PROFESSOR ALI GHAFFARIANHOSEINI

HEAD OF THE SCHOOL OF FUTURE ENVIRONMENTS (SOFE)
AUCKLAND UNIVERSITY OF TECHNOLOGY, NEW ZEALAND

CV

alighh@aut.ac.nz
WZ1213, LEVEL 12, WZ BUILDING, 6-24 ST PAUL STREET, AUCKLAND, NEW ZEALAND

AUT PROFILE academics.aut.ac.nz/ali.ghaffarianhoseini
GOOGLE SCHOLAR PROFILE scholar.google.com/citations?user=CbDnFfgAAAAJ&hl=en
LINKEDIN linkedin.com/in/ali-ghaffarian

EXECUTIVE SUMMARY



SENIOR ACADEMIC EXECUTIVE · VISIONARY PEOPLE LEADER · CHAMPION OF TRANSFORMATIONAL GOVERNANCE

Professor Ali Ghaffarian

Head of the School of Future Environments AUCKLAND UNIVERSITY OF TECHNOLOGY

Over two decades of **executive academic leadership** across successive senior roles, steering sophisticated teams and initiatives across Architecture, Construction, Creative Technologies, and Engineering disciplines.

THE PORTFOLIO UNDER HIS STEWARDSHIP

The Executive Mandate

SCALE OF PORTFOLIO LED

100+ Academic And Professional Staff

ARCHITECTURE · CONSTRUCTION · CREATIVE TECH · ENGINEERING

One of New Zealand's leading and most complex academic entities.

BUDGET STEWARDSHIP · SURPLUS GENERATED

Budget **Multi million NZD**

Surplus **Strong and sustained**

Net POSITIVE

GLOBAL RANKING POSITION

TOP 260

1000 · 500 · 250 · 100 · #1

A newly established academic entity led into the **Global Top 260** in a remarkably short period.

NATIONAL ADVISORY STANDING

Artificial Intelligence Reference Group

Office Of The Prime Minister's Chief Science Advisor

Evaluator · Ministry Of Business, Innovation And Employment

Delegate · College Of Assessors, Royal Society Te Apārangi

STRUCTURAL AND FINANCIAL GOVERNANCE · PEOPLE-CENTRED LEADERSHIP · ACADEMIC VISION

Leadership In Practice

TWO DECADES OF EXECUTIVE ACADEMIC LEADERSHIP

*Leadership that combines **Evidence-Based Decision-Making** with **Future-Oriented Governance**, blending financial acumen, people-centred leadership, and academic vision.*

01 HE LED — Financial Strategy And Resilience

- Smart Optimisation Frameworks
- Budget Strategy Reform
- Strategic Resource Allocation And SSR Rationalisation
- Cost-Efficiency Modelling
- Revenue Diversification
- Disciplined Cost Governance

OUTCOME

Positioned his teams as a **Benchmark Of Operational Agility And Academic Innovation** within AUT and beyond.

02 HE BUILT — People-Centred Leadership Systems

- Workload Allocation And Capacity Monitoring
- Transparent Performance Assessment Reviews
- Structured Recognition Of Teaching And Service
- Strategic Promotion Of Team Success
- Equity And Equality Frameworks
- Conflict Resolution And Mediation

OUTCOME

Created the conditions for staff to flourish. **Sustaining Cohesion, Morale And Trust** through periods of significant institutional change.

03 HE DROVE — Structural And Cultural Transformation

- Academic Leadership Redesign And Optimisation
- Organisational Restructuring And Redeployment
- Integration Of Allied And Academic Streams
- Portfolio-Wide Curriculum Renewal
- Transdisciplinary Programme Integration
- CapEx And OpEx Portfolio Management

OUTCOME

Digital Transformation And Sustainability embedded as central pillars. Models developed and tested across successive senior leadership roles, then scaled across the wider portfolio.

THE STRATEGIC AGENDA HE IS SETTING

Transition From Static To Dynamic Curricula
A Leading Sector Advocate

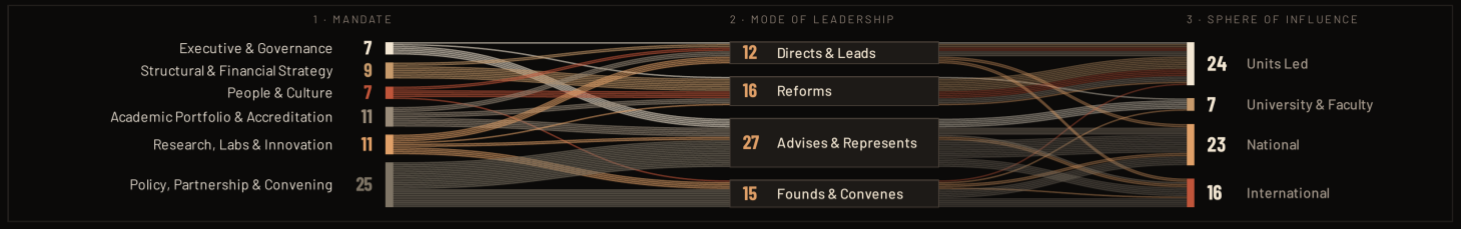
Embedding AI Across Academic Leadership
AI-Readiness Adaptation For Staff, Programmes And Institutional Systems

Amalgamation Of Indigenisation And Technological Advancement
Championed Alongside Sustained Engagement With Policy Makers And Industry Leaders

Beyond The Publication Movement
Safeguarding Measurable Research Impact On Communities

SEVENTY COMMITMENTS FROM ACROSS HIS CAREER — MAPPED BY MANDATE, MODE OF LEADERSHIP AND SPHERE OF INFLUENCE

Strategic Footprint And Sphere Of Influence



HOW TO READ THE FIGURES

One line = one commitment: a role, reform, programme, lab or partnership

24 Number of commitments in that category · each column totals 70

1 · MANDATE — The leadership portfolio it belongs to. Line colour follows this column.

2 · MODE OF LEADERSHIP — How the leadership is exercised: directing, reforming, advising or founding.

3 · SPHERE OF INFLUENCE — Where it takes effect, from units he has led to the international stage.

REPRESENTATIVE EXAMPLES FROM A WIDER PORTFOLIO OF BOARD, ADVISORY AND GOVERNANCE APPOINTMENTS

Governance Appointments And Strategic Influence

NATIONAL POLICY AND ASSESSMENT REPRESENTATIVE ROLES

Artificial Intelligence Reference Group
Office Of The Prime Minister's Chief Science Advisor

Ministry Of Business, Innovation And Employment
Evaluator

College Of Assessors, Royal Society Te Apārangi
Delegate

BIMinNZ National Core Leadership Committee
Advisor

INTERNATIONAL REPRESENTATIVE ROLES

Multiple Leading Q1 Journals
Associate / Guest Editor

HIGH-IMPACT INTERNATIONAL ALLIANCES

Spanning Australasia, Asia, Europe and The Americas, including staff mobility, joint curricula and co-led research

SECTOR AND PROFESSIONAL BODIES REPRESENTATIVE ROLES

Association Of Architecture Schools Of Australasia
Institutional Representative (AASA)

Associated Schools Of Construction
Institutional Representative (ASC)

New Zealand Institute Of Architects
Academic Member · NZIA No. 24326

New Zealand Green Building Council
Green Star Accredited Professional · GSAP No. 16415

UNIVERSITY EXECUTIVE AND GOVERNANCE REPRESENTATIVE ROLES

DCT Senior Leadership And Executive Committee
Member

AUT Academic Board
Senior Academic Representative

Faculty Rankings Committee · Academic Promotions Panels
Member

Te Kāhui Rangahau o Te Rōpū Taki Māori
Institutional Representative

FOUNDER, INAUGURATOR AND ORGANISER · REPRESENTATIVE EXAMPLES

GDI · DFBI · ASA · IGLC · SASBE · NZBERS · EEG · ENZ · PHINZ · NZGBC
among many others

LABORATORIES FOUNDED AND LED · KEY EXAMPLES

Responsive + Green Urban Built Environment Lab FOUNDING CO-DIRECTOR

AUT Architectural Engineering (AE) Lab FOUNDING CO-DIRECTOR

AUT Structural Testing Laboratory DESIGN, DEVELOPMENT AND OPERATIONALISATION

POLICY AND INDUSTRY PARTNERS · REPRESENTATIVE EXAMPLES

MBIE · MfE · Auckland Council · Auckland Transport · CIB · CIOB · ENZ · NZRAB and a wider network across government and industry

SCHOLARLY LEADERSHIP AND STANDING

Scholarship

STANDING

11k+	40+	80+	19
CITATIONS	H-INDEX	I10-INDEX	I100-INDEX

NZD 1.5m+ Funding · **~500** Projects · **~290** Outputs · **30+** Countries

RESEARCH TRAINING

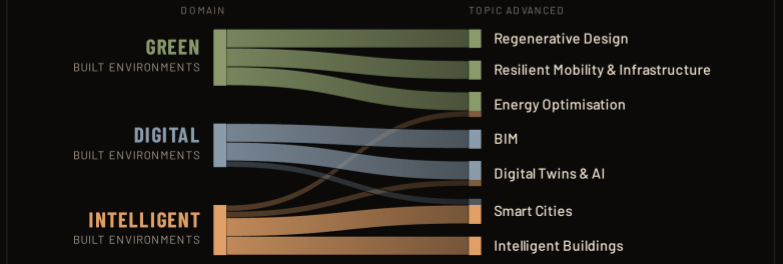
PhDs graduated	20+
PhD examinations	50+
Master's graduated	150+
Master's defences	300+

GOOGLE SCHOLAR SUBJECT RANK

#1 Sustainable Built Environments
#5 Architectural Design
#5 Digital Construction
#10 Building Information Modelling

INTERDISCIPLINARY RESEARCH — THREE DOMAINS, SEVEN TOPICS

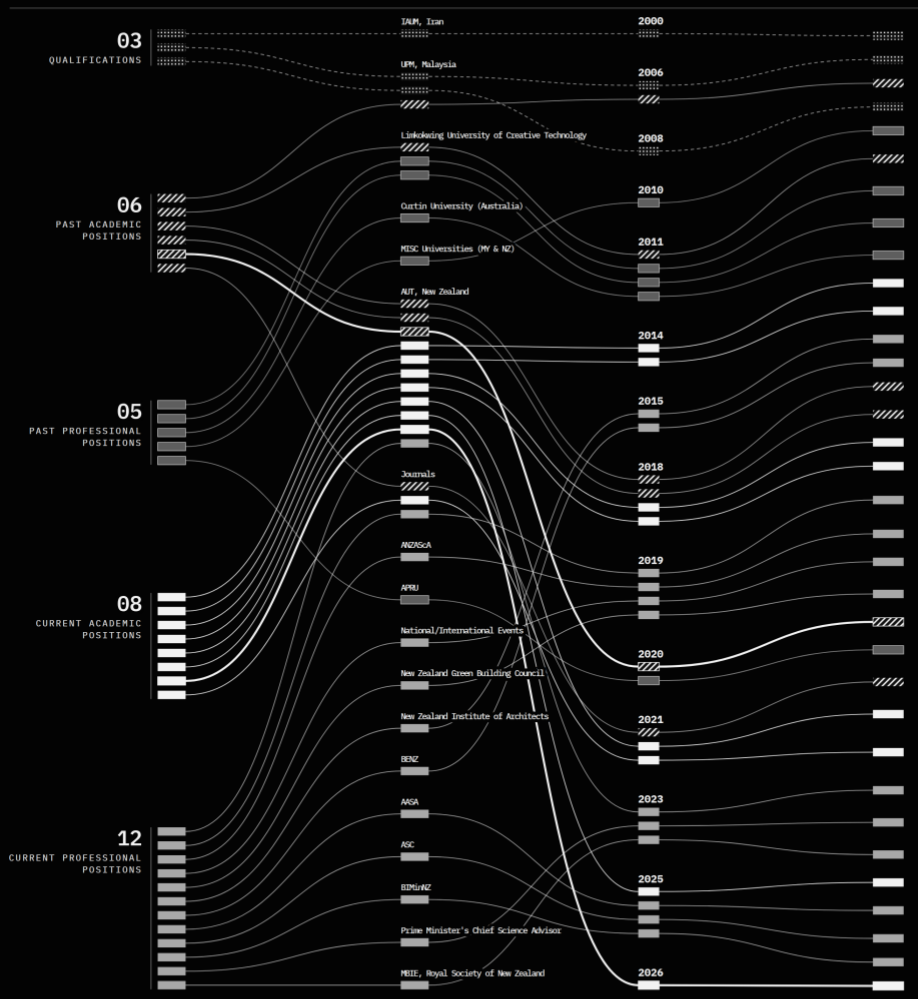
Research Focus



CAREER ARCHITECTURE

HEAD of School of Future Environments, AUT, New Zealand JAN 2026 - PRESENT

CURRENT ACADEMIC POSITIONS · CURRENT PROFESSIONAL POSITIONS · PAST ACADEMIC POSITIONS · PAST PROFESSIONAL POSITIONS · QUALIFICATIONS · HEAD ROLES



#	DATES	APPOINTMENTS & QUALIFICATIONS
01	2000-2005	**B.Arch. (Hons)** Architectural Engineering · IAUM, Iran
02	2006-2008	**MSc** Architectural Studies · UPM, Malaysia
03	2006 - 2011	**Researcher/Lecturer**, University of Putra Malaysia, Malaysia
04	2008-2012	**PhD** Architectural Studies · UPM, Malaysia
05	2010-PRESENT	MISC Universities (MY & NZ) - **Academic Programmes Moderator**
06	2011 - 2014	**Academic Principal Senior Lecturer**, Limkokwing University of Creative Technology, Malaysia
07	2011-2014	Faculty of Architecture and Built Environment, Limkokwing University of Creative Technology, Malaysia - **R&D Coordinator**
08	2011-2014	Limkokwing University of Creative Technology, Malaysia - **Academic Programmes Moderator**
09	2011-2014	Curtin University (Australia) Programme Run by Limkokwing University of Creative Technology, Malaysia - **Academic Programmes Moderator**
10	2014 - PRESENT	**PROFESSOR** in Architecture and Built Environment Engineering, AUT, New Zealand
11	2014 - PRESENT	**CO-DIRECTOR** (Responsive+Green Urban Built Environments - RGUBE), AUT, New Zealand
12	2015 - PRESENT	**ACADEMIC ARCHITECT** (24326) - New Zealand Institute of Architects
13	2015 - PRESENT	**EXECUTIVE BOARD MEMBER** – BIM Education New Zealand (BENZ)
14	2018 - 2020	**Programme Director** (BE Hons – Architectural Engineering), AUT, New Zealand
15	2018 - 2020	**Industry Engagement Coordinator** (Architectural and Construction Engineering), AUT, New Zealand
16	2018 - PRESENT	**LEADING RESEARCHER**, AUT, New Zealand
17	2018 - PRESENT	**DIRECTOR** (Architectural Engineering Lab), AUT, New Zealand
18	2019 - PRESENT	**GUEST EDITOR** - Journal of Energy and Buildings, Journal of Construction Innovation (Q1), Journal of Smart and Sustainable Built Environments (Q1), Journal of Intelligent Buildings International
19	2019 - PRESENT	**EXECUTIVE BOARD MEMBER** - The Architectural Science Association (ANZAScA)
20	2019 - PRESENT	**CO-FOUNDER/CHAIR/ORGANIZER** - Several National/International Events namely GDI, DFBI, ASA, IGLC, SASBE, NZBERS, EEG, ENZ, PHINZ, NZGBC, etc
21	2019 - PRESENT	**GREEN STAR ACCREDITED PROFESSIONAL** (GSAP - 16415) – Design & As Built - New Zealand Green Building Council
22	2020 - 2026	**HEAD** of Department of Built Environment Engineering, AUT, New Zealand
23	2020 - 2025	**FUTURE ENERGY LANDSCAPES CO-LEADER** - Association of Pacific Rim Universities (APRU)
24	2021 - 2023	**Associate Editor**, Architectural Science Review, Taylor and Francis, Australia (Q1)
25	2021 - PRESENT	**ASSOCIATE RESEARCHER** - Centre for AI Research (CAIR), previously Knowledge Engineering & Discovery Research Institute (KEDRI), AUT
26	2021 - PRESENT	**ASSOCIATE EDITOR**, Housing & The Built Environment, Springer, Netherlands (Q1) | Frontiers in Built Environment, Switzerland (Q1) | Urbanization, Sustainability and Society, New Zealand
27	2023 - PRESENT	**SOFE REPRESENTATIVE** - Te Kāhui Rangahau o Te Rōpū Taki Māori - a sub-committee of Te Rōpū Taki Māori – DCT Māori Staff Caucus
28	2023 - PRESENT	**DELEGATE OF THE REFERENCE GROUP FOR ARTIFICIAL INTELLIGENCE** - Office of the Prime Minister's Chief Science Advisor
29	2023 - PRESENT	**DELEGATE OF THE COLLEGE OF ASSESSORS** - Ministry of Business, Innovation and Employment (MBIE), Royal Society of New Zealand
30	2025 - PRESENT	**DELEGATE** of the Faculty of Design and Creative Technologies Executive Committee
31	2025 - PRESENT	**SoFE LEADERSHIP REPRESENTATIVE** - Association of Architecture Schools of Australasia (AASA)
32	2025 - PRESENT	**SoFE LEADERSHIP REPRESENTATIVE** - Associated Schools of Construction (ASC)
33	2025 - PRESENT	**NATIONAL ADVISOR** - BIMinNZ National Core Leadership Committee
34	JAN 2026 - PRESENT	**HEAD** of School of Future Environments, AUT, New Zealand

PROGRAMME DEVELOPMENT — 13

AUT (NZ)
01. Bachelor of Construction – Construction Management
02. Bachelor of Construction – Quantity Surveying
03. Bachelor of Engineering (Honours) - Construction Engineering
04. Bachelor of Engineering (Honours) - Architectural Engineering
05. Bachelor of Engineering Technology - Building Surveying Technology
06. Bachelor of Engineering Technology - Building Services Engineering
07. Bachelor of Engineering Technology - Construction Safety Engineering
08. Bachelor of Engineering Technology - Asset and Facilities Management

LUCT (MY)
09. Master of Design - Innovative Built Environment
10. Master of Science - Sustainable Built Environment
11. Foundation - Civil Engineering
12. Diploma - Civil Engineering
13. Bachelor of Engineering - Civil Engineering

PROGRAMME MODERATION & ACCREDITATION — 15

AUT (NZ)
01. Bachelor of Engineering (Honours) - Construction Engineering
02. Bachelor of Engineering (Honours) - Architectural Engineering

Massey University (NZ)
03. Bachelor of Construction (Construction Management) – External Examination Moderation
04. Bachelor of Construction (Quantity Surveying) – External Examination Moderation

LUCT (MY)
05. Bachelor of Architecture (Architecture Studies – Part I & II)
06. Degree in Interior Architecture
07. Foundation in Built Environment
08. Diploma in Interior Architecture
09. Diploma in Architecture Technology

Curtin University (AU) run by LUCT (MY)
10. Bachelor of Applied Science (Architectural Science)
11. BA (HONS) in Interior Design

UPM (MY)
12. Master of Science (Architectural Studies)
13. Master of Science (Integrated Design Studies)
14. Doctor of Philosophy (Architectural Studies)
15. Doctor of Philosophy (Integrated Design Studies)

INTERNATIONAL CONFERENCE/EVENT ORGANIZATION & CONTRIBUTION

100+ Number of Events

SELECTED LIST OF EVENTS

International Conference of Green + Digital + Intelligent Built Environments **(GDI)**
International Conference of Smart and Sustainable Built Environments **(SASBE)**
International Conference on Digital Frontiers in Buildings and Infrastructure **(DFBI)**
The International Group for Lean Construction **(IGLC)**
Computer-Aided Architectural Design Research in Asia **(CAADRIA)**
Construction Applications of Virtual Reality **(ConVR)**
Architectural Science Association **(ASA)** formerly known as ANZAScA (Australian and New Zealand Architectural Science Association)
CIB World Building Congress **(WBCIB)**
Australasian Building Simulation **(AIRAH)**
Green Cities
Applied Human Factors and Ergonomics **(AHFE)**
Sustainable Development of Energy, Water And Environmental Systems **(SDEWES)**
Automation, Control & Robotics Engineering **(CACRE)**
Sustainable Built Environment **(SBE)**
Advanced Building Skins
etc. in

- ☐ **Australia**
- ☐ **Brazil**
- ☐ **Canada**
- ☐ **China**
- ☐ **Croatia**
- ☐ **Czech Republic**
- ☐ **Egypt**
- ☐ **Finland**
- ☐ **France**
- ☐ **Germany**
- ☐ **Greece**
- ☐ **Hong Kong**
- ☐ **Iran**
- ☐ **Italy**
- ☐ **Japan**
- ☐ **Kuwait**
- ☐ **New Zealand**
- ☐ **Portugal**
- ☐ **Romania**
- ☐ **Singapore**
- ☐ **Slovenia**
- ☐ **South Korea**
- ☐ **Switzerland**
- ☐ **Sri Lanka**
- ☐ **Thailand**
- ☐ **Turkey**
- ☐ **United Arab Emirates (UAE)**
- ☐ **United Kingdom (UK)**
- ☐ **and the United States of America (USA)**

PUBLICATIONS

100+	Journal Articles
100+	Conference Papers
20+	PhD Thesis
20+	Books/Book Chapters & Professional Press/Reports
1	Patent

PHD/MASTER'S EXAMINATION

22	External Examination PhD
32	PhD Chair, Mentor & Confirmation (AUT)
16	Master's Thesis Examination
300+	Master's Oral Defences

PHD/MASTER'S SUPERVISION

16	Ongoing PhD & Mentorship
20+	Ongoing Master's

EXAMINATION · INSTITUTIONS

University of New South Wales	(AU)
Deakin University	(AU)
Adelaide University	(AU)
Macquarie University	(AU)
University of Auckland	(NZ)
Victoria University of Wellington	(NZ)
Massey University	(NZ)
University of Putra Malaysia	(MY)
Qassim University	(SA)

and many others

FUNDED PROJECTS

50+ Number of Projects

SOURCES

Auckland University of Technology
Ara Ake
University of Malaya (MY)
University of Putra Malaysia (MY)
etc

ACADEMIC PROJECTS

200+	PG Projects
200+	Dissemination

ONLINE PROFILES

ACADEMIC PORTFOLIO https://academics.aut.ac.nz/ali.ghaffarianhoseini PUBLICATIONS https://scholar.google.com/citations?user=CbDnFfgAAAAJ&hl=en

CAREER PORTFOLIO

rofessor Ali Ghaffarian *is a Senior Academic Strategist, Visionary People Leader, and Champion of Transformational Governance with over two decades of experience in academic leadership, steering sophisticated teams and initiatives across Architecture, Construction, Creative Technologies, and Engineering disciplines.*

01

ACADEMIC LEADERSHIP AND GOVERNANCE

As Head of the School of Future Environments (SoFE) at Auckland University of Technology (AUT), Professor Ghaffarian leads more than 100 academic and professional staff across the departments of Architecture and Built Environment Engineering and the School office, with a multi million dollar annual operating budget.

His resource reforms, covering staff to student ratio rationalisation, cost efficiency modelling and the reallocation of specialist capability, were developed while he led Built Environment Engineering (2020 to 2026) and then applied across the Future Environments. They have supported continuity of teaching quality and staff wellbeing through a period of portfolio change that included the discontinuation of the Creative Technology programmes.

He bases decisions on curriculum renewal, programme integration and the place of digital transformation and sustainability in teaching and research on evidence, and he has led these changes in both of his line leadership roles at AUT.

He has introduced workload allocation and monitoring, transparent performance review, and structured recognition of teaching and service contributions, together with new ways of making team achievements visible within and beyond AUT.

02

STRATEGY, FINANCE AND INNOVATION

His organisational work has covered the redesign of academic leadership roles, unit and departmental redeployments, and the integration of allied and academic streams so that specialist capability is shared rather than duplicated. These models were tested in his departmental roles before being scaled to the School. The School operates with a strong and sustained annual surplus, and the international conferences and events he chaired or hosted generated millions of dollars in external income.

He has led AI readiness work for staff, programmes and School systems, and argues for curricula that follow changes in practice rather than fixed syllabi. Under his strategy, Architecture and Built Environment at AUT entered the QS World University Rankings by Subject for the first time in 2026, in the 201 to 260 band, within just two years. He works to bring indigenous knowledge and technological change together in the School's teaching and research, and he judges research by its measurable effect on communities as well as by its publication record.

03

INSTITUTIONAL AND NATIONAL ROLES

He is a member of the Faculty of Design and Creative Technologies (DCT) Senior Leadership and Executive Committee, an active Consultant / Scholar (member of the Artificial Intelligence Reference Group at the Office of the Prime Minister's Chief Science Advisor), and the School's representative at both the Association of Architecture Schools of Australasia (AASA) and the Associated Schools of Construction (ASC). Within AUT, he plays an institutional role as a member of the Faculty Rankings Committee and serves on Academic Promotions Panels, contributing to academic excellence and transparent advancement processes across the Faculty.

He also serves as an Evaluator for the Ministry of Business, Innovation and Employment (MBIE), a Delegate of the College of Assessors at Royal Society Te Apārangi, a Senior Academic Representative on the AUT Academic Board, and the National Committee Advisor (Academia) to BIMinNZ. He is an Academic Member of the New Zealand Institute of Architects (NZIA No. 24326) and a Green Star Accredited Professional (GSAP No. 16415) with the New Zealand Green Building Council.

04

RESEARCH AND SCHOLARSHIP

From a scholarly standpoint, Professor Ghaffarian is a globally recognised scientist who has secured more than NZD $1.5 million in research, doctoral scholarship and conference hosting funding in New Zealand, and authored nearly 300 international outputs, including journal articles, books, book chapters, conference papers and a patent application. His interdisciplinary research primarily focuses on Green, Digital and Intelligent Built Environments and integrates trending technologies with sustainable development frameworks to advance Smart Cities, Intelligent Buildings, Resilient Mobility & Infrastructure (Decarbonisation), BIM, Digital Twins & AI in Design and Construction, Regenerative Design & Climate Adaptation, and Energy Optimisation & Carbon Reduction in the built environment.

His scholarly standing, with more than 11,000 Google Scholar citations, an h index of 42, an i10 index of 86 and an i100 index of 19 (October 2026), reflects sustained international uptake of his research. He has collaborated with leading institutions in 30+ countries and founded the GDI conference series and has chaired, hosted or jointly organised international conferences and forums including but not limited to SASBE, ANZAScA (ASA), IGLC, NZBERS, EMCONZ, AACE, PHINZ and NZGBC events, raising AUT's international academic profile.

He co-founded the Responsive + Green Urban Built Environment Lab and AUT's Architectural Engineering Lab, and led the design, development and operationalisation of AUT's Structural Testing Laboratory. He is Associate Editor of three international journals, has guest edited 9 journal special issues, and represents the School at Te Kāhui Rangahau o Te Rōpū Taki Māori.

05

PROGRAMMES, ACCREDITATION AND SUPERVISION

Throughout his career, Professor Ghaffarian has developed, moderated, reviewed, and accredited numerous academic programmes, led external and internal moderation processes, and guided national and international accreditation for architecture and engineering degrees. His leadership has extended to the design and operation of specialised facilities, CapEx and OpEx portfolio management, and the alignment of staffing structures with strategic priorities.

He has supervised 21 PhDs to completion, currently supervises 16 doctoral candidates (13 in progress and three under examination), and has supervised 153 completed Master's research projects. He has held 54 doctoral examination roles as examiner, chair, mentor or confirmation examiner, examined 16 master's theses, and examined more than 300 Master's oral defences at AUT and beyond.

06

PARTNERSHIPS AND GLOBAL ENGAGEMENT

Professor Ghaffarian's leadership extends beyond academia into national and global policy influence, collaborating with MBIE, MfE, Auckland Council, Auckland Transport, CIB, CIOB, ENZ and NZRAB. His integrated network of partnerships bridges regulatory, industry, and research sectors, promoting AUT as a thought leader in digital transformation, climate resilience, and sustainable innovation.

Internationally, he maintains high-impact alliances with world-class institutions across Australasia, Asia, Europe, and the Americas, promoting staff mobility, joint curricula, and co-led research.

CAREER CHRONOLOGY

Qualifications, appointments and external roles in date order; each role is evidenced in the sections that follow

Qualifications

Degree	Field	Institution	Years
PhD	Architectural Studies	Universiti Putra Malaysia (UPM), Malaysia	2008 to 2012
MSc	Architectural Studies	Universiti Putra Malaysia (UPM), Malaysia	2006 to 2008
B.Arch. (Hons)	Architectural Engineering	IAUM, Iran	2000 to 2005

Current Academic Appointments

Period	Appointment
Jan 2026 to present	**Head of School,** School of Future Environments (Huri te Ao), Auckland University of Technology (AUT)
2014 to present	**Professor** in Architecture and Built Environment Engineering, AUT (joined AUT in 2014)
2025 to present	**Member,** Faculty of Design and Creative Technologies Executive Committee, AUT
2021 to present	**Associate Researcher,** Centre for AI Research (CAIR), formerly the Knowledge Engineering and Discovery Research Institute (KEDRI), AUT
2018 to present	**Appointed Leading Researcher,** AUT
2018 to present	**Founder and Co-Director,** Architectural Engineering Lab, AUT
2014 to present	**Co-founder and Co-Director,** Responsive + Green Urban Built Environment (RG UBE) Lab

Current External, Editorial and Professional Roles

Period	Role
2025 to present	**School of Future Environments Leadership Representative,** Association of Architecture Schools of Australasia (AASA) and Associated Schools of Construction (ASC)
2025 to present	**National Committee Advisor (Academia),** BIMinNZ
2023 to present	**Member,** Artificial Intelligence Reference Group, Office of the Prime Minister's Chief Science Advisor
2023 to present	**School representative,** Te Kāhui Rangahau o Te Rōpū Taki Māori, research subcommittee of the DCT Māori Staff Caucus
2022 to present	**Evaluator,** Ministry of Business, Innovation and Employment (MBIE); **Delegate, College of Assessors,** Royal Society Te Apārangi
2022 to present	**Associate Editor,** Urbanization, Sustainability and Society (Emerald, United Kingdom)
2021 to present	**Associate Editor,** Journal of Housing and the Built Environment (Springer Nature, Q1) and Frontiers in Built Environment (Frontiers, Q1)
2021 to present	**Guest Editor,** 9 journal special issues (see Editorial Leadership)
2019 to present	**Green Star Accredited Professional** (GSAP No. 16415), Design and As Built, New Zealand Green Building Council
2016 to present	**Conference founder, chair and host:** GDI (founder), SASBE, ANZAScA, IGLC32 (host department), DFBI, NZBERS, EMCONZ, PHINZ and NZGBC events (see Strategic Global Engagement)
2015 to present	**Academic Member** (No. 24326), Te Kāhui Whaihanga New Zealand Institute of Architects
2015 to present	**National Board Member,** BIM Education New Zealand (BENZ)

Past Appointments

Period	Appointment
2020 to 2026	**Head of Department,** Built Environment Engineering, AUT
2020 to 2025	**Co-Leader, Future Energy Landscapes Working Group, APRU Sustainable Cities and Landscapes Hub**

2019 to 2020	**Executive Board Member,** Architectural Science Association (ANZAScA), during the preparation of ANZAScA 2020
2021 to 2023	**Associate Editor,** Architectural Science Review (Taylor & Francis, Q1)
2018 to 2020	**Programme Director,** BE (Hons) Architectural Engineering, AUT
2018 to 2020	**Industry Engagement Coordinator,** BE (Hons) Architectural and Construction Engineering, AUT
2011 to 2014	**Academic Principal Senior Lecturer** and **R&D Coordinator,** Faculty of Architecture and Built Environment, Limkokwing University of Creative Technology (LUCT), Malaysia
2011 to 2014	**Academic Programmes Moderator,** LUCT and the Curtin University (Australia) programme delivered by LUCT
2010 to 2019	**Academic Programmes Moderator,** Universiti Putra Malaysia (from 2010) and Massey University (2019)
2006 to 2011	**Researcher and Lecturer,** Universiti Putra Malaysia
2002 to 2006	**Architect** in practice: Civil Organisation of the Medical University of Mashhad (2002); Arjan Tarh Architectural Consultancy (2003); The Designers Architectural Consultancy (2004); Atrium Architectural Consultancy (2004)

Research Focus

Research interests	Green, digital and intelligent built environments; smart cities and intelligent buildings; urban technology induction; resilient mobility and infrastructure (decarbonisation); building information modelling (BIM); digital twins and artificial intelligence in design and construction; regenerative design; climate adaptation; built environment energy optimisation and carbon footprint reduction

AUT academic profile Google Scholar ORCID RG UBE Lab LinkedIn

INSTITUTIONAL LEADERSHIP AND GOVERNANCE

Line leadership, portfolio responsibility and governance roles in three universities since 2006

Professor Ghaffarian's leadership record is cumulative. Each appointment added a layer of accountability that the next one depended on: course and programme leadership in Malaysia, where he led accreditation work with the Malaysian Qualifications Agency; programme direction at AUT, where he carried the Architectural Engineering and Civil Construction Engineering majors through their Engineering New Zealand accreditation; departmental headship of Built Environment Engineering from 2020, which added staffing, budget and a multi degree portfolio; and, headship of the School of Future Environments, which places those responsibilities within the University's senior academic governance.

