Waipapa Taumata Rau
University of Auckland

China Scholarship Council 2027 Opportunities

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Welcome to Doctoral Research at the University of Auckland



The University of Auckland is New Zealand's leading university and a globally recognised centre for research excellence. As a PhD candidate, you will join a vibrant community of scholars working at the forefront of discovery, innovation and societal impact. Our doctoral programmes are designed to support ambitious researchers who seek to address complex global challenges while developing the skills, networks and expertise needed for successful international careers. Through close collaboration with world-class supervisors, access to advanced research facilities, and opportunities to engage with leading researchers across disciplines, doctoral candidates are empowered to make meaningful contributions to knowledge and society.

Studying at the University of Auckland

Located in Auckland, New Zealand's largest and most diverse city, the University offers a unique research and living environment. Auckland is consistently recognised as one of the world's most liveable cities and provides an exceptional quality of life, combining a safe, welcoming multicultural community with stunning natural landscapes, a thriving innovation ecosystem, and strong connections across the Asia-Pacific region. As home to the world's largest