2026	100+	$Multi Million	20+ YEARS
HEAD OF SCHOOL	**STAFF LED**	**OPERATING BUDGET**	**MULTIPLE UNIVERSITIES**
School of Future Environments, Huri te Ao, AUT	Academic and professional staff across two departments and the School office	Annual School operating budget under his management	AUT (New Zealand); LUCT and UPM (Malaysia)

Leadership Appointments

#	Appointment and portfolio	Institution and scope	Period
1.	**Head of School, School of Future Environments (Huri te Ao)** *Head of School; member of the Faculty Executive Committee* **LEADERSHIP ROLE** Leads a School of more than 100 academic and professional staff, organised as the departments of Architecture and Built Environment Engineering and the School office. Leads the realignment of the School's academic portfolio to architecture and built environment engineering following transition of the Creative Technology programmes (BCT, MCT and PGCertCT) into AI-related content. Portfolio: financial, resource and facilities planning, estimation, tracking and forecasting; recruitment of academic and professional staff; contracting and human resources; new programme development and CUAP submissions; alignment of national academic audit and quality assurance requirements with School operations; planning and delivery of University Open Days Professional services: four teams of 13 staff (School management, registrar, technical, and external partnerships and engagement); established a Professional Services Excellence Recognition event with named team awards, first held on 5 October 2026 Standing: Architecture and Built Environment at AUT entered the QS World University Rankings by Subject for the first time in 2026 (see Global Rankings Strategy and Institutional Standing) AUT academic profile AUT News: rankings 2026	**Institution** Auckland University of Technology, Faculty of Design and Creative Technologies (DCT) **Faculty governance** Member, DCT Executive Committee since 2025	2026 to present
2.	**Head of Department, Built Environment Engineering** *Head of Department* **LEADERSHIP ROLE** Led the department that delivers AUT's architectural and construction engineering, construction management, quantity surveying and engineering project management degrees. Led the department's Engineering New Zealand accreditation working group (2021), chaired the external examination of its undergraduate courses (2021), and was head of the host department for IGLC32 (2024), the first International Group for Lean Construction conference held in New Zealand. Portfolio: academic recruitment and mentoring of academics and team leaders; departmental budget, CapEx and OpEx planning; workload allocation; programme review and industry advisory engagement Research leadership: Leader of the Smart Cities and Infrastructure Research Cluster, relinquished on appointment as Head of School AUT News: IGLC32 at AUT	**Institution** Auckland University of Technology, School of Future Environments **Programmes** BE (Hons) Architectural and Construction Engineering; Bachelor of Construction; MCM; MEPM; MEng	2020 to 2026

3. **Programme Director, BE (Hons) Architectural Engineering** — 2018 to 2020

Programme Director; Industry Engagement Coordinator, Architectural and Construction Engineering

Institution
Auckland University of Technology

Accreditation body
Engineering New Zealand (Washington Accord)

LEADERSHIP ROLE

Directed the Architectural Engineering major through its first Engineering New Zealand accreditation and led the programme's accreditation working group (2018). Engineering New Zealand lists Architectural Engineering and Construction Engineering at AUT as accredited from 2018, with the next review in 2028; the accreditation is recognised internationally under the Washington Accord.

Coordinated industry engagement for both majors, including the industrial projects (ENBU89X) and the Engineering New Zealand work placement (ENBU777)

Engineering New Zealand accredited degrees

4. **Academic Principal Senior Lecturer and R&D Coordinator** — 2011 to 2014

Faculty of Architecture and Built Environment

Institution
Limkokwing University of Creative Technology (LUCT), Malaysia

Quality body
Malaysian Qualifications Agency (MQA)

LEADERSHIP ROLE

Coordinated research and development for the Faculty, led its accreditation working group with the Malaysian Qualifications Agency (2013), developed five programmes from foundation to master's level, and moderated LUCT programmes and the Curtin University (Australia) programme delivered at LUCT.

5. **Researcher and Lecturer** — 2006 to 2011

Universiti Putra Malaysia

Institution
Universiti Putra Malaysia (UPM)

LEADERSHIP ROLE

Taught research methodology to PhD and MSc candidates and architecture courses to BSc students; academic moderator from 2010 for the MSc and PhD programmes in Architectural Studies and Integrated Design Studies.

Design consultant (architect) to the University (2010); Chair, PhD, MSc and MLA Postgraduate Club (2008)

6. **Architectural Practice** — 2002 to 2006

Architect

Practice
Architectural design and visualisation

LEADERSHIP ROLE

Practised as an architect before entering academia: Junior Architect with the Civil Organisation of the Medical University of Mashhad (2002), then Architect with Arjan Tarh Architectural Consultancy (2003), The Designers Architectural Consultancy (2004) and Atrium Architectural Consultancy (2004).

Course coordinator, Architectural Computational Visualisation (vocational), 2003

Governance and Committee Roles

#	Body and role	Remit	Period
7.	**University Academic Board, AUT** Senior Academic Representative	The University's senior academic body, chaired by the Vice Chancellor	Current
8.	**DCT Executive Committee** Member	Senior leadership and executive committee of the Faculty of Design and Creative Technologies	2025 to present
9.	**DCT Faculty Rankings Committee** Member	Faculty strategy and data for international rankings	Current
10.	**DCT Academic Promotions Panels** Member	Assessment of academic promotion cases in the Faculty	Current
11.	**Te Kāhui Rangahau o Te Rōpū Taki Māori** School representative	Research subcommittee of Te Rōpū Taki Māori, the DCT Māori Staff Caucus	2023 to present
12.	**PhD Examinations** Convenor, chair and chair mentor	Convening doctoral oral examinations at AUT; 17 chair and chair mentor roles to date	2021 to present
13.	**School of Future Environments boards** Member or chair	Strategic Planning Team; Research Committee; Doctoral Scholarship Board; Board of Studies; Board of Assessment; Learning and Teaching Committee; Staff Student Consultative Board; Scholarships Working Group; Leadership Group; Leaders Forum	2020 to present

Full appointment chronology appears in the Career Chronology at the start of the full CV. Committee periods marked Current are held at the date of this CV.

STRATEGY, FINANCE AND EXTERNAL INCOME

Operating model, revenue diversification and portfolio renewal

The financial record below keeps apart three sources that academic CVs often merge: the operating result of the unit he leads, external revenue generated through conferences he chaired or hosted, and competitive research and scholarship funding. Each is reported at the level at which it can be evidenced. The operating model itself was not introduced at School level untested; its elements were developed and trialled in his departmental roles before being scaled.

$Multi Million	Sustained	$$	NZD $1.5M+
OPERATING BUDGET	**ANNUAL SURPLUS**	**CONFERENCE INCOME**	**FUNDING SECURED**
Approximate annual School operating budget	Strong and sustained annual surplus returned by the School	External revenue from IGLC32, SASBE 2024 and GDI 2025	Research, doctoral scholarship and hosting grants in New Zealand

Strategic and Financial Initiatives

#	Initiative	Evidence and partners	Year
1.	**School operating model and financial independence** *Head of Department, then Head of School* **LEADERSHIP ROLE** Redesigned academic leadership structures, redeployed units and integrated allied and academic streams so that specialist capability is shared rather than duplicated. Combined this with rationalisation of staff to student ratios, cost efficiency modelling, revenue diversification and disciplined cost control. Result: the School operates with a strong and sustained annual surplus People systems introduced alongside: workload allocation and monitoring, transparent performance review, and structured recognition of teaching and service contributions	**Scope** School of Future Environments and, before 2026, Built Environment Engineering	2020 to present
2.	**External revenue through international conferences** *Chair, joint chair or head of host department* **LEADERSHIP ROLE** Generated more than NZD 700,000 in external income for AUT through three international conferences: IGLC32 (more than NZD 300,000, as head of the host department), SASBE 2024 with CIB W116 (more than NZD 200,000, as joint chair) and the inaugural GDI 2025 (more than NZD 200,000, as founder and joint chair). Beca was primary partner and sponsor of GDI 2025; the full conference record appears under Strategic Global Engagement	**Conferences** IGLC32 (2024); SASBE 2024; GDI 2025	2024 to 2025
3.	**Academic portfolio renewal** *Head of School* **LEADERSHIP ROLE** Realigning the School's portfolio to its two disciplinary cores after the discontinuation of the Creative Technology programmes, and leading the case for a new Level 7 Graduate Diploma in Construction Management, built on competitor analysis and the settings of Immigration New Zealand visa policy. Redevelopment of the Creative Technology minor for the Architecture department Graduate Diploma proposal under internal approval through the Dean of the Faculty	**Approval route** Faculty of Design and Creative Technologies; CUAP	2026
4.	**Industry partnership for student talent** *Head of School* **LEADERSHIP ROLE** Established a partnership with Signature Homes around The Future of Home, a student design competition with an associated scholarship, linking the School's students with a New Zealand home builder.	**Partner** Signature Homes	2026

5. **Digital construction partnership with Cupix** — 2026

Head of School

Partner
Cupix
Areas
Digital twins; reality capture; digital construction; work integrated learning

LEADERSHIP ROLE

Leads the School's strategic partnership with Cupix, the digital twin and reality capture platform for construction, across digital construction research, teaching, work integrated learning and potential applications for AUT Estates.

Cupix

6. **Partnership with the Embassy of France and Villa Antipode / Te Ataata** — 2026

Head of School

Partners
Embassy of France in New Zealand; Villa Antipode / Te Ataata
Term
2028 to 2030

LEADERSHIP ROLE

Renewed the School's Memorandum of Understanding with the Embassy of France and Villa Antipode / Te Ataata for 2028 to 2030, extending a partnership that includes the Te Ataata residency, the Future Environments Thought Leadership Series and emerging student internships in Paris.

Te Ataata Residency Programme (AUT) Te Ataata (Villa Antipode)

Conference income refers to external revenue generated for AUT. Funding figures are summarised under Research Leadership, Standing and Impact and listed in full under Funding and Grants: Full Record.

NATIONAL AND INTERNATIONAL SERVICE: POLICY, ASSESSMENT AND PROFESSIONAL BODIES

Advice to government, assessment for national and international funders, and leadership in sector bodies

His external service falls into two groups with different kinds of authority. The first is advisory and evaluative: membership of the Artificial Intelligence Reference Group at the Office of the Prime Minister's Chief Science Advisor, and assessment of proposals for MBIE, Royal Society Te Apārangi and European funders, where his judgement bears on the allocation of public research money. The second is representative: seats on the bodies that set expectations for BIM practice and education, architectural science and the accreditation of built environment programmes in Aotearoa New Zealand and Australasia. In BIMinNZ he holds the one advisory seat its terms of reference reserve for academia.

Government, Policy and Research Assessment

#	Role and body	Remit	Period
1.	**Artificial Intelligence Reference Group** *Member; Office of the Prime Minister's Chief Science Advisor (PMCSA)* LEADERSHIP ROLE Member of the reference group of experts and stakeholders that informs the Chief Science Advisor's work on artificial intelligence, contributing the perspective of design, construction and the built environment. PMCSA artificial intelligence project	**Body** Office of the Prime Minister's Chief Science Advisor, New Zealand	2023 to present
2.	**Ministry of Business, Innovation and Employment (MBIE)** *Evaluator; College of Assessors* LEADERSHIP ROLE Assesses proposals submitted to national contestable research funding administered by MBIE. AUT profile record	**Body** MBIE, New Zealand Government	2022 to present
3.	**Royal Society Te Apārangi** *Delegate, College of Assessors; Reviewer, Catalyst: Seeding* LEADERSHIP ROLE Assesses proposals for the Society's contestable funds, including the Catalyst: Seeding scheme (2022). AUT profile record	**Body** Royal Society Te Apārangi	2022 to present
4.	**International research funders** *International assessor* LEADERSHIP ROLE Assessor for the European Research Council (ERC); Marie Skłodowska-Curie Actions, including the DIGI+ and SyMeCo programmes; Horizon Europe Research Infrastructures under Pillar I, Excellent Science; the United Nations; and national government research projects. Proposals assessed across these schemes carry a combined requested value above NZD 100 million.	**Bodies** ERC; MSCA; Horizon Europe; United Nations	Ongoing
5.	**Academic promotions** *Independent external assessor* LEADERSHIP ROLE Assessor of cases for promotion to Professor and Associate Professor for universities in New Zealand, Australia, Canada, Hong Kong, Malaysia, Saudi Arabia, the United Kingdom and the United States.	**Scope** Eight countries	Ongoing

Professional and Sector Bodies

#	Role and body	Remit	Period
6.	**BIMinNZ National Committee** *National Committee Advisor (Academia)* LEADERSHIP ROLE Sole academic advisor to the national committee that leads BIM adoption across the New Zealand construction sector. The BIMinNZ terms of reference provide for one advisor from academia, to connect the committee with universities, end users and local and central government agencies. BIMinNZ terms of reference	**Body** BIMinNZ	2025 to present

7.	**BIM Education New Zealand (BENZ)** *National Board Member representing AUT* **LEADERSHIP ROLE** Represents AUT on the national working group of tertiary providers established in December 2014 to coordinate BIM education, set national learning outcome guidelines for architecture, engineering and construction programmes, and link education with industry. BENZ membership record	**Body** National BIM Education Working Group	2015 to present
8.	**Architecture and construction schools of Australasia** *School of Future Environments leadership representative* **LEADERSHIP ROLE** Represents the School at the Association of Architecture Schools of Australasia (AASA) and the Associated Schools of Construction (ASC).	**Bodies** AASA; ASC	2025 to present
9.	**Architectural Science Association (ANZAScA)** *Executive Board Member* **LEADERSHIP ROLE** Served on the executive board of the association that runs the annual international conference of architectural science in Australasia during the preparation of its 54th conference, ANZAScA 2020, which he chaired and AUT hosted.	**Body** Architectural Science Association	2019 to 2020
10.	**Engineering New Zealand** *School representative* **LEADERSHIP ROLE** Represents the School in its relationship with Engineering New Zealand, the accrediting body for AUT's engineering degrees.	**Body** Engineering New Zealand (ENZ)	2018 to present
11.	**Association of Pacific Rim Universities (APRU)** *Co-Leader, Future Energy Landscapes Working Group; Co-Chair, 4th APRU Sustainable Cities and Landscapes Conference and PhD Symposium* **LEADERSHIP ROLE** Jointly led a working group of the APRU Sustainable Cities and Landscapes Hub and jointly chaired its 2020 conference and doctoral symposium. AUT profile record	**Body** APRU Sustainable Cities and Landscapes Hub	2020
12.	**Chartered Institution of Building Services Engineers (CIBSE)** *Judge* **LEADERSHIP ROLE** Judge of the CIBSE Australia and New Zealand Young Engineers, Student and Graduate Awards.	**Body** CIBSE ANZ	2022
13.	**International academic partnerships** *Research lead* **LEADERSHIP ROLE** Led AUT's research collaboration with the College of Architecture at Qassim University, Saudi Arabia (2022), and an AUT funded academic partnership with Qatar University (2023).	**Partners** Qassim University; Qatar University	2022 to 2023

Professional Registrations

#	Professional registration	Body	Since
14.	**Academic Member**, No. 24326	Te Kāhui Whaihanga New Zealand Institute of Architects (NZIA)	2015
15.	**Green Star Accredited Professional**, Design and As Built, GSAP No. 16415	New Zealand Green Building Council (NZGBC)	2019

RESEARCH LEADERSHIP, STANDING AND IMPACT

Citation standing, research infrastructure, programmes, partnerships and funding

His citation record rests on a set of critical review articles that became reference points in their fields: green roofs, the uptake of BIM, green building rating systems, the energy performance of green buildings and urban heat island mitigation. Five of these have each been cited more than 500 times, and two more than 1,000 times. The record has continued to grow after his move into line management rather than plateauing: about two thirds of his citations have accrued since 2021, and 2025 was his highest single year. His most cited articles are listed under Most Cited Journal Articles.

11,000+	40+	80+	19
CITATIONS	H INDEX	I10 INDEX	I100 INDEX
Google Scholar	Google Scholar	Articles cited 10 times or more	Articles cited 100 times or more

Citation Trajectory (Google Scholar)

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026*
Citations	39	38	104	161	239	410	583	801	940	1,165	1,210	1,229	1,282	1,561	1,099

**2026 to 15 October.*

Google Scholar profile ORCID record

Research Groups, Laboratories and Infrastructure

#	Entity and role	Scope	Year
1.	**Responsive + Green Urban Built Environment (RG UBE) Lab** *Co-founder and Co-Director, with Professor Amirhosein GhaffarianHoseini* LEADERSHIP ROLE Interdisciplinary research consortium based in New Zealand, Canada and Malaysia, working at building and urban scales towards healthier, smarter and environmentally responsive cities. Research areas: building intelligence and performance; digital twins; urban microclimate and thermal comfort; parametric modelling and simulation; mobility and transport innovation; infrastructure sustainability and resilience; policy and strategy analysis; artificial intelligence applications RG UBE Lab	**Base** New Zealand, Canada and Malaysia	2014
2.	**Structural Testing Laboratory, AUT** *Led design, development and operationalisation* LEADERSHIP ROLE A nationally significant facility with full scale structural testing systems and instrumentation, which supports major research programmes and annual commercial testing projects with industry, government and research partners.	**Host** Built Environment Engineering, AUT	Ongoing
3.	**Architectural Engineering Lab, AUT** *Founder and Co-Director* LEADERSHIP ROLE Teaching and research laboratory for the Architectural Engineering major.	**Host** Built Environment Engineering, AUT	2018
4.	**Neuroarchitecture Virtual Reality Lab** *Lead* LEADERSHIP ROLE Establishing a virtual reality laboratory for sensory design optimisation and occupant wellbeing, funded by AUT (NZD 6,000, 2025), linked to the NZD 100,000 study of mental health and AI in New Zealand classrooms.	**Host** School of Future Environments, AUT	2025
5.	**Research clusters and institutes** *Leader and member* LEADERSHIP ROLE Leader, Smart Cities and Infrastructure Research Cluster (to 2026); Leader, Regenerative Design Research Cluster (2020), a group whose work has been funded by BRANZ, MBIE and EQC; Associate Researcher, Centre for AI Research (CAIR), formerly the Knowledge Engineering and Discovery Research Institute (2021 to present); Appointed Leading Researcher, AUT (2018 to present). Regenerative Design Research	**Institution** Auckland University of Technology	2018 to present

Research Programmes and Partnerships

#	Programme	Partners and funding	Year
6.	**Urban digital twins: Kaitiakitanga** *Lead* LEADERSHIP ROLE A line of work that began with a digital twin model of AUT City Campus (2022), became the 2024 Endeavour Fund proposal Developing a digital twin model for urban microclimate of Auckland: Kaitiakitanga 1.0 (PROP-1634-ENDRP-AUT), and now underpins a 2026 Transition Research Fund expression of interest under the Environmental Sustainability and Resilience pillar, with AI integrated into the method. Related AUT funded work: Digital Twins and Sustainable Construction in the New Zealand Construction Industry, Parts I and II (2022 to 2024); A Working Digital Twin Model for a Complex Building (2022)	**Funders** AUT; MBIE Endeavour Fund (proposal); Transition Research Fund (EOI)	2022 to 2026
7.	**Decarbonising heavy freight and smart mobility** *Lead* LEADERSHIP ROLE A programme on freight emissions and mobility that moved from a national plan for decarbonising New Zealand's heavy freight transport (2020) to an externally funded total cost of ownership comparison for long distance heavy freight for Ara Ake (2022 to 2024). Related projects: Smart Mobility as Enabler of Smart City Auckland (2021 to 2022); Smart Mobility for Freight Transport Emissions Reduction (2022 to 2023); Smart Mobility as a Sustainability Enabler for New Zealand (NZD 50,000, 2023); The Role of AI in Freight Decarbonisation (2023 to 2024)	**Partners and funders** Ara Ake (NZD 19,650); AUT	2020 to 2024
8.	**Smart cities for Aotearoa New Zealand** *Lead* LEADERSHIP ROLE Defined the smart city characteristics of significance to the New Zealand context (NZD 35,000, 2021 to 2022) and extended the work to urban revitalisation in Auckland (NZD 25,000, 2024).	**Funder** AUT	2021 to 2024
9.	**Neuroarchitecture, wellbeing and learning environments** *Lead* LEADERSHIP ROLE Incorporating Mental Health and AI in New Zealand Classrooms: A Neuroarchitecture Perspective (NZD 100,000, 2025 to 2026), building on doctoral work on indoor environments and users' state of mind.	**Funder** AUT	2025 to 2026
10.	**Climate responsive housing and neighbourhoods** *Lead* LEADERSHIP ROLE Community climate responsive housing models for Lower Hutt with Lower Hutt City Council and Nature-based Urban design for Wellbeing and Adaptation in Oceania (NUWAO) (2022); community mixed use design concepts for Auckland neighbourhoods (2020).	**Partners** Lower Hutt City Council; NUWAO	2020 to 2022
11.	**Equity in built environment education** *Lead* LEADERSHIP ROLE Two AUT funded studies on the barriers to education faced by Māori and Pacific students in the School's five bachelor programmes and on measures to raise their access and achievement (NZD 20,000, 2023).	**Funder** AUT	2023
12.	**Horizon Europe: New European Bauhaus regeneration call** *New Zealand work package lead* LEADERSHIP ROLE Application in preparation to HORIZON-NEB-2026-01-REGEN-02, with AUT positioned as New Zealand work package lead, building on long standing collaboration with Politecnico di Milano and Sensintegra.	**Partners** Politecnico di Milano; Sensintegra	2026

Collaboration Network

Sector	Organisations
Government	Ministry of Business, Innovation and Employment; Ministry for the Environment; Ministry of Transport; Auckland Council; Auckland Transport; Lower Hutt City Council; current and former Members of Parliament
Crown and energy sector	NIWA; Ara Ake; Energy Efficiency and Conservation Authority (EECA); Genesis Science
Professional bodies	ANZAScA; APRU; CIBSE; CIOB; Engineering New Zealand; HFESNZ; NZGBC; NZIA; NZIOB; RICS
Industry	Beca; Fletcher; Jasmax
International research teams	Research partners in Australia, Canada, France, Hong Kong, Iran, Malaysia, New Zealand, South Korea, the United Kingdom and the United States, including Loughborough University, Teesside University, Adelaide University, Universiti Putra Malaysia and the University of Malaya

Funding Secured by Type

Funding type	Awards	Amount	Funders
Doctoral scholarships (stipends and fees)	16	NZD 1,066,000	AUT (Vice Chancellor's Doctoral Scholarships and doctoral fee and stipend awards)
Research and teaching projects	23	NZD 400,150	AUT; Ara Ake
Conference hosting grants	2	NZD 42,000	AUT (ANZAScA 2020; South Pacific Passive House Conference)
New Zealand total, 2015 to 2026	**41**	**NZD 1,508,150**	
Malaysian grants and fellowships, 2007 to 2017	5	MYR 356,000	University of Malaya; Universiti Putra Malaysia; Ministry of Higher Education, Malaysia

Compiled from the Selected List of Funding and Grants. The SoFE Contestable PBRF award (2026) is excluded until its value is confirmed. Conference income is reported separately under Strategy, Finance and External Income.

Publication Venues

Field	Journals in which his work appears
Energy and environment	Applied Energy; Renewable and Sustainable Energy Reviews; Energy and Buildings; Energy Research and Social Science; Sustainable Energy Technologies and Assessments; Science of the Total Environment; Journal of Environmental Management; Thermal Science and Engineering Progress; Desalination and Water Treatment
Building science and architecture	Building and Environment; Architectural Science Review; Intelligent Buildings International; Building Research and Information; Journal of Building Engineering; Frontiers of Architectural Research; Archnet-IJAR; Architectural Engineering and Design Management; Frontiers in Built Environment
Construction and digital delivery	Automation in Construction; Engineering, Construction and Architectural Management; Journal of Construction Engineering and Management (ASCE); Construction Innovation; Smart and Sustainable Built Environment; International Journal of Construction Management; Journal of Information Technology in Construction (ITcon); Built Environment Project and Asset Management; Waste Management and Research
Cities and society	Cities; Sustainable Cities and Society; Habitat International; Urban Forestry and Urban Greening; Journal of Housing and the Built Environment; Urbanization, Sustainability and Society; Sustainable Development

Venues verified against his Google Scholar record on 28 September 2026. The full list of outputs follows under Research Outputs.

FUNDING AND GRANTS: FULL RECORD

Research grants, doctoral scholarships and hosting grants, listed by country and year; summarised under Research Leadership, Standing and Impact

New Zealand (42)
Amounts in NZD

#	Project	Period	Amount (NZD)	Funder
1.	SoFE Contestable PBRF Round 1 2026	2026		AUT
2.	Incorporating 'Mental Health' and 'AI' in New Zealand Classrooms: A Neuro-Architecture Perspective	2025 to 2026	100,000	AUT
3.	Climate-Adaptive Kinetic Façade Simulations	2025	15,000	AUT
4.	Establishing a Neuroarchitecture Virtual Reality lab for Sensory Design Optimization and Occupant Wellbeing	2025	6,000	AUT
5.	Developing A Decision Support Model for Digital Technology Integration in Circular Construction Practices	2025	9,000	AUT
6.	Urban Revitalization – Case of Auckland, New Zealand	2024	25,000	AUT
7.	Factors influencing Dynamic Scheduling in the Road and infrastructure segment of the New Zealand construction industry	2024	7,000	AUT
8.	The Role of Artificial Intelligence in Freight Decarbonization: Auckland, New Zealand	2023 to 2024	7,000	AUT
9.	Dynamic Scheduling Influential Factors and Environmental Changes in the NZ Building Construction	2023	7,500	AUT
10.	Investigating the impact of the application of Smart cities in building Analysis at the design phase in Aotearoa, New Zealand, using Social Network Analysis integration framework	2023 to 2024	6,000	AUT
11.	Academic Collaboration/Partnership with Qatar University	2023	5,000	AUT
12.	The primary barriers to education experienced by Māori and Pacific students in the five bachelor programs at SoFE'	2023	10,000	AUT
13.	Digital Twins & Sustainable Construction in New Zealand Construction Industry-Part II	2023 to 2024	23,000	AUT
14.	Long Distance Heavy Freight Total Cost of Ownership (TCO) Comparison	2022 to 2024	19,650	Ara Ake
15.	Digital Twins & Sustainable Construction in New Zealand Construction Industry-Part I	2022 to 2023	18,500	AUT
16.	Enhancing Access and Achievement for Māori and Pacific Students in SoFE Bachelor Programs	2023	10,000	AUT
17.	How to use Artificial Intelligence to quantify construction and demolition waste?	2023	5,500	AUT
18.	'Smart' mobility as a sustainability enabler for New Zealand	2023	50,000	AUT
19.	'Smart Mobility' for Freight Transport Emissions Reduction in New Zealand	2022 to 2023	7,500	AUT
20.	The Multifaceted Approach of Creating a Working Digital Twin Model for a Complex Building	2022	18,500	AUT
21.	Hosting the South Pacific Passive House Conference	2022	17,000	AUT
22.	Identifying Smart City Characteristics of Significance to The New Zealand Context	2021 to 2022	35,000	AUT

23.	Smart Mobility as Enabler of Smart City Auckland	2021 to 2022	6,000	AUT
24.	Formation of Future Sustainable Smart Cities in New Zealand	2021	3,000	AUT
25.	A Sustainable New Zealand Construction Sector: Directions	2020 to 2021	6,000	AUT
26.	Hosting the 54th International Conference of the Architectural Science Association (ANZAScA) - Imaginable Futures: Design Thinking, and the Scientific Method	2020	25,000	AUT
27.	Vice Chancellor's Doctoral Scholarship on "Investigating the Emotional State of Residents in Auckland – An Exploratory Multidisciplinary Approach" for PhD student Dependra Pourel	2023 to 2026	97,000	AUT
28.	Vice Chancellor's Doctoral Scholarship on "Digital Twin for Wind Resiliency Development of Auckland City from Urban Microclimate Point of View" for PhD student Sarah Nazari	2022 to 2025	97,000	AUT
29.	Vice Chancellor's Doctoral Scholarship on "Towards Deployable Occupant-Centric Reinforcement Learning for Building HVAC Control" for PhD student Muhammad Zeeshan	2023 to 2026	97,000	AUT
30.	Vice Chancellor's Doctoral Scholarship on "Investigating the Influential Factors Affecting Construction Waste Generation in New Zealand's Residential Building Projects: An Application of Structural Equation Modelling (SEM)" for PhD student Hadeel Albsoul	2021 to 2024	97,000	AUT
31.	Vice Chancellor's Doctoral Scholarship on "Urban Microclimatic Modelling of Auckland from An Outdoor Thermal Comfort Point of View" for PhD student Saghar Hashemi	2021 to 2024	97,000	AUT
32.	Vice Chancellor's Doctoral Scholarship on "Intelligent Acoustics: Integrating Machine Learning with Variable Acoustic Technology, To Optimize Acoustic Comfort in Small-Medium New Zealand Classrooms" for PhD student Megan Burfoot	2019 to 2022	97,000	AUT
33.	Vice Chancellor's Doctoral Scholarship on "Investigating the Relationship Between Building Information Modelling (BIM) and Green Star Rating through System Dynamics Modelling" for PhD student Dat Doan	2016 to 2019	97,000	AUT
34.	Vice Chancellor's Doctoral scholarship on "Developing an Optimized Sustainability Assessment Tool for Building Information Modelling (BIM) Systems - Incorporation of Hygrothermal Modelling Into BIM" for PhD student Marcela Brauner	2015 to 2020	97,000	AUT
35.	Doctoral supervisory stipend & Tuition Fee Scholarship on "Investigating the Effectiveness of BIM-BMS Integration on Managing Existing Educational Building Facilities in New Zealand" for PhD student Tongrui Zhang	2016 to 2019	64,000	AUT
36.	Doctoral Tuition Fee Scholarship on "Reverse Logistics Possibilities for Achieving Closed Loop Supply Chain for Construction Machinery as an End-of-Life Solution" for PhD student Kamal Dhawan	2019 to 2022	19,000	AUT
37.	Doctoral supervisory stipend & Tuition Fee Scholarship on "Improving Strategic Decision Making Necessary for the Effective Design and Governance of Regenerative Design and Development Projects" for PhD student Jas Qadir	2019 to 2022	64,000	AUT
38.	Doctoral Tuition Fee Scholarship on "Effective Deployment of Passive Buildings in Cooling Dominated Climates" for PhD student Damiloju Adeyina	2018 to 2021	19,000	AUT
39.	Doctoral Tuition Fee Scholarship on "A Neuro-Architectural Building Rating Scheme: Investigating the Impact of Indoor Environments on the User's State of Mind in Educational Buildings in Auckland, New Zealand" for PhD student Sameh Azzazy	2018 to 2021	19,000	AUT

40.	Doctoral Tuition Fee Scholarship on "Realizing Trust Dynamics and Governance for Humanizing Driverless Technology" for PhD student Attiq Ur Rehman	2016 to 2021	19,000	AUT
41.	Doctoral Tuition Fee, Supervisory Stipend and Summer Research Scholarship on "Real-Time and Dynamic Planning and Scheduling Under Disruption Using Multi-Hybrid Simulation and Optimization" for PhD student Okechukwu Nwadigo	2016 to 2019	67,000	AUT
42.	Doctoral Tuition Fee Scholarship on "Investigating the Effectiveness of Adopting Building Information Modelling for Refurbishment of Complex Buildings: Case of Auckland" for PhD student Anthony Okakpu	2016 to 2019	19,000	AUT

Malaysia (5)
Amounts in MYR

#	Project	Period	Amount (MYR)	Funder
43.	University of Malaya Living Lab Sustainability Cluster International Grant	2016 to 2017	76,000	UM
44.	IRU-MRUN Collaborative Research programme International Grant (Malaysia-Australia)	2015 to 2016	60,000	UM
45.	Doctoral Fellowship Grant	2010 to 2012	84,000	UPM
46.	RUGS Research Grant	2007 to 2008	114,000	UPM & MHE
47.	Postgraduate Fellowship Grant	2007 to 2008	22,000	UPM
	Total, Malaysia	**2007 to 2017**	**MYR 356,000**	
	Grand total	**2007 to 2026**	**NZD 1,508,150 and MYR 356,000**	

PROGRAMME LEADERSHIP, QUALITY ASSURANCE AND TEACHING

Programme design, professional accreditation, moderation and teaching in New Zealand and Malaysia since 2006

The test of programme leadership is whether a degree survives external scrutiny. Five of the AUT programmes he developed hold, or have held, professional accreditation: the Architectural and Construction Engineering majors with Engineering New Zealand under the Washington Accord, the Building Engineering and Building Services Engineering majors of the Bachelor of Engineering Technology under the Sydney Accord, and the Bachelor of Construction with RICS, whose Quantity Surveying major is also accredited by NZIQS. His working knowledge of the International Engineering Alliance accords (Washington, Sydney and Dublin) has been built through this accreditation work rather than alongside it. Beyond accreditation he has led external and internal moderation, graduating year reviews and industry advisory boards, and has mentored academics on curriculum review and delivery strategy.

13	5	5	32
PROGRAMMES DEVELOPED	**ACCREDITATION LEADERSHIP**	**INSTITUTIONS MODERATED**	**COURSES LED**
Eight at AUT and five at LUCT, foundation to master's level	Engineering New Zealand, RICS and NZIQS	AUT, Massey, LUCT, Curtin at LUCT and UPM	Undergraduate, postgraduate and doctoral, 2006 to the present

Auckland University of Technology

#	Programme	Role, accreditation and outcome	Year
1.	**BE (Hons), Architectural Engineering**	Programme developer; Programme Director 2018 to 2020; led the accreditation working group. Accredited by Engineering New Zealand from 2018 (Washington Accord); next review 2028	2014 to 2020
2.	**BE (Hons), Construction Engineering**	Programme developer; Industry Engagement Coordinator; led the departmental accreditation working group (2021). Accredited by Engineering New Zealand from 2018 (Washington Accord); next review 2028	2014 to 2021
3.	**Bachelor of Engineering Technology, Building Engineering**	Programme developer. Accredited by Engineering New Zealand, 2018 to 2024 (Sydney Accord); programme since closed	2014 to 2024
4.	**Bachelor of Engineering Technology, Building Services Engineering**	Programme developer. Accredited by Engineering New Zealand, 2018 to 2024 (Sydney Accord); programme since closed	2014 to 2024
5.	**Bachelor of Engineering Technology, Asset and Facilities Management**	Programme developer	From 2014
6.	**Bachelor of Engineering Technology, Construction Safety Engineering**	Programme developer	From 2014
7.	**Bachelor of Construction, Construction Management**	Programme developer. Bachelor of Construction accredited by the Royal Institution of Chartered Surveyors (RICS)	From 2014
8.	**Bachelor of Construction, Quantity Surveying**	Programme developer. Accredited by RICS and by the New Zealand Institute of Quantity Surveyors (NZIQS)	From 2014
9.	**Graduate Diploma in Construction Management (Level 7)**	Proposal lead; under internal approval	2026
10.	**Creative Technology minor**	Redevelopment for the Architecture department as Head of School	2026
11.	**Master of Architecture (Professional)**	Head of School responsible for accreditation reporting to the New Zealand Registered Architects Board (NZRAB)	2026

Limkokwing University of Creative Technology, Malaysia

#	Programme	Role, accreditation and outcome	Year
12.	**Master of Design, Innovative Built Environment**	Programme developer; MQA accreditation working group leader	2011 to 2014
13.	**Master of Science, Sustainable Built Environment**	Programme developer; MQA accreditation working group leader	2011 to 2014
14.	**Bachelor of Civil Engineering**	Programme developer	2011 to 2014
15.	**Diploma in Civil Engineering**	Programme developer	2011 to 2014

16.	**Foundation in Civil Engineering**	Programme developer	2011 to 2014

Accreditation status as published by Engineering New Zealand and AUT, accessed 28 September 2026.

Engineering New Zealand: four year degrees Engineering New Zealand: engineering technology degrees AUT Bachelor of Construction accreditation

Moderation and External Quality Assurance

Institution	Programmes	Role and year
Massey University	Bachelor of Construction (Construction Management); Bachelor of Construction (Quantity Surveying)	External moderator, examination moderation, 2019
Auckland University of Technology	Undergraduate courses of the Department of Built Environment Engineering	Chair, external examination, 2021
Limkokwing University of Creative Technology	Bachelor of Architecture (Architecture Studies, Parts I and II); Degree in Interior Architecture; Foundation in Built Environment; Diploma in Interior Architecture; Diploma in Architecture Technology	Academic moderator, 2011 to 2014
Curtin University (Australia), delivered by LUCT	Bachelor of Applied Science (Architectural Science); BA (Hons) Interior Design	Academic moderator, 2011 to 2014
Universiti Putra Malaysia	MSc and PhD in Architectural Studies; MSc and PhD in Integrated Design Studies	Academic moderator, from 2010

Accrediting and professional bodies he has worked with: Engineering New Zealand; RICS; CIOB; NZIOB; NZIQS; NZIA; NZRAB; CIBSE; NZGBC; CUAP; and the Malaysian Qualifications Agency.

Teaching: Courses Led and Coordinated (32)

Institution and period	Programmes	Courses led or coordinated
Auckland University of Technology, 2014 to present	PhD; Master of Engineering; Master of Construction Management; Master of Engineering Project Management	Engineering Research Methodology (ENGE802); Specialist Readings: Construction Project Management (ENBU815); Specialist Readings: Engineering Project Management (ENGE816); Project in Engineering Construction Management (ENBU996); Project in Engineering Project Management (ENBU986); Research Project (ENGE997); Law for Construction Management (ENBU820)
Auckland University of Technology, 2014 to present	BE (Hons) Architectural and Construction Engineering; Bachelor of Construction (Construction Management; Quantity Surveying)	Industrial Project, Architectural and Construction (ENBU89X, two courses); Architectural Design and Sustainability (ENBU700); Architecture and Design Development I (ENBU703); ENZ Work Placement (ENBU777); Innovation, Advanced Construction Systems and Sustainability (ENBU615); Construction Engineering Management I (ENBU604); Construction Technology II (ENBU605); Construction Materials (ENBU600)
Limkokwing University of Creative Technology, 2011 to 2014	Bachelor of Architecture (Professional), Parts I and II; Bachelor of Interior Architecture (LUCT and Curtin University)	Architectural Topical Study; Architectural Enquiries; Architectural Research Project; Architecture Seminar; Special Studies; Architectural Design Studios 1 to 4; Architecture Technology 1; Leadership in Energy and Environmental Design (LEED) 342; Interior Architecture Research Methodology 321; 20th Century Developments in Interior Architecture
Universiti Putra Malaysia, 2006 to 2011	PhD; MSc; BSc Architecture	Research Methodologies in Design (RSB5001); Research Methodologies (ARCX); Visual Architecture (ARC4122)

He also assessed the final postgraduate projects of more than 200 students at AUT (2015).

21	16	153	70
COMPLETED PHD	**PHD IN PROGRESS**	**MASTER'S COMPLETED**	**THESIS EXAMINATIONS**
Primary Supervisor 11, Co-Supervisor 9, Mentor Supervisor 1	13 current candidates and 3 under examination	MCM 129, MEPM 17, MEng 7; 10 current	Across 10 universities, plus 300+ Master's oral defences at AUT

Research training at a glance. Full lists appear under Doctoral Supervision, Master's Supervision and Postgraduate Examination.

GLOBAL RANKINGS STRATEGY AND INSTITUTIONAL STANDING

Positioning architecture and built environment programmes in the QS and Times Higher Education rankings

LEADERSHIP ROLE

Led the School of Future Environments' strategy that took Architecture and Built Environment at AUT from an unranked position to its first appearance in the QS World University Rankings by Subject in 2026, placed in the 201 to 260 band as one of three New Zealand universities ranked in the subject, in under two years.

LEADERSHIP ROLE

Since 2015 he has contributed to the assessment processes of the QS World University Rankings and the Times Higher Education (THE) rankings, providing expert insight on the standing of universities across North America, Australasia, Southeast Asia and the Middle East, with a focus on built environment engineering and architecture. That experience informs how he reads the indicators behind a ranking, from academic and employer reputation to research impact, and how he aligns a school's research, partnerships and international profile with them.

SINCE 2015	4 REGIONS	FIRST RANKING	TOP 260
QS AND THE	INTERNATIONAL INSIGHT	QS BY SUBJECT 2026	GLOBAL POSITION
Contributor to global rankings assessment in architecture and built environment	North America, Australasia, Southeast Asia and the Middle East	Architecture and Built Environment at AUT ranked for the first time	Reached in under two years from an unranked position

Evidence: AUT rankings and accreditation AUT climbs global rankings (AUT News) QS subject ranking 2026 (New Zealand)

INSTITUTION BUILDING: INTERNATIONAL NETWORKS AND STUDENT PLATFORMS

New structures initiated and led within the international research community and at AUT

Alongside the conferences he has founded and chaired, Professor Ghaffarian has built lasting structures that connect AUT, its students and the international research community: a new CIB Task Group on digital twin governance under his leadership, and two student organisations at AUT linked to CIB and to the lean construction community.

Selected Initiatives

#	Initiative and leadership	Organisations and partners	Year
1.	**CIB Task Group: Digital Twin Governance, Interoperability and Lifecycle Decision-Making in the Built Environment** *Founding Leading Coordinator (proposer)* **LEADERSHIP ROLE** Conceived and leads the proposal to establish a new CIB Task Group with the governance, interoperability and lifecycle accountability of digital twins as its primary focus, a gap the proposal identifies as not held as a primary focus by existing CIB commissions W078, TG126, W098 or W116. The proposal has been approved in principle by CIB and is being formalised. Objectives: map and evaluate national and sectoral digital twin governance frameworks; treat interoperability as a governance problem; develop lifecycle decision-making accountability frameworks; produce guidance for policy, standards and practice Three year work plan: two member meetings and a CIB branded webinar each year, a jointly authored research roadmap, and a dedicated session at the CIB World Building Congress Engagement with CIB Student Chapters and early career researchers, and proposed special issues with CIB encouraged journals	**Organisation** International Council for Research and Innovation in Building and Construction (CIB) **Lead institution** Auckland University of Technology, School of Future Environments **Related CIB commissions** W078 Information Technology for Construction; TG126 Artificial Intelligence in Construction; W098 Intelligent and Responsive Buildings; W116 Smart and Sustainable Built Environments	**2026**
2.	**AUT CIB Student Chapter** *Led and supported its formation* **LEADERSHIP ROLE** Led and supported the formation of the CIB Student Chapter at AUT as Head of the School of Future Environments, giving AUT's built environment students a direct link to CIB's international research network. The Chapter was officially launched at AUT in July 2026. Official launch, 8 July 2026, WZ Building, AUT City Campus, Auckland A hub for built environment research and global connection for AUT students CIB Student Chapter record	**Network** CIB Student Chapters programme **Host** AUT School of Future Environments	**2026**
3.	**Lean Construction Student Association (LCSA)** *Led and supported its formation* **LEADERSHIP ROLE** Led and supported the formation of LCSA at AUT in 2025, a student association connecting engineering and built environment students with peers, industry leaders and Lean Construction Australia and New Zealand. LCSA has since partnered with GDI 2025 and the Future Environments Thought Leadership Series. Open to postgraduate and undergraduate students; workshops, site visits and research opportunities with LCANZ AUT student peer groups record	**Industry partner** Lean Construction Australia and New Zealand (LCANZ) **Host** Auckland University of Technology	**2025**

EDITORIAL LEADERSHIP IN INTERNATIONAL JOURNALS

Associate editorships and guest edited special issues in architecture, construction and the built environment

Category	Number
Associate Editor: current appointments	3
Associate Editor: past appointments	1
Guest Editor: journal special issues	9
Editor in Chief: school research publication	1
Total editorial appointments	**13**

Entries are listed newest first and alphabetically within each year, with continuous numbering across the section. Each entry links to the publisher or editorial record as evidence. Q1 denotes a first quartile journal in its subject category. Logos identify the publisher and the institutions associated with each appointment or issue.

ASSOCIATE EDITOR APPOINTMENTS

Current Appointments (3)

#	Journal and publisher	Publisher and institutions	Period
1.	**Frontiers in Built Environment (Q1)** Frontiers Media, Switzerland | Associate Editor https://loop.frontiersin.org/people/2026675	frontiers	Since 2021
2.	**Urbanization, Sustainability and Society** Emerald Publishing, United Kingdom | Associate Editor Open access journal aligned with UN Sustainable Development Goal 11 https://www.emeraldgrouppublishing.com/journal/uss	emerald PUBLISHING AUT	Since 2022
3.	**Journal of Housing and the Built Environment (Q1)** Springer Nature, the Netherlands | Associate Editor https://link.springer.com/journal/10901/editorial-board	TU Delft Springer	Since 2021

Past Appointments (1)

#	Journal and publisher	Publisher and institutions	Period
4.	**Architectural Science Review (Q1)** Taylor & Francis, Australia | Associate Editor https://www.tandfonline.com/journals/tasr20	Taylor & Francis Online	2021 to 2023

GUEST EDITOR: JOURNAL SPECIAL ISSUES

Special Issues (9)

Lead or co-guest editor of thematic special issues

#	Journal and special issue	Publisher and institutions	Year
5.	**Engineering, Construction and Architectural Management (Q1)** *Circular economy and sustainable practices in the built environment* Emerald Publishing | Vol. 33, Issue 8 Guest editors: X. Chen, F. Pour Rahimian, D. T. Doan and A. GhaffarianHoseini https://doi.org/10.1108/ECAM-07-2026-251	emerald PUBLISHING Teesside University AUT	2026

6.	**Indoor Air (Q1)** *Beyond Outdoor Temperature: Housing Conditions, Indoor Heat Exposure, and Human Health* Wiley | Call for papers open; publication expected by September 2027 Guest editors: D. T. Doan, Q. V. Tran, A. GhaffarianHoseini, AH. GhaffarianHoseini and E. Aigwi https://onlinelibrary.wiley.com/doi/toc/10.1155/INA.SI-2026-001147	2026
7.	**Smart and Sustainable Built Environment (Q1)** *Energy efficiency, risk, and resilience in the built environment* Emerald Publishing | Vol. 15, Issue 4 Guest editors: D. T. Doan, A. GhaffarianHoseini, AH. Ghaffarianhoseini and Z. Jalali https://doi.org/10.1108/SASBE-05-2026-792	2026
8.	**Journal of Information Technology in Construction (ITcon)** *Special issue: Smart and Sustainable Built Environment (SASBE 2024)* CIB, International Council for Research and Innovation in Building and Construction | Vol. 30, 15 papers Guest editors: M. B. Purushothaman, A. GhaffarianHoseini, AH. Ghaffarianhoseini and F. Pour Rahimian https://www.itcon.org/special-issue/2025_2024sasbe	2025
9.	**Energy and Buildings (Q1)** *Designing for the future: The role of built environment resilience in climate change alleviation* Elsevier, ScienceDirect In association with The Hong Kong Polytechnic University and Toronto Metropolitan University	2024
10.	**Intelligent Buildings International** *Neuro-Architecture: Exploring the intersection of neuroscience and design for healthy buildings and urban neighbourhoods* Taylor & Francis Guest editors: AH. Ghaffarianhoseini, A. GhaffarianHoseini, D. Clements-Croome (University of Reading) and C. Walker. Call for papers: abstracts by 1 June 2024, manuscripts by 31 December 2024 Call for papers, announced June 2023 (LinkedIn)	2024
11.	**Urbanization, Sustainability and Society** *Smart and sustainable future environments* Emerald Publishing, in association with Auckland University of Technology https://www.emeraldgrouppublishing.com/journal/uss	2024
12.	**Construction Innovation: Information, Process, Management (Q1)** *Enabling the development and implementation of digital twins* Emerald Publishing | Vol. 22, Issue 3 Guest editors: F. Pour Rahimian, N. Dawood, A. GhaffarianHoseini and AH. Ghaffarianhoseini https://doi.org/10.1108/CI-07-2022-247	2022
13.	**Smart and Sustainable Built Environment (Q1)** *Future construction: Design solutions and approaches* Emerald Publishing | Vol. 11, Issue 2 Guest editors: A. GhaffarianHoseini, AH. Ghaffarianhoseini, F. Pour Rahimian and N. Dawood https://doi.org/10.1108/SASBE-07-2022-236	2022

Editor in Chief (1)
School of Future Environments research publication, in development

#	Publication and role	Publisher and institutions	Year
14.	Book of Future Environments Research *Editor in Chief; a School initiative started in 2025 and in development* Auckland University of Technology, Tuwhera | ISSN 2816-0673 | Open access Editorial team: Dr Mahesh Babu (Corresponding Editor); Professor Amirhosein Ghaffarianhoseini (Editor); Dr Mani Poshdar, Dr Funmilayo Ebun Rotimi and Dr Dat Doan (Associate Editors) https://ojs.aut.ac.nz/book-future-environments-research/about/editorialTeam		Since 2025

STRATEGIC GLOBAL ENGAGEMENT: CONVENING ACADEMIA, INDUSTRY AND GOVERNMENT

International platforms founded, chaired and hosted since 2006

Professor Ghaffarian has been active in the international conference community of the built environment disciplines for more than two decades. Since 2006, when he first presented his graduate research at international conferences in Malaysia and China, his involvement has grown from presenting and reviewing to scientific committee membership, conference chairing, hosting and founding. A consistent thread runs through this work: bringing academia, industry and policy makers together and giving them platforms to exchange ideas and shape the future of the built environment. Among the conferences he has founded is the International Conference of Green + Digital + Intelligent Built Environments (GDI), established with Professor Amirhosein Ghaffarianhoseini, which received more than 200 full papers in its first year with Beca as primary partner, and moves to Kuala Lumpur in 2027 with CIOB Malaysia.

Conferences he has chaired include SASBE 2024 with CIB W116 and ANZAScA 2020, and as Head of Built Environment Engineering he led the host department for the first International Group for Lean Construction conference held in New Zealand. As Head of the School of Future Environments he has extended this work to government, diplomatic, cultural and iwi partners, among them Whaikaha, the Ministry of Disabled People, the Embassy of France, the Aga Khan Award for Architecture and Ngāti Whātua Ōrākei. Since 2006 he has also served on the scientific committees of more than 100 international conferences, from the CIB World Building Congress, CAADRIA and ConVR to SDEWES and AHFE, and his conference work now spans 33 countries on six continents. The entries that follow are selected examples from this wider record.

FOUNDER	CHAIR	HOST	20+ YEARS
SELECTED EXAMPLE	**SELECTED EXAMPLES**	**SELECTED EXAMPLES**	**SINCE 2006**
The GDI conference series: Auckland 2025 and 2026; Kuala Lumpur 2027 with CIOB Malaysia	SASBE 2024 with CIB W116; ANZAScA 2020	First IGLC conference in New Zealand; FOSS4G 2025 with 400+ attendees; Aga Khan Award for Architecture Exhibition	100+ scientific committees; 33 countries on six continents

Entries are selected examples, listed newest first within each part and numbered continuously. Each entry links to the conference, publisher or event record. Participation figures are those published by the organisers; income figures refer to external revenue generated for AUT.

I. FOUNDER AND CHAIR: SELECTED INTERNATIONAL CONFERENCE SERIES

Selected example: a conference series founded at AUT and carried beyond New Zealand

Green + Digital + Intelligent Built Environments (GDI)
Founded in 2025 at Auckland University of Technology

#	Event and leadership	Organisers and partners	Year
1.	**International Conference of Green + Digital + Intelligent Built Environments (GDI 2027)** *Founder and Conference Co-Chair* **LEADERSHIP ROLE** Taking the series he founded from Auckland to Kuala Lumpur for its third edition, in collaboration with CIOB Malaysia. Third edition of the GDI series; Kuala Lumpur, Malaysia	**Organisers** Auckland University of Technology, School of Future Environments; Chartered Institute of Building (CIOB) Malaysia	**2027**
2.	**International Conference of Green + Digital + Intelligent Built Environments (GDI 2026)** *Founder and Conference Co-Chair* **LEADERSHIP ROLE** As GDI Chair with Professor Amirhosein Ghaffarianhoseini, opened and closed the GDI 2026 Industry Chapter Day, a full day of plenary talks, panels and workshops on digital innovation in the built environment with more than 20 industry and academic speakers. The 2026 edition runs in two parts, the Industry Chapter at AUT and the main academic conference online, in conjunction with DigiBUILT 2026. The Industry Chapter Day led directly into the Aga Khan Award for Architecture Exhibition and Public Conversation at AUT that evening (entry 11). Industry Chapter Day, 11 September 2026, Sir Paul Reeves Building, AUT; main academic conference online, 7 to 8 December 2026	**Organiser** Auckland University of Technology, School of Future Environments **In conjunction with** DigiBUILT 2026 **Speakers and panellists from** Te Kāhui Whaihanga New Zealand Institute of Architects; Construction Clients' Group; Schneider Electric; Auckland International Airport; Beca; Strata Architects; Warren and Mahoney; Fisher & Paykel; Quanton; Kāinga Ora; Auckland	**2026**

	Plenary talks by the President of NZIA, the Construction Clients' Group, Schneider Electric and AUT; panels on AI and innovation and on women in the built environment; workshops on applied AI and open source AI for design practice https://www.gdi2026.com/	Council; Koru Environmental Consultants; Massey University; ICL Graduate Business School **Followed by** Aga Khan Award for Architecture Exhibition and Public Conversation, AUT **Publishing partners** Emerald Publishing (Smart and Sustainable Built Environment; Urbanization, Sustainability and Society); Taylor & Francis (Intelligent Buildings International)	
3.	**International Conference of Green + Digital + Intelligent Built Environments (GDI 2025)** *Founder and Conference Co-Chair, inaugural edition* **LEADERSHIP ROLE** Founded the series with Professor Amirhosein Ghaffarianhoseini and co-chaired its inaugural edition around three pillars: green, digital and intelligent built environments. The conference was governed by four honorary chairs, a conference committee, 17 international stream leaders and a senior advisory board drawn from 16 countries, and delivered with Beca as primary partner and sponsor alongside ten national and international partner bodies. Organised as Head of Built Environment Engineering; the conference generated more than NZD 200,000 in external income. 1 to 3 December 2025, Beca House and AUT City Campus, Auckland 200+ full papers received; 180+ presentations in 10 thematic tracks; GDI Awards in sustainability and climate adaptation, digital transformation and intelligent futures Conference proceedings and an edited volume of selected papers in preparation Nine keynotes: the AUT Vice-Chancellor; Beca; the Chief Executives of NZIA and NZGBC; the Dean of Design and Creative Technologies, AUT; Loughborough University; the University of Reading; Universiti Putra Malaysia; the Academy of Neuroscience for Architecture (USA) https://www.gdi2025.com/	**Organiser** Auckland University of Technology, School of Future Environments **Primary partner and sponsor** Beca (opening day at Beca House, Auckland) **Partners** Te Kāhui Whaihanga New Zealand Institute of Architects; International Council for Research and Innovation in Building and Construction (CIB); Association of Architecture Schools of Australasia; Associated Schools of Construction; New Zealand Green Building Council; Building Institute Aotearoa; Academy of Neuroscience for Architecture; CIBSE Intelligent Buildings Group; Smart Cities Council; Lean Construction Student Association **Publishing partners** Emerald Publishing; Taylor & Francis; Springer; Elsevier	**2025**

II. CONFERENCE CHAIR: SELECTED INTERNATIONAL CONFERENCES IN AOTEAROA NEW ZEALAND

Selected examples of established international conferences chaired or led in New Zealand

Selected Conference Leadership

#	Event and leadership	Organisers and partners	Year
4.	**International Conference of Smart and Sustainable Built Environment (SASBE 2024)** *Conference Co-Chair and Lead Proceedings Editor* **LEADERSHIP ROLE** Co-chaired the conference with Professor Amirhosein Ghaffarianhoseini at AUT in collaboration with CIB W116, with five international scientific committee chairs, a senior advisory board spanning 20 countries and twelve keynotes from seven countries. Lead editor of the Springer Nature proceedings and guest editor of the associated ITcon special issue. The conference generated more than NZD 200,000 in external income. 7 to 9 November 2024, AUT City Campus, Auckland About 300 abstracts received; 165 peer reviewed papers in Lecture Notes in Civil Engineering, Vol. 591; 15 presentation tracks; three technical workshops Keynotes from the University of Maryland, the Technical University of Denmark, Chung-Ang University, HKUST, the University of Reading, Toronto Metropolitan University, Victoria University of Wellington, NZIA, NZGBC and the Smart Cities Council	**Organisers** Auckland University of Technology, School of Future Environments, in collaboration with CIB W116 Smart and Sustainable Built Environments **Honorary chairs** Teesside University (UK) **Workshop partners** CIB Task Group 125; Universiti Putra Malaysia; XOIA Studio (Canada) **Publishing partners** Springer Nature; Elsevier (Automation in Construction); Emerald (Smart and Sustainable Built Environment;	**2024**

	https://doi.org/10.1007/978-981-96-4051-5	Urbanization, Sustainability and Society); CIB (ITcon)	
5.	**32nd Annual Conference of the International Group for Lean Construction (IGLC32)** *Head of the host department* **LEADERSHIP ROLE** Head of Built Environment Engineering, the host department for the first IGLC conference held in New Zealand, a six day programme spanning an Industry Day, workshops, a three day technical conference and a PhD School. The conference generated more than NZD 300,000 in external income. 1 to 6 July 2024, AUT City Campus, Auckland Keynotes from IGLC co-founder Professor Glenn Ballard (UC Berkeley) and Kāinga Ora https://www.aut.ac.nz/news/stories/lean-construction-conference-at-aut	AUT **Organisers** International Group for Lean Construction (IGLC); Auckland University of Technology **Co-host** Lean Construction Australia and New Zealand (LCANZ) **PhD School Dean** Aarhus University (Denmark) **Keynote speakers from** University of California, Berkeley; Kāinga Ora	**2024**
6.	**54th International Conference of the Architectural Science Association (ANZAScA 2020): Imaginable Futures** *Conference Chair and Proceedings Editor* **LEADERSHIP ROLE** Chaired the 54th annual conference of the Architectural Science Association, hosted at AUT with NZD 25,000 in AUT hosting funding, and co-edited its proceedings with Professor Amirhosein Ghaffarianhoseini and Associate Professor Nicola Naismith. Hosted at AUT City Campus, Auckland, November 2020 Proceedings: Imaginable futures: Design thinking, and the scientific method (ISBN 978-0-9923835-7-2) https://www.aut.ac.nz/events/international-conference-of-the-architectural-science-association	AUT **Organiser** Architectural Science Association (ANZAScA) **Host** Auckland University of Technology, School of Future Environments	**2020**

III. INSTITUTIONAL HOST: SELECTED GLOBAL CONFERENCES, EXHIBITIONS AND ALLIANCES

Selected examples hosted at AUT, or organised with partner institutions, under his departmental and School leadership

Selected Hosted and Partnered Events

#	Event and leadership	Organisers and partners	Year
7.	**2nd Global Conference: Indigenous Planning Reclaimed** *Head of School, Education Partner institution* **LEADERSHIP ROLE** Under his headship, the School of Future Environments is Education Partner for the second global conference, alongside Ngāti Whātua Ōrākei as tangata whenua partner and Tātaki Auckland Unlimited as hosting support partner. The School hosted a precursor event in its Thought Leadership Series in July 2026 (entry 19). 21 to 24 March 2027, Tāmaki Makaurau Auckland; successor to the inaugural International Indigenous Planning Conference, Manitoba, Canada, 2013 https://www.indigenousplanningreclaimed.org/	AUT **Organiser** Indigenous Planning Reclaimed **Tangata whenua partner** Ngāti Whātua Ōrākei **Education partner** AUT School of Future Environments **Hosting support partner** Tātaki Auckland Unlimited	**2027**
8.	**ASAC Weaving 2026: Australasian Student Architecture Congress, with the NZIA Resene Student Design Awards** *Head of School, host institution* **LEADERSHIP ROLE** Under his headship, the School of Future Environments hosts Weaving 2026, the Australasian Student Architecture Congress, with the Te Kāhui Whaihanga New Zealand Institute of Architects Resene Student Design Awards, bringing students, academics and the architecture profession from across Australasia to AUT.	**Congress** Australasian Student Architecture Congress (ASAC) **Partner** Te Kāhui Whaihanga New Zealand Institute of Architects (NZIA) **Host** AUT School of Future Environments	**2026**

30 November to 5 December 2026, Tāmaki Makaurau Auckland; School hosting at Tukutuku, AUT North Campus, in the first week of December

ASAC Weaving 2026 NZIA Resene Student Design Awards

9. **CIPS Industry Event: Procurement Professionals and University Research** — **2026**

Head of School, host institution

Partner

Chartered Institute of Procurement and Supply (CIPS)

Host

AUT School of Future Environments

LEADERSHIP ROLE

Under his headship, the School of Future Environments convened an industry event with the Chartered Institute of Procurement and Supply, connecting procurement professionals with AUT researchers and students.

14 October 2026, AUT

CIPS Australia and New Zealand

10. **AACE New Zealand Conference 2026: Unlocking the Potential of Project Controls and Cost Management in Aotearoa New Zealand** — **2026**

Head of School, host institution

Organiser

AACE International, Aotearoa New Zealand Section (Association for the Advancement of Cost Engineering)

Golden sponsor

Transpower New Zealand

Keynote organisations

RiskNZ; Global AI Certification Council; Beca; Strategic Planning Co.

Host

AUT School of Future Environments

LEADERSHIP ROLE

Under his headship, the School of Future Environments partnered with the AACE Aotearoa New Zealand Section to host its inaugural national conference at AUT, bringing cost engineering, project controls and risk professionals from industry, the public sector and academia together on AI governance, risk management and forensic schedule analysis.

24 September 2026, WG Building, AUT City Campus, Auckland; inaugural conference of the AACE Aotearoa New Zealand Section, established in 2024

Keynotes from RiskNZ, the Global AI Certification Council, Beca and Strategic Planning Co.; flagship panel on lessons from major projects, moderated by AUT

Event record (AUT)

11. **Global Architecture, Local Futures: Aga Khan Award for Architecture Exhibition and Public Conversation** — **2026**

Head of School, host institution

Partners

Aga Khan Award for Architecture (Aga Khan Development Network); Shia Imami Ismaili Council for Australia and New Zealand; Ismaili Centre Auckland

Host

AUT School of Future Environments

LEADERSHIP ROLE

Under his headship, the School hosted the Aga Khan Award for Architecture exhibition and public conversation with the Shia Imami Ismaili Council for Australia and New Zealand, programmed as the evening event of the GDI 2026 Industry Chapter Day and preceded by a two day student showcase at the Ismaili Centre Auckland.

11 September 2026, Sir Paul Reeves Building, AUT; opening conversation with Farrokh Derakhshani, Director of the Aga Khan Award for Architecture; attended by the High Commissioner for Pakistan to New Zealand

Preceded by Emerging Auckland, a student showcase at the Ismaili Centre Auckland, 5 to 6 September 2026

Event record

12. **NowNet Arts Conference 2026: Future Environments Through Network Arts** — **2026**

Head of School, host institution

Organiser

NowNet Arts

Host

AUT School of Future Environments

LEADERSHIP ROLE

Under his headship, the School hosted this international conference and creative symposium on network arts, delivered in person and online.

17 to 20 August 2026, AUT City Campus; keynotes, research papers, workshops, performances and demonstrations

Event record

13. **FOSS4G 2025: Global Conference on Free and Open Source Software for Geospatial** — **2025**

Head of Built Environment Engineering in the supporting School

LEADERSHIP ROLE

The School of Future Environments, in which he led Built Environment Engineering, was the named institutional supporter of the global FOSS4G conference, held at AUT City Campus.

17 to 23 November 2025, AUT City Campus; 400+ attendees; 50+ workshops; three days of parallel conference sessions

https://2025.foss4g.org/

Organisers
Open Source Geospatial Foundation (OSGeo); OSGeo Oceania

Bid and destination partners
Auckland Convention Bureau, Tātaki Auckland Unlimited; Tourism New Zealand Business Events

Institutional supporter and venue
AUT School of Future Environments

14. **International Conference on Digital Frontiers in Buildings and Infrastructure (DFBI 2025)** — **2025**

Keynote Speaker; AUT as organising institution

LEADERSHIP ROLE

Keynote speaker at this European conference, for which AUT was one of four organising institutions alongside TU Delft, Teesside University and the University of Twente.

11 to 13 June 2025, Faculty of Civil Engineering and Geosciences, TU Delft, the Netherlands

46 peer reviewed papers in Lecture Notes in Civil Engineering, Vol. 848 (Springer Nature)

https://www.dfbi.net/

Organising institutions
TU Delft; Teesside University; University of Twente; Auckland University of Technology

Partners
buildingSMART; Building Digital Twin Association; SCIONS; Sci-Tech Development

Supporters
University of Melbourne; University of Barcelona; RILEM; Springer; Wiley; Emerald; Routledge

15. **EMCONZ 2024: Electrical and Mechanical Conference of New Zealand** — **2024**

Head of Built Environment Engineering, host university

LEADERSHIP ROLE

Held at AUT during his headship of Built Environment Engineering: Engineering New Zealand's national electrical and mechanical engineering conference, themed on AI, smart devices and climate change.

14 to 15 November 2024, AUT Events Centre, Auckland

https://www.eeg.org.nz/2024emconz

Organisers
Engineering New Zealand: Electrical Engineering Group and Mechanical Engineering Group

Sponsors
NHP; Zumtobel; Beca; Caliber Design

Host university
Auckland University of Technology

16. **South Pacific Passive House Conference (SPPHC 2021): Our Common Future** — **2021**

Host lead at AUT

LEADERSHIP ROLE

Secured NZD 17,000 in AUT funding to host the conference and trade show at AUT, co-hosted by the Passive House Institute New Zealand and the Australian Passive House Association.

AUT City Campus, Auckland; focus on passive house social housing and intergenerational wellbeing

https://passivehouse.nz/2021/08/11/south-pacific-passive-house-conference-2021/

Co-hosts
Passive House Institute New Zealand (Te Tōpūtanga o te Whare Korou ki Aotearoa); Australian Passive House Association

Host university
Auckland University of Technology

17. **New Zealand Built Environment Research Symposium (NZBERS 2017)** — **2017**

Organiser and host at AUT

LEADERSHIP ROLE

Organiser and host of the 2017 symposium at AUT, which brought together built environment research leads from seven New Zealand universities and keynote speakers from contracting, construction clients and local government.

17 to 18 October 2017, AUT, Auckland; theme: advancing collaborative built environment research and practice in New Zealand

https://www.nzbers.ac.nz/events

Series coordinator
School of Built Environment, Massey University

Keynote speakers from
Leighs Construction; Hawkins Construction; Construction Clients' Group; Auckland Council

Research leads from
University of Auckland; Massey University; AUT; Unitec; University of Canterbury; Victoria University of Wellington; University of Otago

IV. CROSS-SECTOR PLATFORMS: SELECTED INDUSTRY, GOVERNMENT, DIPLOMATIC AND COMMUNITY FORUMS

Selected forums with ministries, embassies, infrastructure owners, the workforce and iwi

Future Environments Thought Leadership Series and School Platforms

School of Future Environments, AUT

#	Event and leadership	Organisers and partners	Year
18.	**BIO//LOGIC: Do Biota Want to Collaborate?** *Future Environments Thought Leadership Series* **LEADERSHIP ROLE** Convened under his headship with the Embassy of France in New Zealand, Villa Antipode and LASER Auckland, on art, AI, biotechnology and ecology. 12 August 2026, AUT City Campus; livestreamed Event record	AUT **Partners** Embassy of France in New Zealand; Villa Antipode / Te Ataata; LASER Auckland; AUT Visual Arts Practice-led Research Institute	**2026**
19.	**Indigenous Planning Reclaimed: Setting the Scene** *Future Environments Thought Leadership Series* **LEADERSHIP ROLE** Convened under his headship as a precursor to the 2027 global conference, for professionals from planning, architecture, engineering, design, local government, iwi and community organisations. 15 July 2026, AUT City Campus; with Professor Hirini Matunga Event record	AUT **Partner** Indigenous Planning Reclaimed	**2026**
20.	**Transformational Technology in Built Environments** *Future Environments Thought Leadership Series* **LEADERSHIP ROLE** Convened under his headship, bringing industry professionals, academics and students together on how technology is reshaping the built environment. 30 June 2026, AUT City Campus Event record	AUT **Participants** Industry professionals, academics and students	**2026**
21.	**The Hard Part of AI: Lean and AI in Construction** *Future Environments Thought Leadership Series* **LEADERSHIP ROLE** Convened under his headship on the practical delivery of AI in construction, with speakers from Auckland International Airport and BuildBIM. 13 May 2026, AUT City Campus Event record	AUT LCSA **Partners** Auckland International Airport; BuildBIM; Lean Construction Student Association	**2026**
22.	**Accessible and Inclusive Design** *Future Environments Thought Leadership Series* **LEADERSHIP ROLE** Convened under his headship with Whaikaha, Ministry of Disabled People, bringing together government, academia and sector partners on accessibility and inclusive design. 22 April 2026, AUT City Campus and online Event record	AUT **Partner** Whaikaha, Ministry of Disabled People	**2026**
23.	**Empowering Innovation and Well-being through Systems Thinking** *Future Environments Thought Leadership Series* **LEADERSHIP ROLE** Hosted by the School while he led Built Environment Engineering, on mental health and resilience in construction and engineering. 23 October 2025, AUT City Campus; timed with the release of the 2025 MATES Well-being Survey https://www.aut.ac.nz/events/future-environments-x-mates-in-construction-thought-leadership-series	AUT **Partner** MATES in Construction	**2025**

24.	**Future Environments Research Symposium (AUT Research Week)** *Annual showcase of the School of Future Environments* **LEADERSHIP ROLE** Opened the 2026 symposium as Head of School. Research across architecture and built environment engineering, and creative technologies before those programmes were discontinued https://www.aut.ac.nz/events/future-environments-research-symposium	AUT **Programme** AUT Research Week	**2024 to 2026**
25.	**NZGBC Future Thinker of the Year Awards 2021** *Host institution* **LEADERSHIP ROLE** Hosted the awards evening of the New Zealand Green Building Council's Future Thinker of the Year at the School of Future Environments. 22 April 2021, AUT School of Future Environments, Auckland https://architecturenow.co.nz/articles/future-thinker-of-the-year-for-2021-announced/	NZGBC AUT **Organiser** New Zealand Green Building Council **Host** AUT School of Future Environments	**2021**

Selected Industry, Government and International Engagements

As Head of School and, before January 2026, Head of Department

#	Event and leadership	Organisers and partners	Year
26.	**AUT Live 2026: School of Future Environments Open Day** *AUT Live, the University's annual open day* **LEADERSHIP ROLE** Led the School's participation in his first year as Head of School, presenting seven undergraduate and postgraduate fields to prospective students, whānau and schools. School sessions filled beyond room capacity. Saturday 29 August 2026, AUT City Campus, Auckland Reflection on AUT Live 2026, LinkedIn	AUT **Organiser** Auckland University of Technology **Audience** Prospective students, whānau and schools	**2026**
27.	**Beca Business Roundtable on Opportunity Driven Growth** *Invited participant representing AUT* **LEADERSHIP ROLE** Represented AUT as Head of School at a roundtable convened by Beca's Head of New Ventures, alongside senior leaders from infrastructure, transport, housing, primary industry, venture and research organisations. The invitation reflected the relationship built with Beca through GDI 2025. 14 May 2026, Beca House, Auckland Beca: ignite your thinking	**Host** Beca	**2026**
28.	**Viet Nam Ministry of Construction Delegation at AUT** *Viet Nam Government Timber Construction Study Tour* **LEADERSHIP ROLE** Received, as Head of School and host, a delegation from Viet Nam's Ministry of Construction and the Viet Nam Institute for Building Materials. AUT was the delegation's first academic stop, and the School presented its research on green timber, seismic protection and life cycle performance. 23 March 2026, Tukutuku building, AUT	AUT **Delegation** Ministry of Construction of Viet Nam; Viet Nam Institute for Building Materials **Host** AUT School of Future Environments	**2026**
29.	**Visit to the Singapore University of Technology and Design** *International engagement as Head of Department, Built Environment Engineering* **LEADERSHIP ROLE** Visited SUTD to explore collaboration in design led education, sustainability and emerging technologies, hosted by Assistant Professor F. Peter Ortner and Professor Lim Seh Chun, former Provost. June 2025, Singapore Account of the visit, LinkedIn	**Host** Singapore University of Technology and Design	**2025**

V. GLOBAL SCIENTIFIC STEWARDSHIP: SCIENTIFIC COMMITTEES AND GLOBAL FOOTPRINT

Conference series from more than 100 scientific and technical committees since 2006, and his global footprint

LEADERSHIP ROLE

Since 2006, member of the scientific and technical committees of more than 100 international conferences. Together with his conference chairing, keynotes and presentations, this service extends across 33 countries on six continents. The role carries responsibility for the quality of what each conference presents: peer reviewing and selecting papers, advising on scientific themes, and upholding the review standards on which the published proceedings depend. The committees include the flagship congress of CIB, CAADRIA in Asia, the Architectural Science Association in Australasia, and international series in energy systems, human factors, construction technology and building envelopes.

Major Conference Series

Series in which he has served on scientific or technical committees, with committee records where available online

#	Conference series	Scope and organising body
30.	**Computer-Aided Architectural Design Research in Asia (CAADRIA)**	Annual conference of the Association for Computer-Aided Architectural Design Research in Asia
31.	**Construction Applications of Virtual Reality (ConVR)**	International Conference on Construction Applications of Virtual Reality **Verified: Scientific Committee, CONVR 2016, Hong Kong** committee record **Verified: Scientific Committee, CONVR 2018, Auckland** committee record
32.	**Architectural Science Association (ASA), formerly ANZAScA (Australian and New Zealand Architectural Science Association)**	Annual international conference of the Architectural Science Association
33.	**CIB World Building Congress (WBCIB)**	Flagship congress of CIB, the International Council for Research and Innovation in Building and Construction
34.	**Australasian Building Simulation (AIRAH)**	Building simulation conference of the Australian Institute of Refrigeration, Air Conditioning and Heating
35.	**Green Cities**	International Green Cities conferences
36.	**Applied Human Factors and Ergonomics (AHFE)**	International Conference on Applied Human Factors and Ergonomics
37.	**Sustainable Development of Energy, Water and Environment Systems (SDEWES)**	SDEWES conference series **Verified: Scientific Advisory Board, 10th SDEWES Conference, Dubrovnik, 2015** committee record
38.	**Automation, Control and Robotics Engineering (CACRE)**	International Conference on Automation, Control and Robotics Engineering
39.	**Sustainable Built Environment (SBE)**	International and regional conferences of the SBE series
40.	**Advanced Building Skins**	International conference on building envelopes and façade technology

Global Footprint (33 countries on six continents)

Countries in which he has served on scientific committees, chaired, keynoted or presented at international conferences since 2006

Region	Countries	Selected host cities of his conference contributions
Asia Pacific (11)	Australia, China, Hong Kong, Indonesia, Japan, Malaysia, New Zealand, Singapore, South Korea, Sri Lanka, Thailand	Kuala Lumpur, Kuching and Selangor; Nanjing, Beijing and Shanghai; Hong Kong; Seoul; Jakarta and Bali; Colombo; Sydney, Melbourne and Brisbane; Auckland and Wellington
Europe (14)	Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Portugal, Romania, Slovenia, Switzerland, United Kingdom	Dubrovnik; Prague; Budapest; Florence and Bologna; Lisbon; Lille; Delft; Glasgow and Huddersfield
Middle East and Africa (5)	Egypt, Iran, Kuwait, Türkiye, United Arab Emirates	Tehran
Americas (3)	Brazil, Canada, United States	São Paulo; Toronto and Banff; Pittsburgh

VOICE: KEYNOTES, INVITED ADDRESSES AND PUBLIC CONTRIBUTIONS

Keynote addresses, invited and as Chair or Head, contributions to public commentary and policy, and a summary of leadership and research perspectives

Keynote Addresses: Invited Keynotes

#	Event and contribution	Organiser and place	Year
1.	**CIB President's Seminar Series: From Research to Impact** *Invited keynote, "From Static to Dynamic: Built Environment Education in the Age of Agentic AI"* LEADERSHIP ROLE Invited address in the seventh CIB President's Seminar Series, on the impact of research in the built environment sector. Sets out an operating model for architecture and built environment education in a sector that now changes in months rather than review cycles. Forthcoming, 30 October 2026, online CIB President's Seminar Series	**Organiser** CIB, International Council for Research and Innovation in Building and Construction	2026
2.	**International Conference on Digital Frontiers in Buildings and Infrastructure (DFBI 2025)** *Invited keynote, "Cities as Living, Sensing Bodies"* LEADERSHIP ROLE Keynote address at the conference organised by TU Delft, Teesside University, the University of Twente and Auckland University of Technology. 11 to 13 June 2025, Faculty of Civil Engineering and Geosciences, TU Delft, the Netherlands DFBI 2025 keynote page	**Place** TU Delft, the Netherlands	2025
3.	**Smart Cities Week Aotearoa 2024** *Keynote Speaker* LEADERSHIP ROLE Delivered remarks with Professor Amirhosein GhaffarianHoseini at the two day national event on urban innovation and sustainability, alongside speakers from industry and local government. May 2024 RG UBE report of the event	**Organiser** Smart Cities Council	2024
4.	**Universidad de La Frontera, Chile** *Invited keynote, "The State of BIM in New Zealand"* LEADERSHIP ROLE Presented a research view of national BIM adoption in New Zealand, alongside an industry account from Beca and a Chilean perspective, delivered with simultaneous Spanish translation. August 2022 Account of the keynote	**Host** Universidad de La Frontera, Chile	2022
5.	**Leading-Edge Energy-Efficiency Developments and Management Technology for Urban Infrastructure** *Invited keynote with Professor Amirhosein Ghaffarianhoseini, "Extroverted Intelligent Technologies Forming Introverted Smart Cities"* LEADERSHIP ROLE Delivered remarks on the future horizon of energy conservation potentials and promoted utilization of remote working schemes well before CoVID. Report November 2019	**Organiser** German-New Zealand Chamber of Commerce	2019
6.	**From Intelligent Prototypes to an Energy Efficient Future** *Invited keynote with Professor Amirhosein Ghaffarianhoseini* LEADERSHIP ROLE Traced the path from intelligent building prototypes to energy efficient buildings, arguing for integration by design rather than technology adopted for its own sake. Keynote slides	**Organiser** German-New Zealand Chamber of Commerce	2018

Keynote Addresses: Opening Keynotes and Closing Addresses as Chair or Head

7.	**GDI 2026 Industry Chapter Day** *Opening and closing addresses as GDI Chair* **LEADERSHIP ROLE** Opened and closed the Industry Chapter Day of the International Conference of Green + Digital + Intelligent Built Environments with Professor Amirhosein GhaffarianHoseini, a day of plenary talks, panels and workshops with more than 20 industry and academic speakers. 11 September 2026, Sir Paul Reeves Building, AUT GDI 2026	**Organiser** Auckland University of Technology, School of Future Environments	2026
8.	**Future Environments Research Symposium, AUT Research Week** *Opening address as Head of School* **LEADERSHIP ROLE** Opened the School's annual research symposium, which presents research across architecture and built environment engineering. September 2026, AUT City Campus Symposium record	**Organiser** School of Future Environments, AUT	2026
9.	**International Conference of Green + Digital + Intelligent Built Environments (GDI 2025)** *Opening keynote and closing address as conference Chair* **LEADERSHIP ROLE** Opened and closed the inaugural edition of the GDI conference series, which received more than 200 full papers across ten thematic tracks, with Beca as primary partner. 1 to 3 December 2025, AUT City Campus; opening address on 2 December, closing remarks at the gala on 3 December GDI 2025 AUT News	**Organiser** Auckland University of Technology, School of Future Environments **Primary partner** Beca	2025
10.	**FOSS4G 2025: Global Conference on Free and Open Source Software for Geospatial** *Opening keynote as Head of Built Environment Engineering* **LEADERSHIP ROLE** Opened the global conference of the Open Source Geospatial Foundation with AUT's Deputy Vice Chancellor Research, Professor Mark Orams, before more than 400 developers, researchers, agencies and companies. 17 to 23 November 2025, AUT City Campus FOSS4G 2025	**Organisers** Open Source Geospatial Foundation (OSGeo); OSGeo Oceania **Host** AUT School of Future Environments	2025
11.	**International Conference of Smart and Sustainable Built Environment (SASBE 2024)** *Welcome, opening keynote and closing address as conference Chair* **LEADERSHIP ROLE** Delivered the formal welcome, the opening keynote and the closing address of the conference he chaired with Professor Amirhosein Ghaffarianhoseini in collaboration with CIB W116. 7 to 9 November 2024, AUT City Campus, Auckland Conference programme Chairs and committee	**In collaboration with** CIB W116, Smart and Sustainable Built Environments	2024
12.	**32nd Annual Conference of the International Group for Lean Construction (IGLC32)** *Opening keynote and closing address as Head of the host department* **LEADERSHIP ROLE** Opened and closed the technical conference of the first IGLC held in Aotearoa New Zealand, hosted by Built Environment Engineering at AUT. July 2024, AUT City Campus; technical conference opened on 3 July Welcome address recording Closing address recording	**Host** Built Environment Engineering, School of Future Environments, AUT	2024

13.	**54th International Conference of the Architectural Science Association (ANZAScA 2020)** *Opening and officiating keynote and closing address as conference Chair* LEADERSHIP ROLE Opened, officiated and closed the conference, hosted by AUT and moved online in the first year of the pandemic, with more than 300 registrants. 25 to 28 November 2020, hosted by AUT and delivered online Conference record (AUT)	**Organiser** Architectural Science Association (ANZAScA) **Host** Auckland University of Technology	2020

Public Commentary and Policy Contributions

#	Contribution	Reach	Year
14.	**Building consent reform: How digital technology can make new liability rules watertight** *The Conversation, with Dat Tien Doan and Amirhosein GhaffarianHoseini* LEADERSHIP ROLE Commentary on New Zealand's building consent reform, arguing that digital technology is what makes the proposed liability rules enforceable. The article was republished by national news and industry outlets. The Conversation interest.co.nz NZ City PlaceMakers The National Tribune	**Republished by** interest.co.nz; NZ City; PlaceMakers; The National Tribune (Australia)	2025
15.	**Construction workforce of the future** *Consultation for ConCOVE Tūhura* LEADERSHIP ROLE Consulted by Height, on behalf of ConCOVE Tūhura, the Centre of Vocational Excellence for construction and infrastructure, on the skills and technology the future construction workforce will need. December 2024 Account of the consultation	**Consultation** ConCOVE Tūhura	2024
16.	**Strengthening research funding assessment in New Zealand** *Recommendations to Royal Society Te Apārangi, MBIE and Callaghan Innovation* LEADERSHIP ROLE Set out seven recommendations on how research proposals are assessed and funded, drawing on his experience as national and international assessor and as principal investigator, during the review of New Zealand's science system. June 2024 Recommendations	**Addressed to** Royal Society Te Apārangi; MBIE; Callaghan Innovation	2024
17.	**Auckland's draft Regional Land Transport Plan** *Expert commentary for the public consultation* LEADERSHIP ROLE Set out expert recommendations on integrated public transport and ticketing, separated cycling infrastructure, electric vehicle and bus fleet transition, sensor based traffic management and digital community engagement, aligned with the Auckland Transport Alignment Project and the Government Policy Statement on Land Transport 2024. RG UBE record	**Consultation** Auckland Regional Land Transport Plan	2024
18.	**Capturing the benefits of AI in healthcare for Aotearoa New Zealand** *Member, reference group of the Office of the Prime Minister's Chief Science Advisor* LEADERSHIP ROLE Served on the reference group that informed the Chief Science Advisor's report on artificial intelligence in healthcare, released on 15 December 2023, bringing a built environment perspective to national thinking on AI. December 2023 Project page Report	**Report** Office of the Prime Minister's Chief Science Advisor	2023

Leadership and Research Perspectives (14)

Since March 2024 he has published fourteen perspectives for professional and sector readers: six on academic and institutional leadership, six that translate his group's published studies on indoor environments, thermal comfort, wind, climate responsive housing and digital twins, and two on Auckland's urban growth. The full series, with links to each piece and the research behind it, is on his portfolio website.
alighaffarian.com/voice: Leadership Perspectives

Other articles for professional and general readers are listed under Professional and Public Scholarship.

AWARDS, HONOURS AND RECOGNITION

Research awards, institutional recognition and publication impact, 2008 to 2026

The record below falls into three groups. Competitive awards and medals came first, during his doctoral and early career research in Malaysia. Faculty awards at AUT followed from 2019, recognising research excellence and contribution. The largest group is publisher recognition of individual articles as among the most read, most downloaded or most cited in their journals, which is the most direct evidence of how widely his review papers are used.

Awards and Medals

#	Award	Awarding body	Year
1.	**Best Paper Award,** 20th International Conference on Construction Applications of Virtual Reality (CONVR2020)	CONVR	2020
2.	**DCT Champion**	Faculty of Design and Creative Technologies, AUT	2020
3.	**Outstanding Doctoral Award**	Faculty of Design and Creative Technologies, AUT	2020
4.	**DCT Dean's Research Team Award**	Faculty of Design and Creative Technologies, AUT	2019
5.	**Best Paper Award,** IConBEE2018 conference	IConBEE	2018
6.	**Bronze Medal,** IBS Sustainability Integration Exhibition	Industrialised Building System exhibition, Malaysia	2011
7.	**Gold Medal**	British Inventors Society	2009
8.	**Silver Medal**	Malaysian Association of Research Scientists (MARS)	2009
9.	**Silver Medal**	Universiti Putra Malaysia	2008

Publication Impact Recognition

#	Recognition	Publisher or body	Year
10.	**Two review articles cited more than 1,000 times each** on Google Scholar: State of the art analysis of the environmental benefits of green roofs (Applied Energy, 2014; 1,314 citations), also listed among the journal's most read articles, and Building Information Modelling (BIM) uptake: Clear benefits, understanding its implementation, risks and challenges (Renewable and Sustainable Energy Reviews, 2017; 1,273 citations)	Elsevier	2026
11.	**Most read article in the history of Architectural Science Review**: What is an intelligent building? Analysis of recent interpretations from an international perspective (2016), with 51,627 views on the publisher's site	Taylor & Francis	2026
12.	**Most read and second most read articles,** Architectural Science Review; one of the most read articles, Intelligent Buildings International	Taylor & Francis	2018
13.	**Research featured in the CIBSE Intelligent Buildings Group newsletter,** over several rounds	CIBSE Intelligent Buildings Group, London	2018
14.	**One of the most cited and one of the most downloaded articles,** Building and Environment	Elsevier	2017
15.	**Work featured in the 60th Anniversary Special Edition** of Architectural Science Review, and in ANZAScA and Architectural Science Review newsletters	Taylor & Francis; ANZAScA	2017
16.	**Award for Highly Cited Article,** Applied Energy	Elsevier	2015
17.	**Two of the most read articles,** Renewable and Sustainable Energy Reviews	Elsevier	2014

Recognition of Supervised Research

#	Recognition	Awarding body	Year
18.	**NZGBC Future Thinker Award shortlist** for his doctoral candidate Megan Burfoot, on her doctoral research on intelligent classroom acoustics	New Zealand Green Building Council	2022

Evidence: AUT research profile, awards and contributions Architectural Science Review: article record and views RG UBE: green roofs citations RG UBE: most read papers 2018

MOST-CITED JOURNAL ARTICLES

List of published journal articles with 100+ citations

- Berardi, U., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2014). State-of-the-art analysis of the environmental benefits of green roofs. *Applied Energy*, *115*, 411–428. https://doi.org/10.1016/j.apenergy.2013.10.047
  Q1 | Impact Factor 10.1 | Google Scholar citations 1,314 (October 2026)

- **GhaffarianHoseini, A.**, Tookey, J., Ghaffarianhoseini, AH., Naismith, N., Azhar, S., Efimova, O., & Raahemifar, K. (2017). Building information modelling (BIM) uptake: Clear benefits, understanding its implementation, risks and challenges. *Renewable and Sustainable Energy Reviews*, *75*, 1046–1053. https://doi.org/10.1016/j.rser.2016.11.083
  Q1 | Impact Factor 16.3 | Google Scholar citations 1,273 (October 2026)

- Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Ghaffarianhoseini, AH., & Tookey, J. (2017). A critical comparison of green building rating systems. *Building and Environment*, *123*, 243–260. https://doi.org/10.1016/j.buildenv.2017.07.007
  Q1 | Impact Factor 7.1 | Google Scholar citations 978 (October 2026)

- Ghaffarianhoseini, AH., Dahlan, N. D., Berardi, U., **GhaffarianHoseini, A.**, Makaremi, N., & GhaffarianHoseini, M. (2013). Sustainable energy performances of green buildings: A review of current theories, implementations and challenges. *Renewable and Sustainable Energy Reviews*, *25*, 1–17. https://doi.org/10.1016/j.rser.2013.01.010
  Q1 | Impact Factor 16.3 | Google Scholar citations 666 (October 2026)

- Aflaki, A., Mirnezhad, M., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Omrany, H., Wang, Z.-H., & Akbari, H. (2017). Urban heat island mitigation strategies: A state-of-the-art review on Kuala Lumpur, Singapore and Hong Kong. *Cities*, *62*, 131–145. https://doi.org/10.1016/j.cities.2016.09.003
  Q1 | Impact Factor 6.0 | Google Scholar citations 583 (October 2026)

- Omrany, H., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Raahemifar, K., & Tookey, J. (2016). Application of passive wall systems for improving the energy efficiency in buildings: A comprehensive review. *Renewable and Sustainable Energy Reviews*, *62*, 1252–1269. https://doi.org/10.1016/j.rser.2016.04.010
  Q1 | Impact Factor 16.3 | Google Scholar citations 404 (October 2026)

- Ghaffarianhoseini, AH., Berardi, U., & **GhaffarianHoseini, A.** (2015). Thermal performance characteristics of unshaded courtyards in hot and humid climates. *Building and Environment*, *87*, 154–168. https://doi.org/10.1016/j.buildenv.2015.02.001
  Q1 | Impact Factor 7.1 | Google Scholar citations 400 (October 2026)

- Ghaffarianhoseini, AH., AlWaer, H., Omrany, H., **GhaffarianHoseini, A.**, Alalouch, C., Clements-Croome, D., & Tookey, J. (2018). Sick building syndrome: Are we doing enough? *Architectural Science Review*, *61*(3), 99–121. https://doi.org/10.1080/00038628.2018.1461060
  Q1 | Impact Factor 2.5 | Google Scholar citations 375 (October 2026)

- **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Berardi, U., Tookey, J., Li, D. H. W., & Kariminia, S. (2016). Exploring the advantages and challenges of double-skin façades (DSFs). *Renewable and Sustainable Energy Reviews*, *60*, 1052–1065. https://doi.org/10.1016/j.rser.2016.01.130
  Q1 | Impact Factor 16.3 | Google Scholar citations 338 (October 2026)

- Ghaffarianhoseini, AH., Berardi, U., AlWaer, H., Chang, S., Halawa, E., **GhaffarianHoseini, A.**, & Clements-Croome, D. (2016). What is an intelligent building? Analysis of recent interpretations from an international perspective. *Architectural Science Review*, *59*(5), 338–357. https://doi.org/10.1080/00038628.2015.1079164
  Q1 | Impact Factor 2.5 | Google Scholar citations 275 (October 2026)

- Ghaffarianhoseini, AH., Dahlan, N. D., Berardi, U., **GhaffarianHoseini, A.**, & Makaremi, N. (2013). The essence of future smart houses: From embedding ICT to adapting to sustainability principles. *Renewable and Sustainable Energy Reviews*, *24*, 593–607. https://doi.org/10.1016/j.rser.2013.02.032
  Q1 | Impact Factor 16.3 | Google Scholar citations 243 (October 2026)

- **GhaffarianHoseini, A.**, Zhang, T., Nwadigo, O., Ghaffarianhoseini, AH., Naismith, N., Tookey, J., & Raahemifar, K. (2017). Application of nD BIM integrated knowledge-based building management system (BIM-IKBMS) for inspecting post-construction energy efficiency. *Renewable and Sustainable Energy Reviews*, *72*, 935–949. https://doi.org/10.1016/j.rser.2016.12.061
  Q1 | Impact Factor 16.3 | Google Scholar citations 232 (October 2026)

- Halawa, E., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Trombley, J., Hassan, N., Baig, M., Yusoff, S. Y., & Azzam Ismail, M. (2018). A review on energy conscious designs of building façades in hot and humid climates: Lessons for (and from) Kuala Lumpur and Darwin. *Renewable and Sustainable Energy Reviews*, *82*, 2147–2161. https://doi.org/10.1016/j.rser.2017.08.061
  Q1 | Impact Factor 16.3 | Google Scholar citations 179 (October 2026)

- Ghaffarianhoseini, AH., Berardi, U., **GhaffarianHoseini, A.**, & Al-Obaidi, K. (2019). Analyzing the thermal comfort conditions of outdoor spaces in a university campus in Kuala Lumpur, Malaysia. *Science of the Total Environment*, *666*, 1327–1345. https://doi.org/10.1016/j.scitotenv.2019.01.284
  Q1 | Impact Factor 8.2 | Google Scholar citations 162 (October 2026)

- **GhaffarianHoseini, A.**, Tookey, J., Ghaffarianhoseini, AH., Yusoff, S. M., & Hassan, N. B. (2016). State of the art of rainwater harvesting systems towards promoting green built environments: A review. *Desalination and Water Treatment*, *57*(1), 95–104. https://doi.org/10.1080/19443994.2015.1021097
  Q1 | Impact Factor 5.1 | Google Scholar citations 152 (October 2026)

- Ramakreshnan, L., Aghamohammadi, N., Fong, C. S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Wong, L. P., Hassan, N., & Sulaiman, N. M. (2018). A critical review of urban heat island phenomenon in the context of Greater Kuala Lumpur, Malaysia. *Sustainable Cities and Society*, *39*, 99–113. https://doi.org/10.1016/j.scs.2018.02.005
  Q1 | Impact Factor 12.0 | Google Scholar citations 117 (October 2026)

- Azzazy, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & Doborjeh, Z. (2021). A critical review on the impact of built environment on users' measured brain activity. *Architectural Science Review*, *64*(4), 319–335. https://doi.org/10.1080/00038628.2020.1749980
  Q1 | Impact Factor 2.5 | Google Scholar citations 105 (October 2026)

- Ghaffarianhoseini, AH., AlWaer, H., **GhaffarianHoseini, A.**, Clements-Croome, D., Berardi, U., Raahemifar, K., & Tookey, J. (2018). Intelligent or smart cities and buildings: A critical exposition and a way forward. *Intelligent Buildings International*, *10*(2), 122–129. https://doi.org/10.1080/17508975.2017.1394810
  Q1 | Impact Factor 2.2 | Google Scholar citations 101 (October 2026)

SUMMARY OF RESEARCH OUTPUTS

Category	Number
Journal Publications (total)	**121**
Journal Articles	115
Journal Editorials, Guest Editorials and Book Reviews	6
Authored Books	2
Edited Books and Conference Proceedings	3
Forewords and Conference Front Matter	3
Book Chapters	8
Conference Papers and Presentations	108
Research Reports	1
Patent applications	1
Professional and Public Scholarship	16
Preprints and Manuscripts	3
Doctoral Supervision: Completed PhD Theses	21
Degree Theses	2
Total	**289**

PEER-REVIEWED JOURNAL ARTICLES

2026

1. Purushothaman, M. B., **GhaffarianHoseini, A.**, & Tun Kyaw, Z. (2026). Examining the impact of human factors on lean construction scheduling through network and feedback analysis. *Engineering, Construction and Architectural Management*, ***33***(15), 790–811. https://doi.org/10.1108/ecam-11-2025-1784

2. Al-Kayed, A. A., Rotimi, F. E., Purushothaman, M. B., Pawley, M., & **GhaffarianHoseini, A.** (2026). Modelling the enablers of effective digital technology implementation for competitiveness enhancement among subcontracting organisations in New Zealand's residential construction industry. *Journal of Engineering, Design and Technology*, *24*(4), 894–919. https://doi.org/10.1108/JEDT-12-2025-0724

3. Daemei, A. B., Izadyar, N., Assareh, E., Lukosch, H. K., Santamouris, M., Al Salam, M. A., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2026). Serious games for energy applications in the built environment: A systematic review. *Energy Research & Social Science*, *138*, 104826. https://doi.org/10.1016/j.erss.2026.104826

4. Doan, D. T., Albsoul, H., Shobha, A. R., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2026). An integrated challenge–strategy framework for construction waste management in New Zealand: Behavioural and organisational challenges and strategies. *Engineering, Construction and Architectural Management*, *33*(8), 6206–6227. https://doi.org/10.1108/ECAM-05-2025-0892

5. Fahmi, M., Purushothaman, M. B., Rotimi, F. E., & **GhaffarianHoseini, A.** (2026). Interactions and connections of safe egress factors in hospital designs. *Smart and Sustainable Built Environment*, *15*(4), 1590–1623. https://doi.org/10.1108/SASBE-06-2025-0307

6. **GhaffarianHoseini, A.**, Okakpu, A., Ghaffarianhoseini, AH., Lerman, K., & Pour Rahimian, F. (2026). Social network analysis (SNA) in architectural conceptual design: Classifying factors for social harmony – a comprehensive review. *Archnet-IJAR: International Journal of Architectural Research*, *20*(4), 936–963. https://doi.org/10.1108/ARCH-04-2025-0164

7. Ghaffarianhoseini, AH., Omrany, H., **GhaffarianHoseini, A.**, Cooper, I., Baghaei Daemei, A., Rahimian, F., Chang, S., Powell, K. M., El Haouzi, H. B., AlWaer, H., & Berardi, U. (2026). Ten questions concerning the future of intelligent buildings. *Building and Environment*, in press. https://doi.org/10.1016/j.buildenv.2026.115189

8. Hashemi, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & Jamei, E. (2026). A systematic review of microclimate and outdoor thermal comfort studies in Australia and New Zealand. *Smart and Sustainable Built Environment*, *15*(1), 156–181. https://doi.org/10.1108/SASBE-10-2023-0322

9. Nkado, F. C., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2026). Interrelationships among stakeholder-perceived factors influencing solar PV adoption in passive houses in New Zealand. *Sustainable Development*, in press. https://doi.org/10.1002/sd.71582

10. Nkado, F. C., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2026). Solar photovoltaic systems adoption for passive houses in New Zealand: A mixed-methods analysis of trends and influencing factors. *Energy and Buildings*, *368*, 117862. https://doi.org/10.1016/j.enbuild.2026.117862

11. Owais, O. A., Poshdar, M., **GhaffarianHoseini, A.**, Jaafar, K., & Sarhan, S. (2026). Empirical validation of the next-gen digital project manager competency framework through exploratory factor analysis. *Smart and Sustainable Built Environment*, in press. https://doi.org/10.1108/SASBE-11-2025-0698

12. Patel, U. R., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Burgess, A. (2026). Towards a well-being-oriented framework for urban digital twins. *Cities*, *169*, 106579. https://doi.org/10.1016/j.cities.2025.106579

13. Poorisat, T., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2026). Integrating energy efficiency, water efficiency and indoor environmental quality towards advancing sustainable building designs and practices in New Zealand: Stakeholders' perspectives. *Construction Innovation*, *26*(9), 79–114. https://doi.org/10.1108/CI-09-2025-0418

14. Poorisat, T., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2026). Strategies to advance the energy efficiency, water efficiency, and indoor environmental quality in New Zealand's sustainable building designs and practices. *Sustainable Development*, in press. https://doi.org/10.1002/sd.71450

15. Poorisat, T., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2026). Unveiling the roles and effective engagement of stakeholders involved in sustainable building design and practices. *Smart and Sustainable Built Environment*, in press. https://doi.org/10.1108/SASBE-10-2025-0678

16. Pourel, D., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Naismith, N. (2026). Integrated considerations of thermal comfort, daylight comfort and outdoor microclimate in medium density housing (MDH) development. *Smart and Sustainable Built Environment*, *15*(4), 1565–1589. https://doi.org/10.1108/SASBE-05-2025-0286

17. Purushothaman, M. B., San Pedro, L. N. R., & **GhaffarianHoseini, A.** (2026). Construction projects: Interactions of the causes of delays. *Smart and Sustainable Built Environment*, *15*(2), 439–471. https://doi.org/10.1108/SASBE-11-2023-0334

18. Purushothaman, M. B., Rotimi, F. E., Samarasekara, S., & **GhaffarianHoseini, A.** (2026). SMART technologies that influence construction health and safety factors risk reduction in the current digital era. *Smart and Sustainable Built Environment*, *15*(6), 2353–2417. https://doi.org/10.1108/SASBE-09-2024-0400

19. Samarasekara, H. M. S. N., Purushothaman, M. B., Rotimi, F. E., & **GhaffarianHoseini, A.** (2026). A system dynamics approach to evaluating factors influencing whole life cost estimation for residential buildings in New Zealand. *Urbanization, Sustainability and Society*, *3*(1), 72–96. https://doi.org/10.1108/USS-12-2024-0104

20. Srinivas, S., Purushothaman, M. B., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2026). Smart airports as responsive systems: A systematic literature review and network analysis. *Smart and Sustainable Built Environment*, in press. https://doi.org/10.1108/SASBE-02-2026-0150

21. Warkaka, Y. G., Rotimi, F. E., Purushothaman, M. B., & **GhaffarianHoseini, A.** (2026). Material recovery and reuse in post-disaster housing reconstruction: Lessons from global disaster contexts. *Buildings*, *16*(17), 3362. https://doi.org/10.3390/buildings16173362

2025

22. Albsoul, H., Doan, D. T., Aigwi, I. E., & **GhaffarianHoseini, A.** (2025). A review of extant literature and recent trends in residential construction waste reduction. *Waste Management & Research*, *43*(3), 322–338. https://doi.org/10.1177/0734242x241241607

23. Azzazy, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & Omrany, H. (2025). The brain response to indoor thermal comfort: From the thermal perception to the current indoor thermal comfort indices. *Architectural Science Review*, *68*(4), 241–262. https://doi.org/10.1080/00038628.2024.2424861

24. Azzazy, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., Doan, D. T., & Hollander, J. B. (2025). The significance of indoor thermal comfort on occupants' perception: In university buildings in Auckland, New Zealand. *Building Research & Information*, *53*(1-2), 19–39. https://doi.org/10.1080/09613218.2024.2344072

25. Bidhendi, A., Nahri, Z., Motamed Manesh, M., Poshdar, M., & **GhaffarianHoseini, A.** (2025). Synergistic integration of BIM and prefabrication for enhanced architectural excellence. *Journal of Information Technology in Construction*, *30*, 1354–1376. https://doi.org/10.36680/j.itcon.2025.055

26. Burfoot, M., Budha-Magar, S., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2025). A study of New Zealanders motivations towards increasing native backyard planting. *Urbanization, Sustainability and Society*, *2*(1), 3–28. https://doi.org/10.1108/USS-05-2024-0032

27. Doan, D. T., Mai, T. P. A., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. (2025). A review of the current state and future trends in modern methods of construction research. *Construction Innovation*, *25*(6), 1821–1839. https://doi.org/10.1108/CI-02-2023-0029

28. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., Zhang, T., & Tookey, J. (2025). Structural equation modelling of building information modelling (BIM) adoption framework in New Zealand. *Engineering, Construction and Architectural Management*, *32*(13), 426–444. https://doi.org/10.1108/ECAM-02-2024-0247

29. Hashemi, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., Santamouris, M., & Kikumoto, H. (2025). Pedestrian-level wind speed analysis: A case study. *Architectural Science Review*, *68*(4), 323–338. https://doi.org/10.1080/00038628.2024.2420686

30. Hashemi, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., Barmomanesh, S., Sailor, D., & Berardi, U. (2025). Summer outdoor thermal risk area mapping on a university campus in Auckland, New Zealand. *Architectural Science Review*, *68*(6), 482–505. https://doi.org/10.1080/00038628.2024.2443137

31. Mai, T. P. A., Doan, D. T., & **GhaffarianHoseini, A.** (2025). Utilizing multiskilled resources in addressing labor shortage issues in off-site construction: Benefits, challenges, and best practices. *Journal of Construction Engineering and Management*, *151*(4), 04025014. https://doi.org/10.1061/jcemd4.coeng-15275

32. Nazari, S., Keshavarz Mirza Mohammadi, P., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Doan, D. T., & Almhafdy, A. (2025). Comparison of shading design between the northern and southern hemispheres: Using the NSGA-II algorithm to reduce building energy consumption and improve occupants' comfort. *Smart and Sustainable Built Environment*, *14*(4), 889–920. https://doi.org/10.1108/SASBE-11-2022-0248

33. Nkado, F. C., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2025). Powering the future: A comprehensive analysis of solar photovoltaic systems adoption in passive houses. *Sustainable Energy Technologies and Assessments*, *73*, 104166. https://doi.org/10.1016/j.seta.2024.104166

34. Owais, O. A., Poshdar, M., **GhaffarianHoseini, A.**, Ying, F., Jaafar, K., Sarhan, S., & Sheikhkhoshkar, M. (2025). From competency mapping to digital twin integration: Developing a next-gen digital project manager model for smart construction. *Journal of Information Technology in Construction*, *30*(1), 1431–1458. https://doi.org/10.36680/j.itcon.2025.058

35. Purushothaman, M. B., Elenzano, D., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Dynamic scheduling: Influential and influenced factors and their interrelationships in the New Zealand construction industry. *Smart and Sustainable Built Environment*, in press. https://doi.org/10.1108/SASBE-11-2024-0488

36. Purushothaman, M. B., Jessica, P., & **GhaffarianHoseini, A.** (2025). Exploring the potential of virtual reality technology to improve safety practices in the construction sector through network, loop, and critical path analysis. *Buildings*, *15*(22), 4152. https://doi.org/10.3390/buildings15224152

37. Quang, T. V., Doan, D. T., Ngarambe, J., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Zhang, T. (2025). AI management platform for privacy-preserving indoor air quality control: Review and future directions. *Journal of Building Engineering*, *100*, 111712. https://doi.org/10.1016/j.jobe.2024.111712

38. Quang, T. V., Doan, D. T., Phuong, N. L., Zhang, T., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Predicting indoor temperature and humidity in a naturally ventilated office room using long short-term memory networks model in a tropical climate. *Architectural Engineering and Design Management*, in press. https://doi.org/10.1080/17452007.2024.2449244

39. Rehman, A., **GhaffarianHoseini, A.**, Naismith, N., Almhafdy, A., Ghaffarianhoseini, AH., Tookey, J., & Urrehman, S. (2025). Development of trust-based autonomous driving framework in New Zealand. *Smart and Sustainable Built Environment*, *14*(2), 429–470. https://doi.org/10.1108/SASBE-04-2023-0086

40. Samarasekara, H. M. S. N., Purushothaman, M. B., Rotimi, F. E., & **GhaffarianHoseini, A.** (2025). A system dynamics framework for whole life costing in seismic and climate-sensitive residential construction in New Zealand. *Smart and Sustainable Built Environment*, in press. https://doi.org/10.1108/SASBE-06-2025-0331

2024

41. Albsoul, H., Doan, D. T., & **GhaffarianHoseini, A.** (2024). Estimating construction waste in New Zealand: A focus on urban areas, residential and non-residential building activities. *Environmental Research Communications*, *6*(3), 035009. https://doi.org/10.1088/2515-7620/ad2d00

42. Albsoul, H., Doan, D. T., Aigwi, I. E., Naismith, N., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2024). Examining critical factors affecting the housing price in New Zealand: A causal loop diagram model. *Journal of Housing and the Built Environment*, *39*(2), 639–661. https://doi.org/10.1007/s10901-023-10095-1

43. Bakhshi, S., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Najafi, M., Rahimian, F., Park, C., & Lee, D. (2024). Digital twin applications for overcoming construction supply chain challenges. *Automation in Construction*, *167*, 105679. https://doi.org/10.1016/j.autcon.2024.105679

44. Burfoot, M., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. (2024). Passive variable acoustic technology for classroom reverberation time: A case study. *Smart and Sustainable Built Environment*, *13*(6), 1450–1472. https://doi.org/10.1108/SASBE-08-2022-0177

45. Dhawan, K., Tookey, J. E., **GhaffarianHoseini, A.**, & Poshdar, M. (2024). Monetised sustainability impacts of integrated planning in the manufactured construction products industry: A transport perspective from New Zealand. *Journal of Economic Analysis*, *3*(4), 161–185. https://doi.org/10.58567/jea03040009

46. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., & Tookey, J. (2024). Developing a framework for building information modelling (BIM) adoption in New Zealand. *Built Environment Project and Asset Management*, *14*(3), 490–506. https://doi.org/10.1108/BEPAM-11-2022-0185

47. Patel, U. R., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Burgess, A. (2024). Digital twin technology for sustainable urban development: A review of its potential impact on SDG 11 in New Zealand. *Cities*, *155*, 105484. https://doi.org/10.1016/j.cities.2024.105484

48. Poorisat, T., Aigwi, I. E., Doan, D. T., & **GhaffarianHoseini, A.** (2024). Unlocking the potentials of sustainable building designs and practices: A systematic review. *Building and Environment*, *266*, 112069. https://doi.org/10.1016/j.buildenv.2024.112069

2023

49. Alsaqabi, Y., Almhafdy, A., Haider, H., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Ali, A. A. M. (2023). Techno-environmental assessment of insulation materials in Saudi Arabia: Integrating thermal performance and LCA. *Buildings*, *13*(2), 331. https://doi.org/10.3390/buildings13020331

50. Burfoot, M., Naismith, N., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2023). Intelligent passive room acoustic technology to satisfy acoustic design standards in classrooms. *Smart and Sustainable Built Environment*, *12*(5), 1031–1055. https://doi.org/10.1108/SASBE-06-2022-0106

51. Burfoot, M., Ghaffarianhoseini, AH., Naismith, N., & **GhaffarianHoseini, A.** (2023). The birth of intelligent passive room acoustic technology: A qualitative review. *Smart and Sustainable Built Environment*, *12*(1), 60–83. https://doi.org/10.1108/SASBE-06-2021-0096

52. Dhawan, K., Tookey, J. E., **GhaffarianHoseini, A.**, & Poshdar, M. (2023). Using transport to quantify the impact of vertical integration on the construction supply chain: A New Zealand assessment. *Sustainability*, *15*(2), 1298. https://doi.org/10.3390/su15021298

53. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., Zhang, T., & Tookey, J. (2023). An empirical examination of Green Star certification uptake and its relationship with BIM adoption in New Zealand. *Smart and Sustainable Built Environment*, *12*(1), 84–104. https://doi.org/10.1108/SASBE-05-2021-0093

54. Doan, D. T., Albsoul, H., & **GhaffarianHoseini, A.** (2023). Enhancing construction waste management in New Zealand: Lessons from Hong Kong and other countries. *Environmental Research Communications*, *5*(10), 102001. https://doi.org/10.1088/2515-7620/ad0105

55. Doan, D. T., Tran, H. V., Aigwi, I. E., Naismith, N., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2023). Green building rating systems: A critical comparison between LOTUS, LEED, and Green Mark. *Environmental Research Communications*, *5*(7), 075008. https://doi.org/10.1088/2515-7620/ace613

56. Dowdeswell, B., Sinha, R., Kuo, M. M. Y., Seet, B.-C., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Sabit, H. (2023). Healthcare in asymmetrically smart future environments: Applications, challenges and open problems. *Electronics*, *13*(1), 115. https://doi.org/10.3390/electronics13010115

57. Omrany, H., Ghaffarianhoseini, AH., Chang, R., **GhaffarianHoseini, A.**, & Pour Rahimian, F. (2023). Applications of building information modelling in the early design stage of high-rise buildings. *Automation in Construction*, *152*, 104934. https://doi.org/10.1016/j.autcon.2023.104934

58. Omrany, H., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Clements-Croome, D. J. (2023). The uptake of city information modelling (CIM): A comprehensive review of current implementations, challenges and future outlook. *Smart and Sustainable Built Environment*, *12*(5), 1090–1116. https://doi.org/10.1108/SASBE-06-2022-0116

2022

59. Dhawan, K., Tookey, J., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022). Consolidating loads for sustainable construction in New Zealand: A literature review-based research framework. *Smart and Sustainable Built Environment*, *11*(2), 313–333. https://doi.org/10.1108/SASBE-08-2021-0151

60. Dhawan, K., Tookey, J. E., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022). Greening construction transport as a sustainability enabler for New Zealand: A research framework. *Frontiers in Built Environment*, *8*, 871958. https://doi.org/10.3389/fbuil.2022.871958

61. Jalali, Z., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Donn, M., Almhafdy, A., Walker, C., & Berardi, U. (2022). What we know and do not know about New Zealand's urban microclimate: A critical review. *Energy and Buildings*, *274*, 112430. https://doi.org/10.1016/j.enbuild.2022.112430

62. Nwadigo, O. B.-K., Naismith, N., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Tookey, J. (2022). Construction project planning and scheduling as a dynamic system: A content analysis of the current status, technologies and forward action. *Smart and Sustainable Built Environment*, *11*(4), 972–995. https://doi.org/10.1108/SASBE-02-2021-0022

63. Okakpu, A., **GhaffarianHoseini, A.**, Tookey, J., Haar, J., Ghaffarianhoseini, AH., & Rehman, A. U. (2022). Risk factors that influence adoption of building information modelling (BIM) for refurbishment of complex building projects: Stakeholders' perceptions. *International Journal of Construction Management*, *22*(13), 2446–2458. https://doi.org/10.1080/15623599.2020.1795985

64. Premier, A., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022). Solar-powered smart urban furniture: Preliminary investigation on limits and potentials of current designs. *Smart and Sustainable Built Environment*, *11*(2), 334–345. https://doi.org/10.1108/SASBE-09-2021-0152

65. Valitabar, M., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Attia, S. (2022). Advanced control strategy to maximize view and control discomforting glare: A complex adaptive façade. *Architectural Engineering and Design Management*, *18*(6), 829–849. https://doi.org/10.1080/17452007.2022.2032576

2021

66. Amini, R., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Berardi, U. (2021). Numerical investigation of indoor thermal comfort and air quality for a multi-purpose hall with various shading and glazing ratios. *Thermal Science and Engineering Progress*, *22*, 100812. https://doi.org/10.1016/j.tsep.2020.100812

67. Azzazy, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & Doborjeh, Z. (2021). A critical review on the impact of built environment on users' measured brain activity. *Architectural Science Review*, *64*(4), 319–335. https://doi.org/10.1080/00038628.2020.1749980

68. Brauner, M., Naismith, N., & **GhaffarianHoseini, A.** (2021). System approach in complex integral design methodology and its application in New Zealand. *Sustainability*, *13*(11), 6244. https://doi.org/10.3390/su13116244

69. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., Zhang, T., & Tookey, J. (2021). Examining critical perspectives on building information modelling (BIM) adoption in New Zealand. *Smart and Sustainable Built Environment*, *10*(4), 594–615. https://doi.org/10.1108/SASBE-04-2020-0043

70. Doan, D. T., Wall, H., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. (2021). Green building practice in the New Zealand construction industry: Drivers and limitations. *International Journal of Technology*, *12*(5), 946–955. https://doi.org/10.14716/ijtech.v12i5.5209

71. Nwadigo, O., Naismith, N. N., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Tookey, J. (2021). Dynamic Bayesian network modelling for predicting adaptability of time performance during time influencing factors disruptions in construction enterprise. *Engineering, Construction and Architectural Management*, *28*(10), 2994–3013. https://doi.org/10.1108/ECAM-05-2020-0371

2020

72. Dananjoyo, R., **GhaffarianHoseini, A.**, Riyadh, H. A., & Udin, U. (2020). The significance of service performance for residential housing development in New Zealand. *Test Engineering and Management*, *83*, 7080–7093. https://www.researchgate.net/publication/340661344_The_Significance_of_Service_Performance_for_Residential_Housing_Development_in_New_Zealand

73. Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Boarin, P., Haarhoff, E., & Walker, C. (2020). Exploring the current status of the construction industry in Auckland: Are we doing enough? *Intelligent Buildings International*, *12*(1), 64–68. https://doi.org/10.1080/17508975.2019.1655703

74. Okakpu, A., **GhaffarianHoseini, A.**, Tookey, J., Haar, J., & Ghaffarianhoseini, AH. (2020). Exploring the environmental influence on BIM adoption for refurbishment project using structural equation modelling. *Architectural Engineering and Design Management*, *16*(1), 41–57. https://doi.org/10.1080/17452007.2019.1617671

75. Omrany, H., Ghaffarianhoseini, AH., Berardi, U., **GhaffarianHoseini, A.**, & Li, D. H. W. (2020). Is atrium an ideal form for daylight in buildings? *Architectural Science Review*, *63*(1), 47–62. https://doi.org/10.1080/00038628.2019.1683508

2019

76. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., Zhang, T., & Tookey, J. (2019). Examining Green Star certification uptake and its relationship with building information modelling (BIM) adoption in New Zealand. *Journal of Environmental Management*, *250*, 109508. https://doi.org/10.1016/j.jenvman.2019.109508

77. **GhaffarianHoseini, A.**, Zhang, T., Naismith, N., Ghaffarianhoseini, AH., Doan, D. T., Rehman, A. U., Nwadigo, O., & Tookey, J. (2019). nD BIM-integrated knowledge-based building management: Inspecting post-construction energy efficiency. *Automation in Construction*, *97*, 13–28. https://doi.org/10.1016/j.autcon.2018.10.003

78. Ghaffarianhoseini, AH., Berardi, U., **GhaffarianHoseini, A.**, & Al-Obaidi, K. (2019). Analyzing the thermal comfort conditions of outdoor spaces in a university campus in Kuala Lumpur, Malaysia. *Science of the Total Environment*, *666*, 1327–1345. https://doi.org/10.1016/j.scitotenv.2019.01.284

79. Okakpu, A., **GhaffarianHoseini, A.**, Tookey, J., Haar, J., & Ghaffarianhoseini, AH. (2019). An optimisation process to motivate effective adoption of BIM for refurbishment of complex buildings in New Zealand. *Frontiers of Architectural Research*, *8*(4), 646–661. https://doi.org/10.1016/j.foar.2019.06.008

2018

80. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Tookey, J., & Ghaffarianhoseini, AH. (2018). Examining the relationship between building information modelling (BIM) and Green Star. *International Journal of Technology*, *9*(7), 1299–1307. https://doi.org/10.14716/ijtech.v9i7.2520

81. Ghaffarianhoseini, AH., AlWaer, H., **GhaffarianHoseini, A.**, Clements-Croome, D., Berardi, U., Raahemifar, K., & Tookey, J. (2018). Intelligent or smart cities and buildings: A critical exposition and a way forward. *Intelligent Buildings International*, *10*(2), 122–129. https://doi.org/10.1080/17508975.2017.1394810

82. Ghaffarianhoseini, AH., AlWaer, H., Omrany, H., **GhaffarianHoseini, A.**, Alalouch, C., Clements-Croome, D., & Tookey, J. (2018). Sick building syndrome: Are we doing enough? *Architectural Science Review*, *61*(3), 99–121. https://doi.org/10.1080/00038628.2018.1461060

83. Halawa, E., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Trombley, J., Hassan, N., Baig, M., Yusoff, S. Y., & Azzam Ismail, M. (2018). A review on energy conscious designs of building façades in hot and humid climates: Lessons for (and from) Kuala Lumpur and Darwin. *Renewable and Sustainable Energy Reviews*, *82*, 2147–2161. https://doi.org/10.1016/j.rser.2017.08.061

84. Okakpu, A., **GhaffarianHoseini, A.**, Tookey, J., Haar, J., Ghaffarianhoseini, AH., & Rehman, A. (2018). A proposed framework to investigate effective BIM adoption for refurbishment of building projects. *Architectural Science Review*, *61*(6), 467–479. https://doi.org/10.1080/00038628.2018.1522585

85. Ramakreshnan, L., Aghamohammadi, N., Fong, C. S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Wong, L. P., Hassan, N., & Sulaiman, N. M. (2018). A critical review of urban heat island phenomenon in the context of Greater Kuala Lumpur, Malaysia. *Sustainable Cities and Society*, *39*, 99–113. https://doi.org/10.1016/j.scs.2018.02.005

2017

86. Aflaki, A., Mirnezhad, M., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Omrany, H., Wang, Z.-H., & Akbari, H. (2017). Urban heat island mitigation strategies: A state-of-the-art review on Kuala Lumpur, Singapore and Hong Kong. *Cities*, *62*, 131–145. https://doi.org/10.1016/j.cities.2016.09.003

87. Doan, D. T., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Ghaffarianhoseini, AH., & Tookey, J. (2017). A critical comparison of green building rating systems. *Building and Environment*, *123*, 243–260. https://doi.org/10.1016/j.buildenv.2017.07.007

88. **GhaffarianHoseini, A.**, Doan, D. T., Naismith, N., Tookey, J., & Ghaffarianhoseini, AH. (2017). Amplifying the practicality of contemporary building information modelling (BIM) implementations for New Zealand green building certification (Green Star). *Engineering, Construction and Architectural Management*, *24*(4), 696–714. https://doi.org/10.1108/ECAM-02-2016-0043

89. **GhaffarianHoseini, A.**, Zhang, T., Nwadigo, O., Ghaffarianhoseini, AH., Naismith, N., Tookey, J., & Raahemifar, K. (2017). Application of nD BIM integrated knowledge-based building management system (BIM-IKBMS) for inspecting post-construction energy efficiency. *Renewable and Sustainable Energy Reviews*, *72*, 935–949. https://doi.org/10.1016/j.rser.2016.12.061

90. **GhaffarianHoseini, A.**, Tookey, J., Ghaffarianhoseini, AH., Naismith, N., Azhar, S., Efimova, O., & Raahemifar, K. (2017). Building information modelling (BIM) uptake: Clear benefits, understanding its implementation, risks and challenges. *Renewable and Sustainable Energy Reviews*, *75*, 1046–1053. https://doi.org/10.1016/j.rser.2016.11.083

91. Ghashghaei, A., Hussein, H., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2017). An experimental comparison of the effectiveness of cool colors as environmental stimulus on the elderlies in high-rise condominiums of Kuala Lumpur. *Journal of Design and Built Environment*, *17*(1), 36–62. https://doi.org/10.22452/jdbe.vol17no1.3

2016

92. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Berardi, U., Tookey, J., Li, D. H. W., & Kariminia, S. (2016). Exploring the advantages and challenges of double-skin façades (DSFs). *Renewable and Sustainable Energy Reviews*, *60*, 1052–1065. https://doi.org/10.1016/j.rser.2016.01.130

93. **GhaffarianHoseini, A.**, Tookey, J., Ghaffarianhoseini, AH., Naismith, N., & Rotimi, J. O. B. (2016). Integrating alternative technologies to improve built environment sustainability in Africa. *Smart and Sustainable Built Environment*, *5*(3), 193–211. https://doi.org/10.1108/SASBE-07-2015-0015

94. **GhaffarianHoseini, A.**, Tookey, J., Ghaffarianhoseini, AH., Yusoff, S. M., & Hassan, N. B. (2016). State of the art of rainwater harvesting systems towards promoting green built environments: A review. *Desalination and Water Treatment*, *57*(1), 95–104. https://doi.org/10.1080/19443994.2015.1021097

95. Ghaffarianhoseini, AH., Berardi, U., AlWaer, H., Chang, S., Halawa, E., **GhaffarianHoseini, A.**, & Clements-Croome, D. (2016). What is an intelligent building? Analysis of recent interpretations from an international perspective. *Architectural Science Review*, *59*(5), 338–357. https://doi.org/10.1080/00038628.2015.1079164

96. Naismith, N., Sethi, R., **GhaffarianHoseini, A.**, & Tookey, J. (2016). Managing conflict in engineering projects: New Zealand experiences. *International Journal of Construction Supply Chain Management*, *6*(1), 19–34. https://doi.org/10.14424/ijcscm601016-19-34

97. Omrany, H., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Raahemifar, K., & Tookey, J. (2016). Application of passive wall systems for improving the energy efficiency in buildings: A comprehensive review. *Renewable and Sustainable Energy Reviews*, *62*, 1252–1269. https://doi.org/10.1016/j.rser.2016.04.010

2015

98. **GhaffarianHoseini, A.**, Ibrahim, R., Tookey, J., & Ghaffarianhoseini, AH. (2015). Quantitative computational experiment (QCE): An alternative post-positivist experimental research strategy of inquiry for design studies. *International Journal of Advances in Science, Engineering and Technology*, *4*(1). https://hdl.handle.net/10292/10361

99. Ghaffarianhoseini, AH., Berardi, U., & **GhaffarianHoseini, A.** (2015). Thermal performance characteristics of unshaded courtyards in hot and humid climates. *Building and Environment*, *87*, 154–168. https://doi.org/10.1016/j.buildenv.2015.02.001

100. Gorsia, K., & **GhaffarianHoseini, A.** (2015). Investigating the effectiveness of using green concrete towards promotion of sustainable built environment. *International Journal of Sustainable Tropical Design Research and Practice (ALAM CIPTA)*, *8*, 49–59. https://www.frsb.upm.edu.my/dokumen/FKRSE1_49-59.pdf

101. Rashidi, H., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Nik Sulaiman, N. M., Tookey, J., & Hashim, N. A. (2015). Application of wastewater treatment in sustainable design of green built environments: A review. *Renewable and Sustainable Energy Reviews*, *49*, 845–856. https://doi.org/10.1016/j.rser.2015.04.104

2014

102. Berardi, U., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2014). State-of-the-art analysis of the environmental benefits of green roofs. *Applied Energy*, *115*, 411–428. https://doi.org/10.1016/j.apenergy.2013.10.047

103. Ghaffarianhoseini, AH., Berardi, U., Dahlan, N. D., & **GhaffarianHoseini, A.** (2014). What can we learn from Malay vernacular houses? *Sustainable Cities and Society*, *13*, 157–170. https://doi.org/10.1016/j.scs.2014.04.008

2013

104. Ghaffarianhoseini, AH., Dahlan, N. D., Berardi, U., **GhaffarianHoseini, A.**, Makaremi, N., & GhaffarianHoseini, M. (2013). Sustainable energy performances of green buildings: A review of current theories, implementations and challenges. *Renewable and Sustainable Energy Reviews*, *25*, 1–17. https://doi.org/10.1016/j.rser.2013.01.010

105. Ghaffarianhoseini, AH., Dahlan, N. D., Berardi, U., **GhaffarianHoseini, A.**, & Makaremi, N. (2013). The essence of future smart houses: From embedding ICT to adapting to sustainability principles. *Renewable and Sustainable Energy Reviews*, *24*, 593–607. https://doi.org/10.1016/j.rser.2013.02.032

2012

106. **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2012). Contemporary creative sustainable architectural progressions. *Journal of Creative Sustainable Architecture & Built Environment*, *2*, 1–2.

107. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Makaremi, N., & GhaffarianHoseini, M. (2012). The concept of zero energy intelligent buildings (ZEIB): A review of sustainable development for future cities. *British Journal of Environment and Climate Change*, *2*(4), 339–367. https://doi.org/10.9734/bjecc/2012/2531

108. Ghaffarianhoseini, AH., Berardi, U., **GhaffarianHoseini, A.**, & Makaremi, N. (2012). Intelligent facades in low-energy buildings. *British Journal of Environment and Climate Change*, *2*(4), 437–464. https://doi.org/10.9734/bjecc/2012/2912

109. Hao, E. K. J., & **GhaffarianHoseini, A.** (2012). Solar vs. conventional air-conditioning systems: Review of Limkokwing University campus, Cyberjaya, Malaysia. *Journal of Creative Sustainable Architecture & Built Environment*, *2*, 23–32.

110. Ling, C. Z., & **GhaffarianHoseini, A.** (2012). Greenscaping buildings: Amplification of vertical greening towards approaching sustainable urban structures. *Journal of Creative Sustainable Architecture & Built Environment*, *2*, 13–22. https://www.researchgate.net/publication/261960977

111. Mosalakatane, Z. N., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2012). Minimizing cultural clashes among Malaysian youth through improving the architectural design of universities. *Intelligent Buildings International*, *4*(1), 49–63. https://doi.org/10.1080/17508975.2011.640655

112. Sotoudehnia, P., Sanjeeva, S., Apparow, O., Lin, T. K., Farmanesh, P., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2012). A design report: Unity in diversity of light: Towards the enhancement of sustainability through rotating the spectrum of colors. *Journal of Creative Sustainable Architecture & Built Environment*, *2*, 3–12. https://works.bepress.com/amirhosein_ghaffarianhoseini/6/

2011

113. Ghaffarianhoseini, AH., Ibrahim, R., Baharuddin, M. N., & **GhaffarianHoseini, A.** (2011). Creating green culturally responsive intelligent buildings: Socio-cultural and environmental influences. *Intelligent Buildings International*, *3*(1), 5–23. https://doi.org/10.3763/inbi.2010.0002

114. Ghaffarianhoseini, AH., Dahlan, N. D., Ibrahim, R., Baharuddin, M. N., & **GhaffarianHoseini, A.** (2011). The concept of local-smart-housing: Towards socio-cultural sustainability of vernacular settlements. *Archnet-IJAR: International Journal of Architectural Research*, *5*(2), 91–105. https://doi.org/10.26687/archnet-ijar.v5i2.200

2009

115. **GhaffarianHoseini, A.**, Ibrahim, R., & Abdullah, R. (2009). Graphical visualization principles for maintaining functional relativity of spaces during architectural design. *International Journal of Sustainable Tropical Design Research and Practice (ALAM CIPTA)*, *4*(1), 9–16. http://psasir.upm.edu.my/id/eprint/32559/

Editorials, Guest Editorials and Book Reviews

2026

116. Chen, X., Pour Rahimian, F., Doan, D., & **GhaffarianHoseini, A.** (2026). Editorial: Circular economy and sustainable practices in the built environment. *Engineering, Construction and Architectural Management*, *33*(8), 6089–6093. https://doi.org/10.1108/ECAM-07-2026-251

117. Doan, D. T., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Jalali, Z. (2026). Guest editorial: Energy efficiency, risk, and resilience in the built environment. *Smart and Sustainable Built Environment*, *15*(4), 1413–1415. https://doi.org/10.1108/SASBE-05-2026-792

2022

118. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Rahimian, F., & Dawood, N. (2022). Guest editorial: Future construction: Design solutions and approaches. *Smart and Sustainable Built Environment*, *11*(2), 177–180. https://doi.org/10.1108/SASBE-07-2022-236

119. Pour Rahimian, F., Dawood, N., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022). Guest editorial: Enabling the development and implementation of digital twins. *Construction Innovation*, *22*(3), 405–411. https://doi.org/10.1108/CI-07-2022-247

2015

120. Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2015). The world's greenest buildings: Promise versus performance in sustainable design [Review of the book The world's greenest buildings, by J. Yudelson & U. Meyer]. *Cities*, *42*, 279–280. https://doi.org/10.1016/j.cities.2014.07.002

2014

121. **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2014). Fundamentals of green roofs: A comprehensive guide to theory and practice [Book review]. *Urban Forestry & Urban Greening*, *13*(4), 831–832. https://doi.org/10.1016/j.ufug.2014.07.008

AUTHORED BOOKS

2026

122. Dhawan, K., Tookey, J. E., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2026). *Sustainability and construction: The global context and the New Zealand perspective* (1st ed.). Woodhead Publishing (Elsevier). Forthcoming, 1 November 2026. ISBN 978-0-443-23758-4. https://shop.elsevier.com/books/sustainability-and-construction/dhawan/978-0-443-23758-4

2014

123. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Rafiee, A. (2014). *Formal reflections in architectural conceptualization: Rationality versus sensation*. The Images Publishing Group. https://imagespublishing.com/uk/book/formal-reflections-in-architectural-conceptualization/

EDITED BOOKS AND CONFERENCE PROCEEDINGS

2027

124. Doan, D. T., Chang, R., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Omrany, H. (Eds.). (2027). *Digital twins for sustainable cities: Bridging technology and urban environmental management* (1st ed.). Elsevier. Forthcoming, 1 April 2027. ISBN 978-0-443-45323-6. https://shop.elsevier.com/books/digital-twins-for-sustainable-cities/doan/978-0-443-45323-6

2025

125. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Pour Rahimian, F., & Purushothaman, M. B. (Eds.). (2025). *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024), 7–9 November, Auckland, New Zealand* (Lecture Notes in Civil Engineering, Vol. 591). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5

2020

126. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. (Eds.). (2020). *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020), 26–27 November, Auckland, New Zealand*. Architectural Science Association (ANZAScA). ISBN 978-0-9923835-7-2. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

Forewords and Conference Front Matter

2025

127. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Rahimian, F., & Purushothaman, M. B. (2025). Preface. In **A. GhaffarianHoseini**, AH. Ghaffarianhoseini, F. Rahimian, & M. B. Purushothaman (Eds.), *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5

128. **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Shaping tomorrow: Insights from SASBE2024 on advancing smart, sustainable, and inclusive built environments [Conference chair's message]. In **A. GhaffarianHoseini**, AH. Ghaffarianhoseini, F. Rahimian, & M. B. Purushothaman (Eds.), *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5

2020

129. **GhaffarianHoseini, A.,** Ghaffarianhoseini, AH., & Naismith, N. (2020). Foreword. In **A. GhaffarianHoseini,** AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association* (pp. ii–iii). Architectural Science Association (ANZAScA). https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

BOOK CHAPTERS

2025

130. Doan, D. T., Ma, Y., & **GhaffarianHoseini, A.** (2025). Building information modelling adoption in the New Zealand construction industry. In Y. Arayici, N. Thurairajah, & B. Kumar (Eds.), *Sustainable communities through digital transformation* (pp. 30–43). Routledge. https://doi.org/10.1201/9781003380559-3

2024

131. Ghaffarianhoseini, AH., **GhaffarianHoseini, A.,** Dhawan, K., Clements-Croome, D., & Wei, S. (2024). Optimising systems in intelligent buildings. In D. Clements-Croome (Ed.), *Intelligent buildings and infrastructure with sustainable and social values (3rd ed.)* (pp. 107–131). Emerald Publishing. https://doi.org/10.1680/978-1-83549-818-720243009

132. Jamei, E., Abuseif, M., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2024). Urban overheating governance on the mitigation and adaptation of anthropogenic heat emissions. In N. Aghamohammadi & M. Santamouris (Eds.), *Mitigation and adaptation of urban overheating* (pp. 295–314). Elsevier. https://doi.org/10.1016/B978-0-443-13502-6.00016-6

133. Omrany, H., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.,** Dhawan, K., Almhafdy, A., & Oteng, D. (2024). The use of city information modelling (CIM) for realizing zero energy community: A path towards carbon neutrality. In A. Cheshmehzangi, M. Batty, Z. Allam, & D. S. Jones (Eds.), *City information modelling* (Urban Sustainability, pp. 215–247). Springer Nature. https://doi.org/10.1007/978-981-99-9014-6_11

2023

134. Doan, D. T., Kumarasiri, B., & **GhaffarianHoseini, A.** (2023). Green building. In R. Brinkmann (Ed.), *The Palgrave handbook of global sustainability* (pp. 1465–1478). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-01949-4_92

2018

135. Ghaffarianhoseini, AH., Clements-Croome, D., **GhaffarianHoseini, A.,** AlWaer, H., & Tookey, J. (2018). Future of intelligent buildings: A critical debate on key performance indicators. In *Research roadmap for intelligent and responsive buildings (CIB W098 Commission Report)* (pp. 10–20). CIB Publication 415. CIB General Secretariat. https://cibworld.org/wp-content/uploads/2022/02/CIB_415_W098_RR.pdf

2017

136. Ghaffarianhoseini, AH., **GhaffarianHoseini, A.,** Tookey, J., Omrany, H., Fleury, A., Naismith, N., & GhaffarianHoseini, M. (2017). The essence of smart homes: Application of intelligent technologies towards smarter urban future. In Information Resources Management Association (Ed.), *Artificial intelligence: Concepts, methodologies, tools, and applications (Vol. 1)* (pp. 79–121). IGI Global. Reprint. https://doi.org/10.4018/978-1-5225-1759-7.ch004

2016

137. Ghaffarianhoseini, AH., **GhaffarianHoseini, A.,** Tookey, J., Omrany, H., Fleury, A., Naismith, N., & GhaffarianHoseini, M. (2016). The essence of smart homes: Application of intelligent technologies towards smarter urban future. In A. Ursyn (Ed.), *Creative technologies for multidisciplinary applications* (pp. 334–376). IGI Global. https://doi.org/10.4018/978-1-5225-0016-2.ch014

CONFERENCE PAPERS AND PRESENTATIONS

2026

138. Doan, D. T., Sameera, L., & **GhaffarianHoseini, A.** (2026). Circular economy in construction supply chains: Global drivers, barriers, and pathways for transition. In *Proceedings of the International Conference on Civil Engineering and Sustainable Building* (Lecture Notes in Civil Engineering, pp. 159–168). Springer Nature. https://doi.org/10.1007/978-981-95-8493-2_14

2025

139. Burfoot, M., Budha-Magar, S., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Assessing native plant presence and maintenance resource allocations in New Zealand backyards: A nationwide online questionnaire. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 320–327). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_31

140. Chen, X., **GhaffarianHoseini, A.**, Liu, F., Guo, B., & Ghaffarianhoseini, AH. (2025). Digital technology for construction circularity: Applications, state of practice, and trends. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 657–667). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_64

141. Chen, X., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Exploring Construction 5.0 paradigms in the AEC sector of New Zealand: Conceptual foundations and implications for practice. In J. Cheng & Y. Yantao (Eds.), *Proceedings of the Sixth International Conference on Civil and Building Engineering Informatics (ICCBEI 2025)* (Kalpa Publications in Computing, Vol. 22, pp. 909–922). EasyChair. https://doi.org/10.29007/sqbj

142. Chen, X., Liu, F., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Guo, B. (2025). From Construction 4.0 to Construction 5.0: Principles and enabling technologies. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 915–927). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_88

143. Dhawan, K., Tookey, J. E., & **GhaffarianHoseini, A.** (2025). Reducing built environment embodied carbon: A transport perspective. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 1347–1357). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_129

144. Doan, D. T., Shobha, A. R., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Advancing sustainable construction waste management in New Zealand: Overcoming challenges through stakeholder collaboration and innovation. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 247–255). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_24

145. Doan, D. T., Patu, T., Naismith, N., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Circular economy (CE) in construction waste management: A review. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 443–452). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_43

146. Doan, D. T., McKinney-Ryder, J., Mai, T. P. A., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Closing the loop: An analysis of construction waste reduction policies. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 486–495). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_47

147. Doan, D. T., Nair, D., Purushothaman, M. B., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025, December 1–3). *Exploring the role of biophilic design in shaping sustainable retail environments* [Paper presentation]. International Conference of Green + Digital + Intelligent Built Environments (GDI 2025), Auckland, New Zealand. https://www.gdi2025.com/programme

148. Doan, D. T., Rose, M. J., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025). Overcoming client barriers to enhance Green Star NZ adoption in New Zealand's construction industry. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 1264–1270). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_121

149. Fahmi, M., Purushothaman, M. B., Rotimi, F. E., & **GhaffarianHoseini, A.** (2025). A systematic review of simulation tools used in fire safety training for hospital staff. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 216–224). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_21

150. Gottam, S., Purushothaman, M. B., Rotimi, F. E., & **GhaffarianHoseini, A.** (2025, December 1–3). *Comparative analysis of ready-mixed concrete dispatch models* [Paper presentation]. International Conference of Green + Digital + Intelligent Built Environments (GDI 2025), Auckland, New Zealand. https://www.gdi2025.com/programme

151. Hashemi, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Naismith, N. (2025). Improving livability in cities by identifying outdoor thermal risk areas. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 1012–1023). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_97

152. Lee, Y., **GhaffarianHoseini, A.**, & Purushothaman, M. B. (2025, December 1–3). *Distributed fibre optic sensing for pipeline integrity management: A comprehensive feasibility study* [Paper presentation]. International Conference of Green + Digital + Intelligent Built Environments (GDI 2025), Auckland, New Zealand. https://www.gdi2025.com/programme

153. Lozova, O., Tookey, J., & **GhaffarianHoseini, A.** (2025). Toward sustainable built environments: Leveraging green hydrogen in New Zealand. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 1524–1539). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_145

154. Mosavat, M., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Le De, L. (2025). Application of design probes to promote and foster children's creative participation in disaster risk reduction. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 279–288). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_27

155. Owais, O. A., Poshdar, M., **GhaffarianHoseini, A.**, Ying, F., Jaafar, K., Sarhan, S., & Sheikhkhoshkar, M. (2025). Digital competencies framework for project managers: Digital twins as an exemplar in the smart built environment. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 639–648). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_62

156. Owais, O. A., Poshdar, M., Ying, F., **GhaffarianHoseini, A.**, & Jaafar, K. (2025). Evolving project manager competencies in the dynamic construction industry: A comprehensive framework for success. In *Creating capacity and capability: Embracing advanced technologies and innovations for sustainable future in building education and practice (AUBEA 2023)* (Lecture Notes in Civil Engineering, pp. 171–182). Springer Nature. https://doi.org/10.1007/978-981-96-1181-2_14

157. Pirian Kalat, O., Chenary, K., & **GhaffarianHoseini, A.** (2025). Quantitative impact of key SDG indicators on national sustainability scores in West Asia: A comprehensive analysis. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 1324–1338). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_127

158. Pourel, D., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Naismith, N. (2025). The nuances between microclimate, thermal comfort, and daylight studies on medium density houses: A systematic literature review. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 1505–1514). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_143

159. Purushothaman, M. B., Samarasekara, H. M. S. N., Rotimi, F. E., & **GhaffarianHoseini, A.** (2025, December 1–3). *Validating a whole life costing framework for residential buildings in New Zealand: A stakeholder-based evaluation* [Paper presentation]. International Conference of Green + Digital + Intelligent Built Environments (GDI 2025), Auckland, New Zealand. https://www.gdi2025.com/programme

160. Samarasekara, H. M. S. N., Purushothaman, M. B., Rotimi, F. E., & **GhaffarianHoseini, A.** (2025). Enhancing the whole life cost framework for New Zealand residential buildings: Addressing geographical characteristics and adverse weather factors. In *Proceedings of the International Conference on Smart and Sustainable Built Environment (SASBE 2024)* (Lecture Notes in Civil Engineering, Vol. 591, pp. 734–742). Springer Nature. https://doi.org/10.1007/978-981-96-4051-5_71

161. Srinivas, S., Purushothaman, M. B., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2025, December 1–3). *Defining smart airports: A thematic framework of technology, operational efficiency and passenger experience* [Paper presentation]. International Conference of Green + Digital + Intelligent Built Environments (GDI 2025), Auckland, New Zealand. https://www.gdi2025.com/programme

162. Weshah, N., Dhawan, K., Tookey, J., & **GhaffarianHoseini, A.** (2025). An innovative use of case models to manage stakeholder interfaces in energy-efficient sustainable construction. In W. Collins, A. J. Perrenoud, & J. Posillico (Eds.), *Proceedings of Associated Schools of Construction 61st Annual International Conference* (EPiC Series in Built Environment, Vol. 6, pp. 391–400). EasyChair. https://doi.org/10.29007/hz1d

2024

163. Albsoul, H., Doan, D. T., Aigwi, I. E., & **GhaffarianHoseini, A.** (2024). Expert views from New Zealand on barriers to recycling construction waste. In *Integrating resiliency into future sustainable cities (RRAU 2023)* (Advances in Science, Technology & Innovation, pp. 313–318). Springer Nature. https://doi.org/10.1007/978-3-031-63203-7_24

164. Al-Kayed, A. A., Rotimi, F. E., Purushothaman, M. B., & **GhaffarianHoseini, A.** (2024). Factors affecting competitiveness in the construction industry: A systematic literature review. In V. Gribniak, A. Rimkus, K. Holschemacher, U. Quapp, & A. Singh (Eds.), *Proceedings of International Structural Engineering and Construction, 11(2)*. ISEC Press. https://doi.org/10.14455/ISEC.2024.11(2).CON-14

165. Hashemi, S., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., Berardi, U., & Rahimian, F. (2024). The impacts of historical and future climate change projections on the outdoor thermal comfort patterns of Auckland, New Zealand. In *Multiphysics and multiscale building physics: Proceedings of the 9th International Building Physics Conference (IBPC 2024)* (Lecture Notes in Civil Engineering, pp. 209–217). Springer Nature. https://doi.org/10.1007/978-981-97-8309-0_27

2023

166. Dhawan, K., Tookey, J., **GhaffarianHoseini, A.**, & Poshdar, M. (2023). Integrated planning as a 'smart' solution for improved sustainability of construction logistics: A transport perspective. In M. Dewsbury, D. Tanton, Z. Al-shamma, & J. Tan (Eds.), *Architectural science and user experience: How can design enhance the quality of experience. Proceedings of the 56th International Conference of the Architectural Science Association* (pp. 406–417). Architectural Science Association. https://archscience.org/wp-content/uploads/2024/08/406-419-Dhawan-et-al.pdf

167. Dhawan, K., Tookey, J., **GhaffarianHoseini, A.**, & Poshdar, M. (2023, November 26–28). *Operations research as a sustainability enabler for construction logistics: A transport perspective* [Paper presentation]. 46th Australasian Universities Building Education Association Conference (AUBEA 2023), Auckland, New Zealand.

168. Owais, O. A., Poshdar, M., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2023). Lean construction waste reduction through the autonomous vehicle technology. In *Proceedings of the 31st Annual Conference of the International Group for Lean Construction (IGLC31)* (pp. 163–173). International Group for Lean Construction. https://doi.org/10.24928/2023/0222

2022

169. Adeyina, D., Anderson, T., & **GhaffarianHoseini, A.** (2022, February 17–18). *A parametric study of passive house strategies in a cooling dominated climate: A case study of Algeria* [Paper presentation]. New Zealand Built Environment Research Symposium (NZBERS 2022), Auckland, New Zealand.

170. Adeyina, D., Anderson, T., & **GhaffarianHoseini, A.** (2022, April 28–30). *The passive house in cooling dominated climate: A case study of Singapore* [Paper presentation]. Asia Pacific Solar Research Conference, Sydney, Australia.

171. Albsoul, H., Doan, D. T., Aigwi, I. E., & **GhaffarianHoseini, A.** (2022, November 23–25). *Waste reduction in the residential construction sector: A bibliometric analysis* [Paper presentation]. 45th Australasian Universities Building Education Association Conference (AUBEA 2022), Sydney, Australia.

172. Bakhshi, S., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022, November 16–19). *A review of digital twin workflows in building supply chain management* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

173. Dhawan, K., Tookey, J., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022, November 16–19). *Decarbonising the construction sector: A New Zealand perspective* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

174. Dhawan, K., Tookey, J., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022, February 17–18). *Logistics management as a sustainability solution for New Zealand construction* [Paper presentation]. New Zealand Built Environment Research Symposium (NZBERS 2022), Auckland, New Zealand.

175. Dhawan, K., Tookey, J., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022, November 16–19). *Operationalisation of logistics management for improved construction performance: A New Zealand perspective* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

176. Doan, D. T., Rajendran, G., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2022). Energy assessment: A critical comparison amongst BREEAM, LEED, and Green Star NZ. In L. V. Trung, V. L. Phu, & B. X. Thanh (Eds.), *Proceedings of the 2nd International Conference on Environment, Resources and Earth Sciences (ICERES 2021)* (pp. 132–134). VNU-HCM Press.

177. Nwadigo, O., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. (2022, November 16–19). *Improving the sustainability of buildings using intelligent decarbonization technologies* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

178. Omrany, H., Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2022, November 16–19). *Towards the development of a digital twin: Case study of Auckland University of Technology campus* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

179. Owais, O., **GhaffarianHoseini, A.**, Alqudah, H., & Poshdar, M. (2022, November 7–9). *Deployment of autonomous vehicles to support emergency response during crisis* [Paper presentation]. ISCRAM Asia Pacific Conference 2022, Palmerston North, New Zealand. https://hdl.handle.net/10292/17267

180. Qadir, J., Moore, D., **GhaffarianHoseini, A.**, Tedestedt George, C., & Rotimi, J. (2022, February 17–18). *Regenerative public-spend projects in New Zealand built environment: Perceptions from across the system on creating the conditions for success* [Paper presentation]. New Zealand Built Environment Research Symposium (NZBERS 2022), Auckland, New Zealand.

181. Rehman, A. U., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Doan, D. T., Tookey, J., Ghaffarianhoseini, AH., & Lovreglio, R. (2022, November 16–19). *A review: Harnessing immersive technologies prowess for autonomous vehicles* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

182. Valitabar, M., Rizi, M., Schnabel, M., **GhaffarianHoseini, A.**, Ko, W., & Ghaffarianhoseini, AH. (2022, November 16–19). *Integrated design of kinetic façade, light shelf, and ceiling to improve visual comfort* [Paper presentation]. The 22nd International Conference on Construction Applications of Virtual Reality (CONVR 2022), Seoul, Korea.

2021

183. Adeyina, D. L., Anderson, T., & **GhaffarianHoseini, A.** (2021). The Passive House in a cooling dominated climate: A case study of Singapore. In *Proceedings of the Asia-Pacific Solar Research Conference*. Australian PV Institute. https://www.apvi.org.au/solar-research-conference/wp-content/uploads/2022/03/Adeyina-Damiloju-The-Passive-House-in-a-Cooling-Dominated-Climate-A-Case-Study-of-Singapore.pdf

184. Burfoot, M., Naismith, N., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2021). The potential for intelligent passive room acoustic technology in classrooms: A BIM-based simulation. In *Industry 4.0 applications for full lifecycle integration of buildings: Proceedings of the 21st International Conference on Construction Applications of Virtual Reality (CONVR 2021)*. Teesside University Press. https://gala.gre.ac.uk/id/eprint/50069/

185. Doan, D. T., Wall, H., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. (2021, October 13–15). *Green building practice in the New Zealand construction industry: Drivers and limitations* [Paper presentation]. The 2nd CSID AUN-SCUD International Conference on Sustainable Infrastructure and Urban Development. https://hdl.handle.net/10292/15638

186. Rehman, A. U., **GhaffarianHoseini, A.**, Naismith, N., Tookey, J., Ghaffarianhoseini, AH., & Urrehman, S. (2021). Ascertaining factors affecting autonomous driving in New Zealand: A framework for HMI design. In *2021 5th International Conference on Vision, Image and Signal Processing (ICVISP)* (pp. 1–8). IEEE. https://doi.org/10.1109/ICVISP54630.2021.00011

2020

187. Adeyina, D., Anderson, T., & **GhaffarianHoseini, A.** (2020, November 30–December 2). *A parametric study of passive house design in a sub-tropical climate* [Paper presentation]. Asia Pacific Solar Research Conference 2020, Sydney, Australia.

188. Adeyina, D., Anderson, T., & **GhaffarianHoseini, A.** (2020, February 20). *Effective deployment of passive house in cooling dominated climate* [Paper presentation]. 6th New Zealand Built Environment Research Symposium (NZBERS 2020), Auckland, New Zealand.

189. Burfoot, M., **GhaffarianHoseini, A.**, Naismith, N., & Ghaffarianhoseini, AH. (2020). Developing virtual classroom environments for intelligent acoustic simulations. In **A. GhaffarianHoseini**, AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020)* (pp. 385–393). Architectural Science Association. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

190. Burfoot, M., **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., & Tookey, J. (2020, February 20). *Integrating acoustic scene classification with variable acoustics, to intelligently improve acoustic comfort in NZ classrooms* [Paper presentation]. 6th New Zealand Built Environment Research Symposium (NZBERS 2020), Auckland, New Zealand.

191. Dhawan, K., Tookey, J. E., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2020). Consolidating construction loads: A future pathway to sustainability? In **A. GhaffarianHoseini**, AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design*

thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020) (pp. 306–315). Architectural Science Association. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

192. Dhawan, K., Tookey, J. E., **GhaffarianHoseini, A.,** & Ghaffarianhoseini, AH. (2020). Optimising New Zealand construction consolidation centres: Defining a research framework. In **A. GhaffarianHoseini,** AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020)* (pp. 835–843). Architectural Science Association. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

193. Hedayat Nejad, R., **GhaffarianHoseini, A.,** Ghaffarianhoseini, AH., & Lovreglio, R. (2020). Automated progress monitoring via fusion of 4D BIM and AI through schedule updating by convolutional networks and a specialized labeled dataset for the construction components. In *Enabling the development and implementation of digital twins: Proceedings of the 20th International Conference on Construction Applications of Virtual Reality (CONVR 2020)*. Teesside University Press. Best Paper Award, First Runner Up. https://www.researchgate.net/publication/344444905

194. Momoh, V., Ayeni, D. A., **GhaffarianHoseini, A.,** & Rotimi, F. E. (2020). Human response to greeneries in public spaces. In **A. GhaffarianHoseini,** AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020)* (pp. 561–568). Architectural Science Association. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

195. Qadir, J., Moore, D., **GhaffarianHoseini, A.,** Tedestedt George, C., & Rotimi, J. O. (2020). To improve the strategic decision making for effective governance of public-spend regenerative projects. In **A. GhaffarianHoseini,** AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020)* (pp. 1203–1211). Architectural Science Association. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

196. Qadir, J., Moore, D., **GhaffarianHoseini, A.,** Tedestedt George, C., & Rotimi, J. O. (2020). To understand the systemic and contextual factors to improve the strategic decision making of regenerative projects. In **A. GhaffarianHoseini,** AH. Ghaffarianhoseini, & N. Naismith (Eds.), *Imaginable futures: Design thinking, and the scientific method. Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA 2020)* (pp. 1213–1221). Architectural Science Association. https://www.researchbank.ac.nz/server/api/core/bitstreams/462b396c-b475-42d3-a21a-9c9e3daadb83/content

197. Zeinalian, A., **GhaffarianHoseini, A.,** Naismith, N., Ghaffarianhoseini, AH., & Tookey, J. (2020, February 20). *Why does building end-of-life matter?* [Paper presentation]. 6th New Zealand Built Environment Research Symposium (NZBERS 2020), Auckland, New Zealand.

2019

198. Brauner, M., **GhaffarianHoseini, A.,** Naismith, N., & Tookey, J. (2019). Decisive use of building materials based on hygrothermal analysis. In *IOP Conference Series: Earth and Environmental Science, 290 (Central Europe towards Sustainable Building, CESB19)* (p. 012008). IOP Publishing. https://doi.org/10.1088/1755-1315/290/1/012008

199. Doan, D. T., **GhaffarianHoseini, A.,** Naismith, N., Zhang, T., Rehman, A. U., Tookey, J., & Ghaffarianhoseini, AH. (2019). Building information modelling (BIM) framework for practical assessment. In *ICCREM 2019: Innovative construction project management and construction industrialization* (pp. 42–48). American Society of Civil Engineers. https://doi.org/10.1061/9780784482308.005

200. **GhaffarianHoseini, A.,** Ghaffarianhoseini, AH., Zhang, T., & Walker, C. (2019, April 15–18). *Holo-transportation in smart offices: Promoting super-efficient working patterns* [Paper presentation]. 24th Annual Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA 2019), Wellington, New Zealand.

201. Okakpu, A., **GhaffarianHoseini, A.,** Tookey, J., Haar, J., Ghaffarianhoseini, AH., Rehman, A., Zhang, T., & Doan, D. T. (2019). Rethinking the complex refurbishment project attributes for building information modelling (BIM) adoption. In *Proceedings of the Creative Construction Conference 2019* (pp. 892–898). Budapest University of Technology and Economics. https://doi.org/10.3311/CCC2019-123

202. Okakpu, A., **GhaffarianHoseini, A.,** Tookey, J., Haar, J., Ghaffarianhoseini, AH., Rehman, A., Zhang, T., & Nwadigo, O. (2019). Simulating interaction dynamics of refurbishment project stakeholders through agent-based modeling towards enhancing BIM adoption effectiveness. In *Proceedings of the Creative Construction Conference 2019* (pp. 899–905). Budapest University of Technology and Economics. https://doi.org/10.3311/CCC2019-124

2018

203. Doan, D., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Tookey, J., & Ghaffarianhoseini, AH. (2018, November 12–14). *Examining the relationship between BIM and Green Star* [Paper presentation]. International Conference on Sustainable Infrastructure and Urban Development (CAIC-SIUD 2018), Jakarta, Indonesia. https://hdl.handle.net/10292/15374

204. Doan, D., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Rehman, A., Tookey, J., & Ghaffarianhoseini, AH. (2018, October 30). *What is BIM? A need for a unique BIM definition* [Paper presentation]. International Conference on Built Environment & Engineering (IConBEE2018), Kuala Lumpur, Malaysia.

205. **GhaffarianHoseini, A.**, Rehman, A., Zhang, T., Doan, D., Naismith, N., Ghaffarianhoseini, AH., & Tookey, J. (2018, October 21). *Enabling immersive technologies of virtual/augmented/mixed reality (VAMR) and electroencephalography (EEG) for enhanced interaction with autonomous vehicles* [Paper presentation]. International Conference on Civil Engineering, Architecture & Urbanism, Tehran, Iran.

206. Moore, D., Poshdar, M., Rotimi, J., Qadir, J., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2018, January 8–9). *Working with BIM: Are we really doing it, and who is counting?* [Paper presentation]. When Social Science Meets Lean and BIM: 6th International Workshop, Huddersfield, United Kingdom.

207. Okakpu, A., **GhaffarianHoseini, A.**, Tookey, J., Haar, J., & Ghaffarianhoseini, AH. (2018, January 27). Investigating the effectiveness of adopting building information modelling (BIM) for refurbishment of complex building projects: Case of Auckland. A preliminary study [Paper presentation]. International Conference on Architecture, Landscape & Interior Design (ALI 2018), Kuala Lumpur, Malaysia. Published in *The Fourth NZAAR International Event Series on Natural and Built Environment, Cities, Sustainability and Advanced Engineering* (pp. 70–75). ISSN 2463-5979. https://gdiacademy.org/nzaar/CCS-18-51.html

208. Rehman, A., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Doan, D., Tookey, J., Ghaffarianhoseini, AH., & Lovreglio, R. (2018, November 21–23). *A review: Harnessing augmented reality and digital infrastructure potential for autonomous vehicles* [Paper presentation]. 18th International Conference on Construction Applications of Virtual Reality (CONVR 2018), Auckland, New Zealand.

209. Zhang, T., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Naismith, N., Rehman, A., Lovreglio, R., Doan, D., Nwadigo, O., & Tookey, J. (2018, January 27). Developing an EEG-based building management system to enhance built environment accessibility for disabled users [Paper presentation]. International Conference on Architecture, Landscape & Interior Design (ALI 2018), Kuala Lumpur, Malaysia. Published in *The Fourth NZAAR International Event Series on Natural and Built Environment, Cities, Sustainability and Advanced Engineering* (pp. 40–42). ISSN 2463-5979. https://gdiacademy.org/nzaar/ALI-18-50a.html

210. Zhang, T., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., Naismith, N., Rehman, A., Lovreglio, R., Doan, D., Nwadigo, O., & Tookey, J. (2018, January 27). Establishing a knowledge base system (KBS) for post-construction building facility maintenance [Paper presentation]. International Conference on Architecture, Landscape & Interior Design (ALI 2018), Kuala Lumpur, Malaysia. Published in *The Fourth NZAAR International Event Series on Natural and Built Environment, Cities, Sustainability and Advanced Engineering* (pp. 43–48). ISSN 2463-5979. https://gdiacademy.org/nzaar/ALI-18-50b.html

2017

211. Doan, D., Escaillas, T., **GhaffarianHoseini, A.**, Naismith, N., Zhang, T., Ghaffarianhoseini, AH., & Tookey, J. (2017, September 12–15). *Energy comparison among green rating systems* [Paper presentation]. International Symposium on Greener Cities for More Efficient Ecosystem Services in a Climate Changing World, Bologna, Italy.

212. **GhaffarianHoseini, A.**, Zhang, T., Naismith, N., Tookey, J., Ghaffarianhoseini, AH., Doan, D., & Okey, B. (2017, November 15–16). *Establishing a knowledge base system (KBS) for post-construction building facility maintenance* [Paper presentation]. Australasian Building Simulation Conference 2017 (AIRAH), Melbourne, Australia.

213. Ghaffarianhoseini, AH., Berardi, U., Raahemifar, K., **GhaffarianHoseini, A.**, & Al-Obaidi, K. (2017). The thermal performance exploration of outdoor and indoor spaces using IES & ENVI-met. In *Proceedings of the 2017 Symposium on Simulation for Architecture and Urban Design (SimAUD 2017)* (pp. 273–280). Society for Modeling and Simulation International. https://doi.org/10.22360/simaud.2017.simaud.036

214. Ghaffarianhoseini, AH., Omrany, H., Raahemifar, K., AlWaer, H., & **GhaffarianHoseini, A.** (2017, November 29–December 2). *Why should we care about healthy buildings? Exploring the impacts of sick building syndrome* [Paper presentation]. The 51st International Conference of the Architectural Science Association (ANZAScA 2017), Wellington, New Zealand.

215. Puolitaival, T., Booth, T., **GhaffarianHoseini, A.**, & Park, K. (2017). BIM education: Case New Zealand. In M. Lamb (Ed.), *AUBEA 2017: Australasian Universities Building Education Association Conference 2017* (EPiC Series in Education Science, Vol. 1, pp. 210–218). EasyChair. https://doi.org/10.29007/lcf3

2016

216. Brauner, M., Tookey, J., & **GhaffarianHoseini, A.** (2016, June 22–24). *Improving building hygrothermal performance through advanced application of building materials: A holistic approach towards mould growth prevention* [Paper presentation]. Central Europe towards Sustainable Building (CESB16): Innovations for Sustainable Future, Prague, Czech Republic.

217. Doan, D., **GhaffarianHoseini, A.**, Zhang, T., Ghaffarianhoseini, AH., Naismith, N., Tookey, J., & GhaffarianHoseini, M. (2016). An overview of widely utilized global green certification systems. In *Proceedings of the International Conference on Sustainable Built Environment (SBE16)* (pp. 487–490). Seoul, Korea.

218. Doan, D., **GhaffarianHoseini, A.**, Zhang, T., Rehman, A., Naismith, N., Tookey, J., & Ghaffarianhoseini, AH. (2016). Green building assessment schemes: A critical comparison among BREEAM, LEED and Green Star NZ. In *Proceedings of the International Conference on Sustainable Building Asia (SBE16)* (pp. 474–478). Seoul, Korea. https://www.researchgate.net/publication/311821810

219. **GhaffarianHoseini, A.**, Rehman, A., Zhang, T., Doan, D., Ghaffarianhoseini, AH., Naismith, N., & Tookey, J. (2016, October 31–November 2). *A BIM readiness & implementation strategy for SME construction companies in the UK* [Paper presentation]. 33rd CIB W78 International Conference on IT in Construction, Brisbane, Australia. https://itc.scix.net/pdfs/w78-2016-paper-008.pdf

220. **GhaffarianHoseini, A.**, Zhang, T., Wang, K., Ghaffarianhoseini, AH., Naismith, N., Tookey, J., Chen, K., Wang, G., Zhang, W., & Li, B. (2016, December 11–13). *Application of real-time virtual reality streaming mobile devices for integrated project delivery: A case study of Bailintou Monastery* [Paper presentation]. 16th International Conference on Construction Applications of Virtual Reality (CONVR 2016), Hong Kong.

221. **GhaffarianHoseini, A.**, Okey, B., Ghaffarianhoseini, AH., Naismith, N., & Tookey, J. (2016, December 27–29). *Construction time management success impact factors and data analysis techniques: A review* [Paper presentation]. 4th International Congress on Civil Engineering, Architecture & Urban Development (ICSAU 2016), Tehran, Iran.

222. **GhaffarianHoseini, A.**, Rehman, A., Doan, D., Zhang, T., Ghaffarianhoseini, AH., Naismith, N., & Tookey, J. (2016, October 13–14). *Developing a BIM execution framework for SME construction companies in the UK* [Paper presentation]. BIM International Conference (BIC 2016), São Paulo, Brazil & Lisbon, Portugal.

223. **GhaffarianHoseini, A.**, Zhang, T., Doan, D., Ghaffarianhoseini, AH., Naismith, N., Tookey, J., & GhaffarianHoseini, M. (2016, December 11–13). *Integrating augmented reality and building information modelling to facilitate construction site coordination: An approach to sustainable construction management* [Paper presentation]. 16th International Conference on Construction Applications of Virtual Reality (CONVR 2016), Hong Kong.

224. **GhaffarianHoseini, A.**, Zhang, T., Li, Y., Doan, D., Rehman, A., Ghaffarianhoseini, AH., Naismith, N., Tookey, J., & GhaffarianHoseini, M. (2016, December 8). Proposing robotic foldable houses for a half-day urban lifestyle [Paper presentation]. International Conference on Architecture, Landscape, Interior Design & Urban Planning (ALIU 2016), Kuala Lumpur, Malaysia. Published in *The Second NZAAR International Event Series on Natural and Built Environment, Cities, Sustainability and Advanced Engineering* (pp. 54–57). ISSN 2463-5979. https://gdiacademy.org/nzaar/ALIU-16-26.html

225. Ghaffarianhoseini, AH., Berardi, U., **GhaffarianHoseini, A.**, & Tookey, J. (2016, June 26). Examining the thermal performance characteristics of outdoor spaces in the tropical context of Kuala Lumpur [Paper presentation]. In *The First NZAAR International Event Series on Natural and Built Environment, Cities, Sustainability and Advanced Engineering* (p. 126). Putrajaya, Malaysia. ISSN 2463-5979. https://gdiacademy.org/nzaar/UDCP-16-02.html

226. Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2016, May 8). *Parametric analysis of the outdoor thermal comfort conditions of partially shaded urban spaces in the tropical context of Malaysia* [Paper presentation]. 43rd International Conference on Recent Innovations in Engineering and Technology (ICRIET), Bali, Indonesia.

227. Naismith, N., Monaghan, B., Zhang, T., Doan, D., **GhaffarianHoseini, A.**, & Tookey, J. (2016, December 8). Examining the productivity in the NZ construction industry [Paper presentation]. International Conference on Sustainability, Green Buildings, Environmental Engineering & Renewable Energy (SGER 2016), Kuala Lumpur, Malaysia. Published in *The Second NZAAR International Event Series on Natural and Built Environment, Cities, Sustainability and Advanced Engineering* (pp. 118–121). ISSN 2463-5979. https://gdiacademy.org/nzaar/CMC-16-25.html

228. Naismith, N., **GhaffarianHoseini, A.**, & Kekreja, R. (2016, July 29–31). *The adoption of integrated project delivery in public sector projects in New Zealand: The way forward* [Paper presentation]. 5th World Construction Symposium 2016: Greening Environment, Eco Innovations & Entrepreneurship, Colombo, Sri Lanka.

229. Puolitaival, T., **GhaffarianHoseini, A.**, Haniel, B., Sharp, D., McMeel, D., Chicca, F., Kenny, P., Phipps, R., Amor, R., Greenan, R., Storey, J., & Booth, T. (2016, September 13–15). *BIM training and education: Case New Zealand* [Paper presentation]. 1st International BIM Academic Forum Conference, Glasgow, United Kingdom.

230. Puolitaival, T., Amor, R., **GhaffarianHoseini, A.**, & Park, K. S. (2016). Supporting BIM adoption and implementation: Case New Zealand. In B. Kumar (Ed.), *Proceedings of the 1st International UK BIM Academic Forum Conference* (pp. 570–579). https://hdl.handle.net/10652/3820

2015

231. **GhaffarianHoseini, A.** (2015, April 19–21). *Adopting key sustainable principles in AEC conceptual implementations: Implications and challenges* [Paper presentation]. Engineering Sustainability 2015, University of Pittsburgh, Pittsburgh, PA, United States.

232. **GhaffarianHoseini, A.**, Ibrahim, R., Tookey, J., & Ghaffarianhoseini, AH. (2015, October 16). *Quantitative computational experiment (QCE): An alternative post-positivist experimental research strategy of inquiry for design studies* [Paper presentation]. 3rd International Conference on Civil and Architectural Engineering (ICCAE), Kuala Lumpur, Malaysia. https://hdl.handle.net/10292/10361

233. Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2015, September 24–25). *The impact of nature conservation on the thermal comfort enhancement of green urban spaces: Lessons for environmental education* [Paper presentation]. International Conference on Innovation in Environmental Education: ICT and Intergenerational Learning, Florence, Italy.

234. Ghaffarianhoseini, AH., & **GhaffarianHoseini, A.** (2015, December 6–7). *The impact of nature conservation on the thermal comfort enhancement of urban spaces: Analyzing the heat mitigation strategies* [Paper presentation]. 11th International Conference on Science and Innovative Engineering (ICSIE 2015), Shanghai, China.

235. Gorsia, K., & **GhaffarianHoseini, A.** (2015, December 2–3). *Investigating the effectiveness of using green concrete towards promotion of sustainable built environment* [Paper presentation]. 5th International Conference on Sustainable Tropical Environmental Design (SusTED'15), Selangor, Malaysia.

2014

236. **GhaffarianHoseini, A.**, Tookey, J., & Ghaffarianhoseini, AH. (2014, November 14). *Application of nD BIM integrated knowledge-based building management system (BIM-IKBMS) for inspecting the post-construction energy efficiency* [Paper presentation]. 4th Annual New Zealand Built Environment Research Symposium (NZBERS), Auckland, New Zealand. https://hdl.handle.net/10292/10085

2011

237. Ghaffarianhoseini, AH., Dahlan, N. D., **GhaffarianHoseini, A.**, & Makaremi, N. (2011, April 9–10). *Penetration of smart housing as an integral part of intelligent buildings into urban areas of developing countries* [Paper presentation]. The First Iranian Students Scientific Conference in Malaysia, Universiti Putra Malaysia, Serdang, Malaysia. http://psasir.upm.edu.my/id/eprint/17919/

2010

238. **GhaffarianHoseini, A.**, Ibrahim, R., & Abdullah, R. (2010, August 2–5). *Developing a computational prototype for promoting the socio-cultural sustainability through integration of social network analysis and architectural conceptual design stage* [Paper presentation]. World Engineering Congress 2010, Kuching, Sarawak, Malaysia.

239. **GhaffarianHoseini, A.**, Ibrahim, R., & Abdullah, R. (2010, December 1–2). *Developing evaluation criteria for optimizing architectural spatial planning during conceptual design stage* [Paper presentation]. Sustainable Tropical Environmental Design Conference (SusTED 2010), Selangor, Malaysia.

2009

240. **GhaffarianHoseini, A.**, Ibrahim, R., & Abdullah, R. (2009). Developing a computational model for automatically evaluating the functional efficiency of architectural plan layouts during the conceptual design stage. In R. Ibrahim (Ed.), *Research methodologies in design 2009*. Universiti Putra Malaysia.

2008

241. **GhaffarianHoseini, A.**, Ibrahim, R., & Abdullah, R. (2008). Maintaining the functional relativity of architectural spaces during the conceptual design phase using social network analysis. In *Proceedings of the 8th International Conference on Construction Applications of Virtual Reality (CONVR 2008)* (pp. 467–480). Kuala Lumpur, Malaysia.

242. Mamdooh, M., Ibrahim, R., & **GhaffarianHoseini, A.** (2008). Identifying 2D documentation challenges for IT/ICT implementation in supporting industrialized building system (IBS) in Malaysia. In *Proceedings of the 12th International Conference on Computing in Civil and Building Engineering (ICCCBE-XII) & INCITE 2008* (p. 147). Tsinghua University Press.

2007

243. **GhaffarianHoseini, A.**, Ibrahim, R., & Abdullah, R. (2007). Expert system for spatial planning during housing design. In R. Ibrahim (Ed.), *Research methodologies in design 2007* (pp. 15–16). Universiti Putra Malaysia. ISBN 978-967-5026-26-3.

244. **GhaffarianHoseini, A.**, & Ibrahim, R. (2007). Using social network analysis for visualising spatial planning during conceptual design phase. In *CAADRIA 2007: Proceedings of the 12th International Conference on Computer Aided Architectural Design Research in Asia* (pp. 233–240). Nanjing, China. https://doi.org/10.52842/conf.caadria.2007.x.i8r

2006

245. **GhaffarianHoseini, A.**, & Ibrahim, R. (2006). Using social network analysis for visualizing spatial planning during conceptual design phase. In R. Ibrahim (Ed.), *Research methodologies in design 2006* (pp. 49–51). Universiti Putra Malaysia. ISBN 983-3455-73-5.

RESEARCH REPORTS

2024

246. Dhawan, K., & **GhaffarianHoseini, A.** (2024). *Total cost of ownership: Freightways Ltd. case study*. Auckland University of Technology. Industry research report.

PATENT APPLICATIONS

2011

247. Ibrahim, R., **GhaffarianHoseini, A.**, & Abdullah, R. (2011). *Spatial planning system* (U.S. Patent Application No. 12/936,398 (PCT/MY2009/000053)). Universiti Putra Malaysia.

PROFESSIONAL AND PUBLIC SCHOLARSHIP

2026

248. Doan, D. T., **GhaffarianHoseini, A.**, Aigwi, I. E., & Nkado, F. C. (2026, July 20). NZ parties want to make rooftop solar more affordable. We found cost isn't everything. *The Conversation*. https://doi.org/10.64628/AA.qnx3fjfhy

2025

249. Chen, X., Tan, F. B., Doan, D. T., & **GhaffarianHoseini, A.** (2025, July 1). Climate resilience with advanced data analytics. *Build*, *206*, 52. https://www.branz.co.nz/design-build/articles/climate-resilience-with-advanced-data-analytics

250. Chen, X., **GhaffarianHoseini, A.**, Doan, D. T., & Ghaffarianhoseini, AH. (2025, March 20). Let digital innovation do the heavy lifting. *Build*, *205*, 52–53. https://www.branz.co.nz/design-build/articles/let-digital-innovation-do-the-heavy-lifting

251. Doan, D. T., & **GhaffarianHoseini, A.** (2025, November 19). Building careers in the age of AI. *Build*. https://www.branz.co.nz/design-build/articles/building-careers-in-the-age-of-ai

252. Doan, D. T., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025, September 8). Building consent reform: How digital technology can make new liability rules watertight. *The Conversation*. https://doi.org/10.64628/AA.ajxuhr4ah

253. Jalali, Z., **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2025, March 20). Carbon-neutral retrofitting for climate change. *Build, 205*, 62–63. https://www.branz.co.nz/design-build/articles/carbon-neutral-retrofitting-for-climate-change

2024

254. **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2024). Beyond rankings: 2023's top 10 most liveable cities. *Architecture Now*.

255. **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2024, June). How Auckland's new urban plan can forge a smart, sustainable future. *Architecture Now*.

2021

256. **GhaffarianHoseini, A.**, & Ghaffarianhoseini, AH. (2021, November 12). Re-imagining the concepts of 'co-living' and 'co-working'. *Architecture Now*. https://architecturenow.co.nz/articles/re-imagining-the-concepts-of-co-living-and-co-working/

2019

257. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Doborjeh, Z. (2019, October 11). Neuro-architecture: How do buildings affect mental health? *Architecture Now*. https://architecturenow.co.nz/articles/neuro-architecture-how-do-buildings-affect-mental-health/

258. **GhaffarianHoseini, A.**, Kalatehjari, R., Poshdar, M., Ghaffarianhoseini, AH., & Tookey, J. (2019, February). Planning for smarter cities. *Build, 170*, 59–60. https://www.branz.co.nz/design-build/publications/build-magazine-170

2018

259. **GhaffarianHoseini, A.**, Kalatehjari, R., Poshdar, M., Ghaffarianhoseini, AH., & Tookey, J. (2018, April). Smart technology. *Build, 165*, 64–65. https://www.branz.co.nz/design-build/publications/build-magazine-165

2016

260. **GhaffarianHoseini, A.**, Tookey, J., Ghaffarianhoseini, AH., Naismith, N., & Doan, D. T. (2016). Future of automated construction. *Progressive Building (NZIOB)*, 119–120.

2015

261. Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Tookey, J., Naismith, N., & AlWaer, H. (2015, August). The evolution of intelligent buildings. *The Masterbuilder, 17(8)*, 120–121. http://www.masterbuilder.co.in/ebook/2015/August2015_eBook/index.html#p=108

2013

262. **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & GhaffarianHoseini, M. (2013). Design computing and cognition vs indirect sustainability achievement methodology. *Design Concept*, 2. Discovery Publisher.

2012

263. Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, GhaffarianHoseini, M., & Makaremi, N. (2012). The essence of innovation in sustainable architecture and urban development. *Architect Concept*, 6. Discovery Publisher. http://works.bepress.com/amirhosein_ghaffarianhoseini/1/

PREPRINTS AND MANUSCRIPTS

2026

264. Pourel, D., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & Santamouris, M. (2026). An investigation of summertime outdoor thermal comfort in housing neighbourhood: A site-specific case study in Auckland [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7028360

265. Pourel, D., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & He, B. J. (2026). Development of a hierarchical SHAP interpretation framework for outdoor thermal comfort improvement [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7344521

266. Pourel, D., Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, Naismith, N., & Jalali, Z. (2026). Evidence based development of a macroclimate Typical Meteorological Year (TMY) file: A site-specific case study in Auckland [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7350693

DOCTORAL SUPERVISION: COMPLETED PHD THESES

2026

267. Owais, O. (2026). *Developing and validating a next-gen digital project manager competency model for construction's digital transformation* [Doctoral thesis, Auckland University of Technology]. Supervisors: Poshdar, M., **GhaffarianHoseini, A.**, & Ying, F. https://hdl.handle.net/10292/21065

268. Samarasekara, H. M. S. N. (2026). An evidence-based framework for whole-life cost analysis of residential buildings in New Zealand [Doctoral thesis, Auckland University of Technology]. Supervisors: Purushothaman, M. B., & Rotimi, F. E.; mentor supervisor: GhaffarianHoseini, A. https://hdl.handle.net/10292/20951

2025

269. Khalili, A. M. (2025). *The library as an architectural typology and social infrastructure* [Doctoral thesis, Auckland University of Technology]. Supervisors: Walker, C., & **GhaffarianHoseini, A.** https://hdl.handle.net/10292/20099

270. Mosavat, M. (2025). *Application of design probes to foster children's creative participation in disaster risk reduction* [Doctoral thesis, Auckland University of Technology]. Supervisors: Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Le De, L. https://hdl.handle.net/10292/20684

271. Patel, U. R. (2025). *Leveraging digital twins to improve wellbeing aspects in smart cities via the Living Standards Framework in New Zealand* [Doctoral thesis, Auckland University of Technology]. Supervisors: Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Burgess, A. https://hdl.handle.net/10292/19956

2024

272. Albsoul, H. (2024). *A decision-making framework for residential construction waste reduction in New Zealand* [Doctoral thesis, Auckland University of Technology]. Supervisors: Doan, D. T., Aigwi, I. E., & **GhaffarianHoseini, A.** https://hdl.handle.net/10292/19552

273. Hashemi, S. (2024). *Assessing microclimate and outdoor thermal comfort in the urban environment: A case study of Auckland, New Zealand* [Doctoral thesis, Auckland University of Technology]. Supervisors: Ghaffarianhoseini, AH., **GhaffarianHoseini, A.**, & Naismith, N. https://hdl.handle.net/10292/18328

274. Lozova, O. (2024). *Decarbonizing the built environment via hydrogen technologies* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, & Tookey, J. https://hdl.handle.net/10292/18114

2023

275. Adeyina, D. (2023). *Exploring the passive house framework in cooling-dominated climates* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, & Anderson, T. https://hdl.handle.net/10292/16561

276. Azzazy, S. (2023). *The impact of indoor thermal environments on the user's state of mind in educational buildings in Auckland, New Zealand* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. https://hdl.handle.net/10292/17490

277. Dhawan, K. (2023). *Supply chain management driven logistics efficiency in the New Zealand construction sector* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, & Tookey, J. https://hdl.handle.net/10292/16424

278. Zeinalian Bafandeh, A. (2023). *Developing a decision support framework to facilitate the demolition versus deconstruction decision-making process at the end-of-life phase of the building lifecycle in New Zealand's construction industry* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Naismith, N. https://hdl.handle.net/10292/16964

2022

279. Burfoot, M. (2022). *Intelligent passive room acoustic technology for acoustic comfort in New Zealand classrooms* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Naismith, N., & Ghaffarianhoseini, AH. https://hdl.handle.net/10292/15396

280. Qadir, T. K. A. (2022). *Regenerative development in the New Zealand built environment: Achieving multi-capital outcomes through improved public investment decisions* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Moore, D., Rotimi, J., & Tedestedt George, C. https://hdl.handle.net/10292/15233

281. Rehman, A. (2022). *Realizing trust dynamics and governance for humanizing driverless technology* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Naismith, N., & Tookey, J. https://hdl.handle.net/10292/14956

2020

282. Brauner, M. (2020). *Developing an optimized sustainability assessment tool for building information modelling (BIM) systems: Incorporation of hygrothermal modelling into BIM* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Tookey, J., Naismith, N., & Bomberg, M. https://hdl.handle.net/10292/13785

2019

283. Doan, D. T. (2019). *Enhancing Green Star certification by improving BIM uptake through system dynamics modelling* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Naismith, N., Ghaffarianhoseini, AH., & Tookey, J. https://hdl.handle.net/10292/12907

284. Nwadigo, O. (2019). *Real-time and dynamic planning and scheduling under disruption using multi-hybrid simulation and optimisation* [Doctoral thesis, Auckland University of Technology]. Supervisors: Naismith, N., **GhaffarianHoseini, A.**, Ghaffarianhoseini, AH., & Tookey, J. https://hdl.handle.net/10292/13010

285. Okakpu, A. (2019). *Investigating the effectiveness of adopting building information modelling for refurbishment of complex buildings: Case study of Auckland* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Tookey, J., & Haar, J. https://hdl.handle.net/10292/13038

286. Zhang, T. (2019). *Investigating the effectiveness of BIM-BMS integration on managing existing building facilities: A New Zealand educational building case* [Doctoral thesis, Auckland University of Technology]. Supervisors: **GhaffarianHoseini, A.**, Naismith, N., & Ghaffarianhoseini, AH. https://hdl.handle.net/10292/13041

2018

287. Dananjoyo, R. (2018). *Developing service performance for the New Zealand house building industry: A study of Auckland residential housing* [Doctoral thesis, Auckland University of Technology]. Supervisors: Tookey, J., Neitzert, T., & **GhaffarianHoseini, A.** https://hdl.handle.net/10292/11542

DEGREE THESES

2012

288. **GhaffarianHoseini, A.** (2012). *Effectiveness of utilizing automatic residential spatial diagramming by senior architectural students* [Doctoral thesis, Universiti Putra Malaysia]. http://psasir.upm.edu.my/id/eprint/51656/

2008

289. **GhaffarianHoseini, A.** (2008). *Adaption of social network analysis for facilitating spatial diagramming during architectural conceptual design phase* [Master's thesis, Universiti Putra Malaysia]. http://psasir.upm.edu.my/id/eprint/4942/

LIST OF POSTGRADUATE SUPERVISION, MENTORSHIP & EXAMINATION

Doctor of Philosophy (PhD)
360 credit points

#	Code	NZQA Level	Institute	Capacity
	AK3518	*10*	*Auckland University of Technology, NZ*	*Research Supervisor/Director of Studies*

Category	Number
Completed PhD theses	21
PhD theses under examination	3
Current PhD candidates	13
Total PhD involvements	**37**

Completed theses are cited in APA 7th edition style with a link to the Auckland University of Technology repository. Completed theses are grouped by thesis year; candidates under examination and in progress are grouped by year of commencement (newest first) and ordered alphabetically by surname. Current candidates include those on an approved leave of absence. Numbering is continuous across the list.

DOCTORAL SUPERVISION

Completed PhD Theses

Primary Supervisor (11)

#	Candidate	Thesis title	Completion Year
1.	**Dr Adeyina, Damiloju**	*Exploring the passive house framework in cooling-dominated climates* https://hdl.handle.net/10292/16561	2023
2.	**Dr Zeinalian Bafandeh, Atefeh**	*Developing a decision support framework to facilitate the demolition versus deconstruction decision-making process at the end-of-life phase of the building lifecycle in New Zealand's construction industry* https://hdl.handle.net/10292/16964	2023
3.	**Dr Burfoot, Megan**	*Intelligent passive room acoustic technology for acoustic comfort in New Zealand classrooms* https://hdl.handle.net/10292/15396	2022
4.	**Dr Qadir Trichur Khabeer Abdul, Jas**	*Regenerative development in the New Zealand built environment: Achieving multi-capital outcomes through improved public investment decisions* https://hdl.handle.net/10292/15233	2022
5.	**Dr Rehman, Attiq Ur**	*Realizing trust dynamics and governance for humanizing driverless technology* https://hdl.handle.net/10292/14956	2022
6.	**Dr Brauner, Marcela**	*Developing an optimized sustainability assessment tool for building information modelling (BIM) systems: Incorporation of hygrothermal modelling into BIM* https://hdl.handle.net/10292/13785	2020
7.	**Dr Doan, Dat Tien**	*Enhancing Green Star certification by improving BIM uptake through system dynamics modelling* https://hdl.handle.net/10292/12907	2019
8.	**Dr Nwadigo, Okechuku**	*Real-time and dynamic planning and scheduling under disruption using multi-hybrid simulation and optimisation* https://hdl.handle.net/10292/13010	2019
9.	**Dr Okakpu, Anthony**	*Investigating the effectiveness of adopting building information modelling for refurbishment of complex buildings: Case study of Auckland* https://hdl.handle.net/10292/13038	2019

10.	**Dr Zhang, Tongrui**	*Investigating the effectiveness of BIM-BMS integration on managing existing building facilities: A New Zealand educational building case* https://hdl.handle.net/10292/13041	2019
11.	**Dr Dananjoyo, Radyan**	*Developing service performance for the New Zealand house building industry: A study of Auckland residential housing* https://hdl.handle.net/10292/11542	2018

Co-Supervisor (9)

#	Candidate	Thesis title	Completion Year
12.	**Dr Owais, Omar**	*Developing and validating a next-gen digital project manager competency model for construction's digital transformation* https://hdl.handle.net/10292/21065	2026
13.	**Dr Khalili, Ali Mohammad**	*The library as an architectural typology and social infrastructure* https://hdl.handle.net/10292/20099	2025
14.	**Dr Mosavat, Mojan**	*Application of design probes to foster children's creative participation in disaster risk reduction* https://hdl.handle.net/10292/20684	2025
15.	**Dr Patel, Urva Rajnikant**	*Leveraging digital twins to improve wellbeing aspects in smart cities via the Living Standards Framework in New Zealand* https://hdl.handle.net/10292/19956	2025
16.	**Dr Albsoul, Hadeel**	*A decision-making framework for residential construction waste reduction in New Zealand* https://hdl.handle.net/10292/19552	2024
17.	**Dr Hashemi, Saghar**	*Assessing microclimate and outdoor thermal comfort in the urban environment: A case study of Auckland, New Zealand* https://hdl.handle.net/10292/18328	2024
18.	**Dr Lozova, Olga**	*Decarbonizing the built environment via hydrogen technologies* https://hdl.handle.net/10292/18114	2024
19.	**Dr Azzazy, Sameh Abdallah Osman**	*The impact of indoor thermal environments on the user's state of mind in educational buildings in Auckland, New Zealand* https://hdl.handle.net/10292/17490	2023
20.	**Dr Dhawan, Kamal**	*Supply chain management driven logistics efficiency in the New Zealand construction sector* https://hdl.handle.net/10292/16424	2023

Mentor Supervisor (1)

#	Candidate	Thesis title	Completion Year
21.	**Dr Samarasekara, Samadhi**	*An evidence-based framework for whole-life cost analysis of residential buildings in New Zealand* https://hdl.handle.net/10292/20951	2026

PhD Theses Under Examination

Co-Supervisor (1)

#	Candidate	Research title	Started
22.	**Pourel, Deependra**	*The ontology between microclimate and thermal and daylight comfort in medium-density, standard-led residential houses in Auckland, New Zealand: A solution-driven exploratory study*	2023

Mentor Supervisor (2)

#	Candidate	Research title	Started
23.	**Nkado, Franklin**	*Developing a performance-based framework to promote solar photovoltaic systems adoption for passive houses in New Zealand*	2023
24.	**Poorisat, Tharaya**	*A framework to integrate energy efficiency, water efficiency and indoor environmental quality: Towards sustainable building design and practice in New Zealand*	2023
25.	**Poorisat, Tharaya**	*A framework to integrate energy efficiency, water efficiency and indoor environmental quality: Towards sustainable building design and practice in New Zealand*	2023

Current PhD Candidates

Co-Supervisor (5)

#	Candidate	Research title	Started
26.	**Nadirsha, Salahsha**	*A framework for integrating IoT and AI technologies into aged care campuses: Design, construction and operational guidelines*	2026
27.	**Shojaei, Gia**	*Electroencephalography-guided adaptive lighting for emotional regulation in interior environments: Experimental development and validation of a neuroadaptive design protocol in New Zealand*	2024
28.	**Srinivas, Sameer**	*Smart airport framework: Investigating the interplay of architecture, operational efficiency and passenger experience in new and transitioning airports*	2024
29.	**Moradi, Babak**	*Responsive façade systems: Regenerative approaches to Auckland's climatic challenges*	2022
30.	**Onundi, Musa**	*The interrelationship between communication skills and knowledge management in the architecture, engineering and construction industry*	2022

Mentor Supervisor (8)

#	Candidate	Research title	Started
31.	**Khaing, Aye Aye**	*Impact of urbanisation and climate change on New Zealand's groundwater systems*	2026
32.	**De Silva, Arundri**	*Improving the wellbeing of professional women in the New Zealand construction industry: Exploring the role of working from home*	2025
33.	**Tuyet Mai**	*Developing and validating an engineering-to-consumer readiness model (ECRM) for the adoption of off-site construction (OSC) under cyclic loading (CL) in the context of AI applications*	2025
34.	**Warkaka, Yakubu George**	*Enhancing the resilience of post-disaster housing reconstruction through circular economy practices in New Zealand*	2025
35.	**Bassi, Sheena**	*The impact of cognitive biases on women professionals in the New Zealand construction industry*	2024
36.	**Gottam, Sahithi**	*Optimising ready-mixed concrete delivery using a smart navigation-based dispatching model*	2024
37.	**Al-Kayed, Anas**	*Digital transformation and competitiveness: An analysis of subcontracting organisations in the New Zealand construction industry*	2023
38.	**Fahmi, Maryse**	*Key factors influencing the architectural design of safe egress for hospital patients in fire emergencies*	2022

POSTGRADUATE EXAMINATION

Summary

Category	Number
Doctoral examination	
External Examiner (PhD)	22
Examiner Mentor (AUT)	4
Chair and Chair Mentor (AUT)	17
Confirmation of Candidature Examiner (AUT)	11
Master's examination	
Master of Philosophy Examiner (AUT)	1
External Examiner and Adjudicator (Master's)	15
Total thesis examinations	**70**
Master's oral defence examinations, MCM and MEPM (AK1290 and AK1317), AUT, 2014 to date; not included in the total above	**300+**

70 examinations across 10 universities. Entries are listed newest first within each institution and numbered continuously. Thesis titles follow the awarding university's repository record where one is available, with a link to that record.

DOCTORAL EXAMINATION

External Examiner: Doctor of Philosophy

Theses examined for other universities, grouped by country and institution.

New Zealand

University of Auckland

#	Candidate	Thesis and supervisors	Year
1.	**Dr Malekkhani, Atefe**	*Critical discourse analysis of New Zealand's digitalisation policies with a Bourdieusian-Putnamian social capital lens* Supervisors: Assoc Prof Lee Beattie and Dr Mohsen Mohammadzadeh	2026
2.	**Dr Khatibi, Hamed**	*Developing measurement tools for assessing smart and resilient cities* Supervisors: Dr Asaad Shamseldin and Prof. Pierre Quenneville https://hdl.handle.net/2292/69760	2023
3.	**Dr Balaei Langroudi, Behrooz**	*Investigating multidimensional factors affecting water supply resilience to disasters* Supervisors: Prof. Suzanne Wilkinson and Prof. Regan Potangaroa https://hdl.handle.net/2292/50167	2019
4.	**Dr Rahman, Mohammad**	*Integrating BIM and lean to achieve sustainable projects* Supervisors: Dr Vicente A. González, Prof. Robert Amor and Assoc. Prof. James Lim	2019
5.	**Dr Sajoudi, Masoud**	*Tool selection and implementation practice for transportation resilience assessment* Supervisors: Prof. Suzanne Wilkinson and Assoc. Prof. Seosamh Costello https://hdl.handle.net/2292/47503	2019

Massey University

#	Candidate	Thesis and supervisors	Year

6.	**Seran, Karmila**	*Developing a decision-making support system prototype for renewable energy* Supervisors: Prof. James Rotimi *Thesis under examination*	2026
7.	**Dr Moshood, Taofeeq Durojaye**	*A framework for enhanced decision making in construction organisations based on quality of pipeline information* Supervisors: Prof. James Rotimi https://hdl.handle.net/10179/73425	2025
8.	**Dr Bakhtiarizadeh, Ehsan**	*Developing a framework for prefabrication supply chain integration in New Zealand using blockchain technology* Supervisors: Prof. James Rotimi https://hdl.handle.net/10179/71811	2024
9.	**Dr Wahid, Israr**	*An analysis of determinants of construction firm performance: A New Zealand perspective* Supervisors: Prof. James Rotimi and Dr Wajiha Shahzad https://hdl.handle.net/10179/69247	2023
10.	**Dr Asadi, Ramin**	*Rework management in construction contracts: An assessment of NZS 3910:2013 provisions* Supervisors: Prof. Suzanne Wilkinson and Prof. James Rotimi https://hdl.handle.net/10179/17680	2022
11.	**Dr Frei, Marcel**	*A quantitative situation analysis model for strategic planning in quantity surveying firms* Supervisors: Dr Hennie van Heerden, Assoc. Prof. Jasper Mbachu, Prof. Robyn Phipps and Prof. Suzanne Wilkinson https://hdl.handle.net/10179/17345	2021

Victoria University of Wellington

#	Candidate	Thesis and supervisors	Year
12.	**Dr Perera, Kopiyawattage (Kasun)**	*Outdoor thermal comfort: An adaptive model to assess thermal comfort in urban outdoors in New Zealand* Supervisors: Assoc. Prof. Michael Donn and Prof. Marc Aurel Schnabel https://doi.org/10.26686/wgtn.19345385	2021

Australia

Adelaide University

#	Candidate	Thesis and supervisors	Year
13.	**Dr Sanagar Darbani, Elham**	*Impacts of glazed façades on outdoor microclimates and thermal comfort: Investigation of urban geometry and glazing emissivity* Supervisors: Dr Ehsan Sharifi and Prof. Veronica Soebarto	2026

Deakin University

#	Candidate	Thesis and supervisors	Year
14.	**Dr Oraee Namzadi, Mehran**	*An integrated model for collaboration in BIM-based construction networks (BbCNs)* Supervisors: Dr Reza Hosseini and Prof. David John Edwards https://hdl.handle.net/10779/DRO/DU:23797134	2020

Macquarie University

#	Candidate	Thesis and supervisors	Year

15.	**Dr Mirabi, Elahe**	*Multi-scale and multi-approach assessment of urban linear heat dynamics and mitigation strategies across road typologies* Supervisors: Prof. Peter Davies and Dr Hsing-Chung Chang https://doi.org/10.25949/33821140	2026

University of New South Wales

#	Candidate	Thesis and supervisors	Year
16.	**Dr Shen, Xiaohan**	*Vision-based information management using digital construction knowledge graphs to integrate data in digital twins for prefabricated construction* Supervisors: Prof. Samad M. E. Sepasgozar, Prof. Michael Ostwald and Assoc. Prof. Changxin Wang https://doi.org/10.26190/unsworks/31753	2025
17.	**Dr Yang, Liming**	*Study of nozzle design and development of reinforcing mesh approach for 3D construction printing* Supervisors: Prof. Samad M. E. Sepasgozar, Dr Ali Kashani and Dr Sara Shirowzhan https://doi.org/10.26190/unsworks/32301	2025
18.	**Dr Alamoudi, Abood**	*Enabling citizens' participation to implement smart sustainable cities for Saudi Vision 2030* Supervisors: Dr Rotimi Abidoye and Dr Benson Lim https://doi.org/10.26190/unsworks/30364	2023

Malaysia

Universiti Putra Malaysia

#	Candidate	Thesis and supervisors	Year
19.	**Dr Chen, Jiandou**	*Expediting buying experience among the younger generation by improving the car user experience with customers' personalities* Supervisors: Prof. Ts. Dr Rahinah Ibrahim	2025
20.	**Dr Liu, Heng**	*Happy toy creation for reducing loneliness among single women in China* Supervisors: Prof. Ts. Dr Rahinah Ibrahim	2025
21.	**Dr Zou, Shasha**	*Floral painting language on packaging towards female consumer acceptance of product packaging recycling strategy* Supervisors: Prof. Ts. Dr Rahinah Ibrahim http://psasir.upm.edu.my/id/eprint/120944/	2023
22.	**Dr Bousbia Laiche, Abdelfatah**	*Quality of life in sustainable work environments: Development of a humane and sustainable framework for indoor environmental quality in green office building assessment* Supervisors: Prof. Nur Dalilah Dahlan, Assoc. Prof. Zalina Shari and Assoc. Prof. Mohammad Zaky Ja'far	2022

Examiner Mentor: Doctor of Philosophy

Auckland University of Technology, AK3518, NZQA Level 10.

Auckland University of Technology

#	Candidate	Thesis and supervisors	Year
23.	**Dr Zhang, Hui**	*Development of LoRa-based wireless sensing technologies for structural health monitoring* Supervisors: Dr Sherif Beskhyroun and Dr Xuejun Li https://hdl.handle.net/10292/17668	2023

24.	**Dr Montiel Arroyo, Miguel**	*Activity-instance modelling: A design lens to examine everyday activities at a granular level* Supervisors: Dr Ricardo Sosa and Dr Darryl Hocking https://hdl.handle.net/10292/17423	2023
25.	**Dr Bolarinwa, Ademola**	*The effects of kaolinite-clay on the undrained strength characteristics and static liquefaction behavior of East Coast sand* Supervisors: Dr Roohollah Kalatehjari, Dr Mani Poshdar and Dr Ahmad Safuan Rashid https://hdl.handle.net/10292/15321	2022
26.	**Dr Soltanifar, Mehrdad**	*A framework to improve the performance of public tender evaluation procedures in New Zealand* Supervisors: Prof. John Tookey and Dr Fei Ying https://hdl.handle.net/10292/13237	2019

Chair and Chair Mentor of Examination: PhD and Doctor of Health Science

Auckland University of Technology, AK3518, NZQA Level 10.

Auckland University of Technology

#	Candidate	Thesis and supervisors	Year
27.	**Dr Kapoor, Gaurav**	*Analytic methods for electricity price forecasting: Application to New Zealand electricity market* Supervisors: Dr Nuttanan Wichitaksorn, Dr Wenjun Zhang and Prof. Jiling Cao https://hdl.handle.net/10292/17525	2024
28.	**Dr Tiban Anrango, Bryan Andres**	*Cellulose-based surfactants: Designing particle-based surfactants for sustainable applications* Supervisors: Dr Jack Chen and Assoc. Prof. Marcus Jones https://hdl.handle.net/10292/18343	2024
29.	**Dr Ahangama Vidanagei, Pramuditha Madhavi**	*Understanding loneliness and its impact on quality of life in older Sinhalese people living in aged care facilities in Sri Lanka* Supervisors: Dr Margaret Sandham, Dr Irene Zeng and Prof. Eleanor Holroyd https://hdl.handle.net/10292/16742	2023
30.	**Dr Cui, Yuanyuan**	*Believing in the unbelievable: The hidden utility of superstitious belief in consumer behaviour* Supervisors: Dr Jungkeun Kim and Prof. Ricky Chan https://hdl.handle.net/10292/16395	2023
31.	**Dr McNicholl, Seamus Gary**	*The value of allied health activity in a district health board setting in New Zealand* Supervisors: Prof. Duncan Reid and Dr Felicity Bright	2023
32.	**Dr Mosa, Abdelghany Salah Abdelghany**	*Engagement in risk management practices in software development projects: Framing effects* Supervisors: Prof. Harminder Singh and Dr Farkhondeh Hassandoust https://hdl.handle.net/10292/16798	2023
33.	**Dr Raman, Kalpana**	*Cultural generalizability of the multidimensional model of mindfulness in the Indian context* Supervisors: Prof. Chris Krägeloh and Prof. Richard Siegert https://hdl.handle.net/10292/16930	2023
34.	**Dr Rothschild, Jeffrey**	*Periodization of carbohydrate availability for endurance training with a focus on pre-training intake* Supervisors: Dr Daniel Plews and Prof. Andrew Kilding https://hdl.handle.net/10292/16466	2023
35.	**Dr Sreekumar, Jayakrishnan**	*At the crossroads of gender and cinema: The films of Shyamaprasad* Supervisors: Prof. Vijay Devadas and Prof. Geoffrey Craig https://hdl.handle.net/10292/16394	2023

36.	**Dr Clubb, Anne**	*Internationally qualified nurses' perceptions of how the New Zealand registered nurse competency assessment programme enabled transition to clinical and culturally safe nursing practice in Aotearoa New Zealand* Supervisors: Prof. Eleanor Holroyd and Dr Priya Saravanakumar https://hdl.handle.net/10292/15288	2022
37.	**Dr Cooke, Daniel**	*Investigating a nonlinear pedagogy approach to primary school physical education* Supervisors: Dr Craig Harrison, Assoc. Prof. Sarah-Kate Millar and Assoc. Prof. Simon Walters https://hdl.handle.net/10292/15914	2022
38.	**Dr He, Ji**	*Collateral sensitivity associated with multidrug-resistance protein 5 in triple-negative breast cancer* Supervisors: Dr Yan Li and Assoc. Prof. Dong-Xu Liu https://hdl.handle.net/10292/15055	2022
39.	**Dr Radakrishna, Hayma Malini**	*Identity, community and creativity: Indian media workers and broadcasting in Singapore* Supervisors: Assoc. Prof. Vijay Devadas and Dr Peter Hoar https://hdl.handle.net/10292/15704	2022
40.	**Dr Andrews, Antony**	*Efficiency and productivity analysis of New Zealand district health boards: An empirical enquiry using Bayesian stochastic frontier analysis* Supervisors: Assoc. Prof. Saten Kumar and Dr Grigorios Emvalomatis https://hdl.handle.net/10292/14498	2021
41.	**Dr Belcher, Suzanne (Clair)**	*Improving the design and implementation of New Zealand's NetballSmart injury prevention programme* Supervisors: Assoc. Prof. Chris Whatman and Dr Matt Brughelli https://hdl.handle.net/10292/14534	2021
42.	**Dr Heard, Kate**	*A bridge over troubled water: Insights from aid workers seeking to reduce maternal mortality in the developing world* Supervisors: Prof. Liz Smythe and Prof. Peggy Fairbairn-Dunlop https://hdl.handle.net/10292/14787	2021
43.	**Dr McGeown, Joshua Patrick**	*Towards a neurophysiological approach of managing sport-originated brain injury* Supervisors: Prof. Patria Hume, Prof. Ken Quarrie and Prof. Alice Theadom https://hdl.handle.net/10292/14778	2021

Confirmation of Candidature Examiner: Doctor of Philosophy

Auckland University of Technology, AK3518, NZQA Level 10. Titles are those of the research proposals examined.

Auckland University of Technology

#	Candidate	Research proposal	Year
44.	**Dr Sadoon, Anas**	*Water-sensitive spatial planning and right-of-way design as a sustainable flood resilience strategy in arid environments: Learning from the Dubai April 2024 flood*	2024
45.	**Dr Katebi, Milad**	*Artificial intelligence in automating community disaster resilience measurement*	2020
46.	**Dr Zhang, Hui**	*Development of a monitoring system for large scale structures using innovative sensory technologies*	2020
47.	**Dr Gade, Rohit**	*Achieving sustainable construction through minimising construction and demolition (C&D) waste in building projects*	2019
48.	**Dr Qadir Abdul, Jas**	*Improving strategic decision making necessary for the effective design and governance of regenerative design and development projects*	2019

49.	**Dr Veismoradi, Sajad**	*Development of a new self-centring damage avoidant rotational resilient slip friction joint for new and existing buildings*	2019
50.	**Dr Zhao, Nan**	*Developing a decision supporting system for procurement method selection in construction industry*	2018
51.	**Dr Mahesh Babu, Purushothaman**	*The interaction of lean, waste, and human factor: Optimising business processes through improved understanding of biases in workplaces*	2017
52.	**Dr Soltanifar, Mehrdad**	*Reengineering contractor selection (CS) processes for improved quality of New Zealand construction sector*	2017
53.	**Dr Dananjoyo, Radyan**	*Developing world class service excellence for the New Zealand house building industry: A study of Auckland residential housing*	2016
54.	**Dr Pokhrel, Manoj Kumar**	*Achieving thermal comfort using 'smart' windows in buildings*	2016

MASTER'S EXAMINATION

Examiner: Master of Philosophy

Auckland University of Technology, AK3720, NZQA Level 9.

Auckland University of Technology

#	Candidate	Thesis and supervisors	Year
55.	**Syed, Yaseen Fatima**	*Biomimicry as a strategy to enhance ecologically regenerative design* Supervisors: Charles Walker https://hdl.handle.net/10292/14301	2021

External Examiner and Adjudicator: Master's Theses

Theses examined for other universities, grouped by country and institution.

New Zealand

University of Auckland

#	Candidate	Thesis and supervisors	Year
56.	**Koeh, Nigel**	*Reimagining the Straits of Malacca: Regeneration of a waterborne village* Degree: Master of Architecture (Professional) Supervisors: Dr Alessandro Premier https://hdl.handle.net/2292/59528	2022
57.	**Shan, Yucong (Simon)**	*A new Chinese exotic: Retrofitting a car-park building into a Chinese community centre* Degree: Master of Architecture (Professional) Supervisors: Dr Alessandro Premier https://hdl.handle.net/2292/59535	2022
58.	**Carbajal, Francisco**	*What gets measured gets managed: Addressing the embodied carbon of a rural new detached architectural home* Degree: Master of Architecture (Professional) Supervisors: Dr Alessandro Premier https://hdl.handle.net/2292/57894	2020
59.	**Al Shidi, Azizah**	*Leen: A cancer care home, the application of caring architecture in the Sultanate of Oman* Degree: Master of Architecture (Professional) Supervisors: Dr Alessandro Premier https://hdl.handle.net/2292/51649	2019

60.	**Loots, Thomas**	*Urban green villages: Re-imagining communities in high-density areas* Degree: Master of Architecture (Professional) Supervisors: Dr Alessandro Premier https://hdl.handle.net/2292/51720	2019
61.	**Carlson, Jody**	*The integration of project management, quality and sustainable design to achieve sustainable project outcomes in New Zealand commercial building projects* Degree: Master of Architecture in Sustainable Design Supervisors: Dr A. Melis and Dr Paola Boarin https://hdl.handle.net/2292/37514	2018

Massey University

#	Candidate	Thesis and supervisors	Year
62.	**Hassan, Adeel**	*Investigating factors that cause delays to the subdivisions of land in New Zealand* Degree: Master of Construction Management Supervisors: Assoc. Prof. James Rotimi and Dr Wajiha Shahzad	2019

Victoria University of Wellington

#	Candidate	Thesis and supervisors	Year
63.	**Jamieson, Megan**	*A new lease on life: Designing for wellbeing in adapted office buildings* Degree: Master of Architecture (Professional) Supervisors: Assoc. Prof. Michael R. Donn and Prof. Joanna Merwood-Salisbury https://doi.org/10.26686/wgtn.20522517	2022
64.	**Liu, Jiaqi**	*Quadrangle courtyard green simulation approach to renovation of residential buildings in China* Degree: Master of Architecture (Professional) Supervisors: Not recorded https://doi.org/10.26686/wgtn.15163743	2021
65.	**Steele, Jack**	*Architectural models as a base for reliable early stage energy simulation* Degree: Master of Architectural Science (Building Science) Supervisors: Assoc. Prof. Michael R. Donn https://doi.org/10.26686/wgtn.17148587	2020
66.	**Sunarya, Wendy**	*The importance of site on house heating energy modelling in Wellington: Integrating EnergyPlus with ENVI-met for site modelling* Degree: Master of Building Science Supervisors: Dr Nigel Isaacs and Assoc. Prof. Michael R. Donn Role: Adjudicator https://doi.org/10.26686/wgtn.17142758	2019
67.	**Haddock, Amber**	*Building information modelling for asset and facilities management* Degree: Master of Building Science Supervisors: Dr Fabricio Chicca Role: Adjudicator https://doi.org/10.26686/wgtn.17134511	2018

Australia

Deakin University

#	Candidate	Thesis and supervisors	Year

68.	**Abu Alieh, Lama**	*An assessment of the capacity of Australian universities' Building Information Modelling (BIM) education to produce market-ready graduates* Degree: Master of Architecture (Professional) Supervisors: Assoc. Prof. Reza Hosseini and Prof. Richard Tucker https://hdl.handle.net/10779/DRO/DU:25623186	2022

Malaysia

Universiti Putra Malaysia

#	Candidate	Thesis and supervisors	Year
69.	**Molany, Nasim**	*A comprehensive sustainable living lab model (SLL) to enhance sustainable literacy in architecture* Degree: Master of Science Supervisors: Prof. Rahinah Ibrahim	2024

Saudi Arabia

Qassim University

#	Candidate	Thesis and supervisors	Year
70.	**Almunyifi, Ali Munif**	*Impact of buildings form factor on the energy consumption in schools: Case study in Qassim region* Degree: Master of Construction Management Supervisors: Asst. Prof. Abdulbasit Ali Almhafdy	2022

MASTER'S SUPERVISION

Summary

Status	MEng (AK3720)	MCM (AK1290)	MEPM (AK1317)	Total
Completed	7	129	17	**153**
Current	0	10	0	**10**
Did not complete	0	2	0	**2**
Total	**7**	**131**	**17**	**165**

Degree details

Programme	Code	NZQA Level	Credit points	Capacity
Master of Engineering (MEng)	AK3720	9	120	Research Supervisor / Director of Studies
Master of Construction Management (MCM)	AK1290	9	120	Research Supervisor / Director of Studies
Master of Engineering Project Management (MEPM)	AK1317	9	120	Research Supervisor / Director of Studies

All programmes are offered by Auckland University of Technology, New Zealand. Within each programme, entries are listed newest first, alphabetically within year, and numbered continuously. Completed research shows the year of completion; current candidates show the year of commencement. Ten candidates who commenced in 2026 are listed under Programme to be confirmed until their enrolments and research titles are confirmed.

MASTER'S SUPERVISION

Completed Master's Research

Master of Engineering (7)
AK3720 | NZQA Level 9 | 120 credit points | Research Supervisor / Director of Studies

#	Candidate	Research title	Year
1.	**Anand, Nikhil**	*Optimizing last-mile urban freight operations in New Zealand's central business districts*	2024
2.	**Dousti, Ghazal**	*Can shared micro-mobility make a macro effect on sustainability in New Zealand?*	2024
3.	**Jose, Megha**	*The role of micro mobility in reducing emissions in New Zealand*	2024
4.	**Surovtsev, Iurii**	*BIM/digital design implementation course for bridges according to New Zealand standards*	2024
5.	**Tian, Ye**	*Advancing Smart Mobility in Railway Transportation with Multifunctional Bays*	2024
6.	**Deng, Zhao**	*Investigating the effectiveness of integration of BIM and blockchain in New Zealand construction industry*	2021
7.	**Khalil, Areej As'ad**	*Optimal building retrofits assessment for zero-energy building implementation in Jordan*	2021

Master of Construction Management (129)
AK1290 | NZQA Level 9 | 120 credit points | Research Supervisor / Director of Studies

#	Candidate	Research title	Year
8.	**An, Zilong**	*A study on the application of intelligent technology to the whole life cycle of buildings in New Zealand: Smart houses and smart buildings*	2025

9.	**Bihari, Renuka**	*Properties and performance of calcined clays in concrete*	2025
10.	**Buan, Vienne**	*Best practices for sustainability in Auckland: Advantages and challenges*	2025
11.	**Chandrasekaran, Sharumathi Uthirapathi**	*Proof pack and BIM-EPD handoff framework for sustainable procurement*	2025
12.	**Costa, Joy**	*Implementing advanced technologies in commercial buildings in New Zealand for carbon reduction and energy efficiency optimization*	2025
13.	**Hlaing, Ni Ni Win**	*Solar photovoltaic adoption in New Zealand*	2025
14.	**Kumar, Sarath Sasi**	*Comparative analysis of timber and concrete systems for mid-rise construction in New Zealand*	2025
15.	**Mallawaarachchi, Adisha Dasun**	*Real time digital twin simulations for the intelligent building emergency evacuation and preparation*	2025
16.	**Maung, Wunna**	*Cognitive barriers to integrated design for decommissioning in New Zealand*	2025
17.	**Murasinghage, Hasitha Lakmal Jayathunga Rana**	*Barriers and challenges to implementing energy-efficient buildings in port infrastructure in New Zealand*	2025
18.	**Ohnmar**	*Barriers to implementing sustainable design practices in construction project management*	2025
19.	**Oo, Wai Yan**	*Barriers to smart system retrofits in shared spaces of older New Zealand apartments: A secondary data case study*	2025
20.	**Ratwadkar, Anshul Santosh**	*Barriers to BIM-BAS integration among small construction firms in Auckland*	2025
21.	**San, Law**	*Sustainable design for Auckland hospitals*	2025
22.	**Set, Ye Hein**	*Sustainable urban infrastructure development in New Zealand*	2025
23.	**Subedi, Bishal**	*Digital technology-enabled transformation in construction organizations: A project management perspective*	2025
24.	**Thet, Aung**	*Prefabrication as a strategy to reduce construction waste in New Zealand's mid-rise residential sector*	2025
25.	**Yazdanichmazketi, Hania**	*Electric vehicle (EV) charging infrastructure strategies in New Zealand with a focus on vehicle-to-grid (V2G) technology*	2025
26.	**Yuan, Mingze**	*Developing a strategic framework to overcome BIM adoption barriers in New Zealand's construction industry*	2025
27.	**Yuan, Rong**	*Enabling the integration of building information modelling (BIM) into facilities management (FM): Evidence from New Zealand projects*	2025
28.	**Aaron, Anthony**	*Enhancing the sustainability of concrete mix design: A comparative analysis of eco-friendly additives*	2024
29.	**Bhatti, Faisal Jahangir**	*Deconstruction planning with digital twins for material reuse*	2024
30.	**Devi, Monika**	*BIM-driven seismic resilience: Enhancing building preparedness through integrated systems in New Zealand*	2024
31.	**Dias, Chamara**	*Promoting the green roof concept among Sri Lankan youth to support its skilled shortage*	2024
32.	**Gafarov, Nikita**	*Shall BIM be mandatory in New Zealand: Learning from the journey of Singapore*	2024
33.	**Guerra, Alex**	*Pioneering the implementation of machine learning (ML) in transforming project management*	2024
34.	**Htet, Swam Paing**	*Challenges and opportunities for integrating predictive maintenance with HVAC and BMS in New Zealand's commercial buildings*	2024

35.	**Htet, Ye Kyaw**	*Implementation of lean construction practices in small and medium-sized enterprises (SMEs) in New Zealand: Focus on waste minimization*	2024
36.	**Iyer, Hamsi**	*Safety and security of data in smart buildings*	2024
37.	**Khamchan, Punnisa**	*Digital fabrication for sustainable NZEB component design in New Zealand*	2024
38.	**Li, Hanna**	*The potential of building information modelling in cost estimation to improve project planning*	2024
39.	**Mikheev, Denis**	*Identifying priority areas in New Zealand for the implementation of green roof technology for non-residential (industrial) buildings: Advantages and disadvantages of areas*	2024
40.	**Mohan, Praseen Chandra**	*Review of New Zealand's current approach to regulating the critical infrastructure system*	2024
41.	**Na, Wun**	*The role of 3D printing technology for sustainable housing development in New Zealand*	2024
42.	**Naderi, Matt**	*Investigating BIM-enabled Prefabrication as a Delivery System for Affordable and Sustainable Housing in New Zealand*	2024
43.	**Naing, Thet**	*Implementing smart building automation systems to optimize energy consumption and reduce carbon emissions*	2024
44.	**Nguyen, Cong Hien**	*A case study: Impacts of electric vehicles (EVs) and rooftop solar panels (RSP) on voltage profile, load losses, and overload of electric power distribution systems*	2024
45.	**Patel, Aayushi Harsh**	*Leveraging building information modeling (BIM) in sustainable enhancement of adaptive reuse projects in New Zealand's construction industry: Challenges and opportunities*	2024
46.	**Pei, Enzo**	*Coding digital dikes: IoT optimizer for Auckland stormwater system*	2024
47.	**Phyu, Kyawt Phyu**	*Investigating factors of time delay in infrastructure projects to enhance the New Zealand infrastructure construction industry*	2024
48.	**Phyu, Zun Pwint**	*Demand-controlled ventilation (DCV) systems for the optimization of HVAC energy efficiency and indoor air quality*	2024
49.	**Saad, Marwa**	*Evaluating cognitive behavioral acceptance in implementing autonomous robotics into New Zealand large scale infrastructure construction sites*	2024
50.	**Saji, Vishnu Kallidumbil**	*Visualization system using BIM for underground utility management, especially in pipelines*	2024
51.	**Senevirathne, Gayan Anushka**	*Traditional Māori building techniques and modern energy efficiency*	2024
52.	**Soltanifar, Amir Hossein**	*Enhancing health and safety in NZ construction: Exploring challenges, causes, and strategies for improvement through qualitative inquiry*	2024
53.	**Tin, Khaing Sandar**	*Sustainable healthcare facilities: Integrating green building practices and energy efficiency*	2024
54.	**Vidhu, Ganu**	*IoT integration in smart residential buildings: Enhancing energy efficiency, occupant comfort, and mental well-being*	2024
55.	**Waldeniye Gedara, Anura Udaya Kumara**	*The impact of 5D BIM on quantity surveying in the Auckland construction industry*	2024
56.	**Win, Phyu Thwe**	*Optimizing modular construction by implementing building information modelling (BIM) technology*	2024
57.	**Withanage, Shashini Madhuka Perera**	*Exploring sustainable construction practices in the New Zealand construction industry: Challenges, opportunities, and impact*	2024

58.	**Xia, Jingru**	*Investigating Auckland occupant behavior impact on residential retrofitting: Energy and comfort*	2024
59.	**Zaw, Nay Myo**	*Enhancing sustainable and cost-effective fiber network infrastructure and mobile solutions for New Zealand*	2024
60.	**Claro, Alexandre Pontes**	*Comparative analysis of artificial intelligence (AI) techniques to reduce project scheduling delays in large constructions in Aotearoa New Zealand*	2023
61.	**Guo, Jizheng**	*Form optimization of fixed shading devices based on energy performance and visual comfort*	2023
62.	**Jetlohasiri, Warin**	*Evaluating cost-effectiveness of energy retrofit strategies for residential buildings: A case study analysis in Auckland, New Zealand*	2023
63.	**Rakhimov, Adel**	*Assessing the impact of energy-efficient buildings on greenhouse emissions reduction in New Zealand*	2023
64.	**Selvam, Sanjay Kumar**	*Analysis of drivers and barriers in the application of AR and VR in the construction industry*	2023
65.	**Sigua, Joel**	*Assessing the sustainability of adopting micro-generation technology to improve the energy performance of residential houses in New Zealand*	2023
66.	**Tarantino, Matthew**	*Investigating megaproject risk analysis technology to enhance efficiency and success in the United Arab Emirates*	2023
67.	**Tun, Myo Zaw**	*Investigating the role of floating production, storage and offloading (FPSO) for a New Zealand oil refinery*	2023
68.	**Won, Ji Won**	*Applying the scope of works as linguistic knowledge to generative AI and the potential shift of managerial roles in construction*	2023
69.	**Zhang, Shihao**	*Analysis of the future application prospect of 3D printing architecture in New Zealand private houses*	2023
70.	**Zhu, Yun**	*Solid oxide fuel cell system's application prospect in energy-efficient buildings in New Zealand*	2023
71.	**Du, Yuhui**	*Intelligent building and building automation systems*	2022
72.	**Ngo, Vince**	*Thermal bridging, condensation risk, and mould growth analysis using WUFI and THERM*	2022
73.	**Ahmed, Fahd**	*Integration of BIM and BMS*	2021
74.	**Collymore, Mark Andrew**	*Inaugurating vertical forests to Auckland's urban landscapes: A feasibility study*	2021
75.	**Hu, Cheng**	*Investigating the barriers towards materializing the Auckland smart city concept*	2021
76.	**Lima, Lucas Nicolau do Carmo**	*Improving BIM adoption for the construction sector in New Zealand: Lessons learnt from international best practices*	2021
77.	**Naik, Monish Vikram**	*The role of smart housing and future landscape in Auckland smartification*	2021
78.	**Rajesh, Amar**	*Insights in waste minimization in Auckland's construction industry*	2021
79.	**Sarwar, Ibrahim**	*Emergence of smart cities and the barriers towards materializing their full potentials*	2021
80.	**Srikumar, Akshay**	*A comparative study of conventional houses and passive buildings*	2021
81.	**Wang, Xiaofeng**	*Re-planning and re-construction for smart city developments in Auckland*	2021
82.	**Baskarababu, Vignesh Vijayam**	*A study on future trends in public transport systems in Auckland*	2020

83.	**Bharadwaja, Prajnana**	*A theoretical comparative study between the construction cost of a conventional building and a 4 Star green building in Auckland, New Zealand*	2020
84.	**Chouka, Sangamesh**	*Effective implementation of cross laminated timber in New Zealand construction industry*	2020
85.	**Kumar, Arvind**	*Integration of BIM and lean principles for implementation in the New Zealand construction sector*	2020
86.	**Narayan, Sarath**	*Building information modelling to mitigate cost overruns and project delays*	2020
87.	**Pardeshi, Avinash**	*Investigating the effectiveness of integration of BIM and IoT for operation and maintenance of healthcare facilities in Auckland, New Zealand*	2020
88.	**Umachandran, Naveen Karthik Kirubanidhi**	*BIM integrated facility management in design*	2020
89.	**Yang, Jianfeng**	*The status of BIM adoption in construction management in New Zealand*	2020
90.	**Ding, Xibin**	*A study of green retrofitting: The feasibility and outcomes in New Zealand*	2019
91.	**Jagadeesh, Sindhur Gowda**	*Sustainable zero waste minimisation in building construction: A systematic review based on life cycle assessment*	2019
92.	**Kayci, Serhat**	*BIM implementation for SMEs in New Zealand*	2019
93.	**Krishnan, Arya**	*Reducing fatality rate in construction sites using smart technologies in Auckland*	2019
94.	**Mehta, Ishaan**	*Integration of BIM and lean for the construction industry in India: Case of variable construction protocols*	2019
95.	**Nagarajan, Shreyas**	*Construction of tall buildings using timber: Case of New Zealand*	2019
96.	**Nagarajan, Sridharan**	*Management in road safety of pedestrians: Research on Barnes Dance in Auckland*	2019
97.	**Nagrare, Rushabh**	*Productivity improvement through earned value analysis*	2019
98.	**Salins, Vivan Kirthan**	*Resistance to join the construction industry in New Zealand*	2019
99.	**Tang, Xiaoyu**	*The role that green building should play in the future development*	2019
100.	**Utreja, Siddharth**	*Investigating the actual degree of user comfort and energy efficiency in smart buildings: A step towards automation in construction industry*	2019
101.	**Yu, Boyang**	*The study of environmental friendliness of intelligent building*	2019
102.	**Zhao, Honglai**	*Exploring the difficulties in the construction process of green building and the key points of cost control: Case study, WZ Building of AUT*	2019
103.	**Bhandari, Sne Kamalakar**	*Issues and opportunities in promotion of green commercial buildings in New Zealand*	2018
104.	**Gao, Yiming**	*An integration of urban infrastructure and citizen-orientation services for delivering a smarter Auckland by utilizing IoT and big data*	2018
105.	**Gonzales, Pierre Angeli**	*An investigation on the BIM efficiency on QTO in AEC industry*	2018
106.	**Lu, Jiajun**	*The main barriers in implementing 5D building information modelling in project cost management in New Zealand*	2018
107.	**Magare, Prashant Suresh**	*Comparative assessment for eco-friendly sustainable pavement materials in New Zealand*	2018
108.	**Radhakrishnan, Veena**	*Vertical farming: A solution for a greener economy in Auckland CBD*	2018

109.	**Raju, Sreerag**	*Investigating barriers in adoption of 5D BIM for quantity surveyors in New Zealand*	2018
110.	**Shen, Yun**	*Application and comparison: BIM-based uses and traditional approaches in construction waste management during construction phase*	2018
111.	**Wang, Dong**	*Purchase mechanism of green buildings*	2018
112.	**Yu, Min**	*How does traditional housing model development evolve to sustainable housing model development in Auckland*	2018
113.	**Zhu, Baozhan**	*Integration green buildings and smart house concepts: Case of Auckland, New Zealand*	2018
114.	**Chen, Yi**	*User's involvement and responsibility to improve the design of intelligent building systems in NZ*	2017
115.	**Farzadi, Farzam**	*Improving the practicality of BIM implementation through tackling interoperability issues between Revit and Robot (React) during design phase*	2017
116.	**Li, Cong**	*The development and utilization of building integrated wind energy system in NZ*	2017
117.	**Liao, Paul**	*Sustainable building: Retrofitting existing buildings can often be more cost effective: True or false*	2017
118.	**Ng, Kean**	*Sustainable development: Connecting buildings and community*	2017
119.	**Singh, Azad**	*Passive houses: Understanding perspective of society*	2017
120.	**Wang, Han**	*Green roofs: Saving and protecting water resources*	2017
121.	**Wang, Ke**	*Energy efficient buildings: An approach to warmer houses in New Zealand*	2017
122.	**Yao, Xiaofeng**	*Exploring the advantages and challenges of green roofs in New Zealand*	2017
123.	**Dobbie, Helena**	*A review on the extent of applicability of intelligent buildings: Case of office buildings in Auckland, New Zealand*	2016
124.	**Eliasson, Alexander**	*Green procurement of construction contracts in NZ: Providing potential solutions towards the barriers project managers face*	2016
125.	**Kapadiya, Parth**	*Futuristic concerns towards enhancing the efficiency of green building concepts in New Zealand*	2016
126.	**Karale, Adwait Anil**	*A comprehensive study on future development of passive solar building designs in urban areas*	2016
127.	**Nagar, Puneet**	*Performance and applicability of a passive solar design in New Zealand residential buildings*	2016
128.	**Pawar, Pranit Pravin**	*A comprehensive study on sustainable/green building developments in New Zealand*	2016
129.	**Wei, Chen**	*Strategies for achieving energy efficiency in existing buildings*	2016
130.	**Yang, Yu**	*The application of BIM in piping and equipment installation*	2016
131.	**Zhu, Yibin**	*Investigating the performance of green roofs in Auckland, New Zealand*	2016
132.	**Karsan, Khushhal**	*Investigating the effectiveness of using green concrete towards promotion of sustainable built environment*	2015
133.	**Le, Minh Trung**	*Promoting sustainability in AEC industry: Auckland, New Zealand*	2015
134.	**Menon, Rahul**	*Investigating the implementation of green practices during design and construction of high rise buildings*	2015

135.	**Reddy, Nagarjuna**	*Verifying the economic feasibility of implementing green roofs for small dwellings: Case of residential units, Auckland, New Zealand*	2015
136.	**Surayagari, Surya Kiran Sai**	*A comprehensive study of residential green buildings in New Zealand*	2015

Master of Engineering Project Management (17)
AK1317 | NZQA Level 9 | 120 credit points | Research Supervisor / Director of Studies

#	Candidate	Research title	Year
137.	**Ruan, Jun**	*A feasibility study on intelligent high definition surveillance platforms: Case of Auckland liquor stores*	2019
138.	**Tang, Su**	*A comparative study on development of BIM in China and New Zealand*	2019
139.	**Zhang, Weiwei**	*Beyond work safety and physical health: Supporting the well-being to improve work environment in New Zealand*	2019
140.	**Jebaselvan, Jackson**	*Introduction of advanced security systems in smart cities: Opportunities and challenges*	2018
141.	**Nair, Juhi Sunil Mohan**	*Sustainable solutions for the overarching urbanization: Conversion of community parks into sustainable parks*	2018
142.	**Samad, Aznain**	*Total cost of ownership of near net-zero energy building*	2018
143.	**Dubarry, Hans**	*Barriers and challenges for sustainable buildings: A case for commercial buildings in New Zealand*	2017
144.	**Regula, Jaya Sruthi**	*Solar PV: Are we using the solar energy to its full potential in New Zealand*	2017
145.	**Sawanat, Akhil**	*An investigation into the possible reasons for slow uptake of marine energy project development and utilisation in New Zealand*	2017
146.	**Verma, Shiv**	*Beyond the asset design and build stages: BIM capabilities and its use in asset and facilities management*	2017
147.	**Ahmed, Aqeel**	*Impact of lean manufacturing on reduction of environmental issues in coal fired power plant of New Zealand*	2016
148.	**Dao, Hanzhi**	*Autoclaved aerated concrete (AAC) application prospect as residential wall cladding material in New Zealand*	2016
149.	**Dong, Trinh**	*Deployment of smart meters for future smart-home in New Zealand*	2016
150.	**Pinheiro, Stebin Joseph**	*A review on the materials used in sustainable building construction in New Zealand: Selection methods, innovations and standardization*	2016
151.	**Gashko, Ivan**	*Investigating the optimization of post project change adaptations*	2015
152.	**Gu, Yang**	*What are the implications and opportunities for building services engineers while moving restorative model buildings*	2015
153.	**Wang, Linyu**	*Lean production in manufacturing process*	2015

Current Master's Candidates

Master of Construction Management (10)
AK1290 | NZQA Level 9 | 120 credit points | Research Supervisor / Director of Studies

#	Candidate	Research title	Started
154.	**Aung, Ye Yint**	*Evaluating BIM interoperability for design-to-fabrication data transfer in specialist façade subcontracting*	2026
155.	**Huang, Wei**	*The impact of 3D concrete printing technology on construction management practices in New Zealand*	2026

156.	**Khin, Nyo Nyo**	Decreased Utilization of Timber In Auckland's Residential Housing Construction	2026
157.	**Lin, Thet Mar**	*Barriers and opportunities influencing readiness for BIM-enabled digital twin adoption among New Zealand construction SMEs*	2026
158.	**Lin, Yufan**	*Cost overruns in New Zealand public megaprojects: An empirical analysis of the gap between estimated and actual costs*	2026
159.	**Nandakumar, Abishek**	Developing a Digital Twin Readiness Framework for New Zealand Construction Organisations	2026
160.	**Oo, Nwe Nwe**	*Smart energy management for improving energy efficiency and sustainability in green buildings*	2026
161.	**Pan, Wennan**	Towards a Well-being-Oriented Digital Twin Framework for Iterative Age-Friendly Urban Renewal in New Zealand	2026
162.	**Xia, Lulu**	Integrating BIM and Digital Twin for Construction-Phase Energy Optimisation in Auckland Modular Housing	2026
163.	**Zeng, Tao**	UAV-Assisted Safety Monitoring on Construction Sites in New Zealand: Barriers, Opportunities, and Implementation Strategies	2026

Did Not Complete

Master of Construction Management (2)
AK1290 | NZQA Level 9 | 120 credit points | Research Supervisor / Director of Studies

#	Candidate	Research title	Year
164.	**Neemia, Tekita**	*Introducing sustainable precast concrete to Tuvalu*	2015
165.	**Wu, Michael**	*A comprehensive study of Auckland's special housing area*	2015

PROFESSOR ALI GHAFFARIANHOSEINI
HEAD OF THE SCHOOL OF FUTURE ENVIRONMENTS (SOFE)
AUCKLAND UNIVERSITY OF TECHNOLOGY, NEW ZEALAND

RECORD UPDATES SINCE OCTOBER 2026

This section lists additions to the record since this edition of the CV was issued. Each item also appears in its place in the full online record at alighaffarian.com, and will be incorporated into the main pages at the next edition.

CURRENT AS OF 16 NOVEMBER 2026

PROGRAMME LEADERSHIP, QUALITY ASSURANCE AND TEACHING

1.	**Master of Design, Innovative Built Environment (LUCT)**	MQA accreditation. Programme developer; led the accreditation working group	2011 to 2014
2.	**Master of Science, Sustainable Built Environment (LUCT)**	MQA accreditation. Programme developer; led the accreditation working group	2011 to 2014

INSTITUTION BUILDING

3. CIB Task Group 134 (TG 134): Digital Twin Governance for the Built Asset Lifecycle

2026

Founding Leading Coordinator

Organisation
International Council for Research and Innovation in Building and Construction (CIB)

Lead institution
Auckland University of Technology, School of Future Environments

Related CIB commissions
W078 Information Technology for Construction; TG126 Artificial Intelligence in Construction; W098 Intelligent and Responsive Buildings; W116 Smart and Sustainable Built Environments

> Conceived and leads a new CIB Task Group with the governance of digital twins across the built asset lifecycle as its primary focus: data stewardship, contractual liability, decision rights at asset handover, interoperability governance and cross jurisdictional regulatory maturity, a layer not held as a primary focus by existing CIB commissions W078, TG126, W098 or W116. The CIB Programme Committee formally endorsed the Task Group and its leadership team on 20 October 2026, commending the quality, depth and timeliness of the proposal and identifying digital twin governance as a cornerstone theme for CIB; the endorsement goes to the CIB Board for ratification in November 2026.

Objectives: map and evaluate national and sectoral digital twin governance frameworks; treat interoperability as a governance problem; develop lifecycle decision-making accountability frameworks; produce guidance for policy, standards and practice

Work plan, 2026 to 2029: two member meetings a year, a global CIB branded webinar series, a Year 1 CIB branded research roadmap on digital twin governance, and a dedicated session at the CIB World Building Congress

Engagement with CIB Student Chapters and early career researchers, and special issue collaborations with CIB endorsed Q1 journals

VOICE: THOUGHT LEADERSHIP AND PUBLIC VOICE

4. **GDI2027 in Kuala Lumpur: Taking the Conference Series International** 2027

Conference Co-Chair

> After two editions in Auckland, the GDI conference series that Professor Ghaffarian co-founded moves to Kuala Lumpur in 2027. The Chartered Institute of Building (CIOB) Malaysia hosts the conference with a consortium of Malaysian universities, and Professor Ghaffarian co-chairs it with Professor Amirhosein Ghaffarianhoseini and Professor Rahinah Ibrahim.

GDI Academy GDI2027 in Kuala Lumpur (Professor Amirhosein Ghaffarianhoseini)

---

5. **SoFE Leads the Faculty at the Te Ara Auaha Staff Awards 2026** 2026

Faculty Recognition

> School of Future Environments colleagues received several awards at the 2026 Te Ara Auaha Faculty Staff Awards, and the School recorded the highest rate of success of any school or entity in the Faculty of Design and Creative Technologies.

---

6. **Neuro-architecture: A Panel Conversation at the School of Future Environments** 2026

Panel Conversation

> On 21 October 2026 the School of Future Environments hosted a panel conversation bringing neuroscience and architecture together. Professor Ghaffarian joined Professor Frederick Marks, Professor Amirhosein Ghaffarianhoseini, who led the panel, Dr Megan Burfoot, Dr Lara Tookey and other researchers and practitioners from across the School.

Neuro-architecture: a panel conversation (Professor Amirhosein Ghaffarianhoseini)

---

7. **Moments: A Photographic Record**

Gallery

> A photographic record of the conferences, keynotes, laboratories, visits and milestones across Professor Ghaffarian's portfolio. Select any photograph to open the story behind it.

R+G UBE Lab on YouTube

RESEARCH OUTPUTS

8. JOURNAL ARTICLES — 2026

Bui, T. T. P., Doan, D. T., Pomponi, F., Tam, V. W. Y., Wilkinson, S., & GhaffarianHoseini, A. (2026). Circular economy in the built environment: A systematic literature review 2005–2025. Sustainable Development, in press.

https://doi.org/10.1002/sd.71812

9. JOURNAL ARTICLES — 2026

Mosavat, M., Ghaffarianhoseini, AH., GhaffarianHoseini, A., & Le De, L. (2026). Design probes as participatory tools for child-centred disaster risk reduction: An empirical study in Aotearoa New Zealand. Design Studies, 107, 101434.

https://doi.org/10.1016/j.destud.2026.101434

10. JOURNAL ARTICLES — 2026

Srinivas, S., Purushothaman, M. B., Ghaffarianhoseini, AH., & GhaffarianHoseini, A. (2026). Architecture–operational efficiency interactions in smart airport transformation: Insights from airport practice. Buildings, 16(21), 4405.

https://doi.org/10.3390/buildings16214405

11. PROFESSIONAL AND PUBLIC SCHOLARSHIP — 2026

GhaffarianHoseini, A. (2026, November 3). The journal article is too static for the world it now serves. Times Higher Education.

https://www.timeshighereducation.com/opinion/journal-article-too-static-world-it-now-serves

12. PROFESSIONAL AND PUBLIC SCHOLARSHIP — 2026

GhaffarianHoseini, A. (2026, October). Recovering construction materials after disasters: A condition-based framework for reuse [Video research interview]. Faculti.

https://doi.org/10.64240/24d616244a

RECORD CORRECTIONS

These notes correct publication details in the original edition. The preceding CV pages are retained as issued; the current online record reflects these corrections.

1. **Examining the impact of human factors on lean construction scheduling through network and feedback analysis**

   This article is excluded from Ali GhaffarianHoseini's research record. AUT identifies the three authors as M. B. Purushothaman, Amirhosein Ghaffarianhoseini and Zaw Tun Kyaw.

   Source record · Checked 2026-11-02

2. **The concept of zero energy intelligent buildings (ZEIB): A review of sustainable development for future cities**

   The publisher lists the authors in this order: AmirHosein GhaffarianHoseini; Ali GhaffarianHoseini; Nastaran Makaremi; Mahdiar GhaffarianHoseini. Ali is the second author.

   Source record · Checked 2026-11-02

3. **The Essence of Future Smart Houses: From Embedding ICT to Adapting to Sustainability Principles**

   The first author is AmirHosein GhaffarianHoseini and the fourth author is Ali GhaffarianHoseini. The most-cited list on the website now reflects that order.

   Source record · Checked 2026-11-02

4. **A BIM Readiness & Implementation Strategy for SME Construction Companies in the UK**

   The complete author order is Ali Ghaffarianhoseini; Attiq Ur Rehman; Dat Tien Doan; Tongrui Zhang; Amirhosein Ghaffarianhoseini; Nicola Naismith; John Tookey.

   Source record · Checked 2026-11-02

5. **A review on energy conscious designs of building façades in hot and humid climates: Lessons for (and from) Kuala Lumpur and Darwin**

   The seventh author is Safiah Yusoff, cited as Yusoff, S. Y. The website's most-cited list now uses that family name and initials.

   Source record · Checked 2026-11-02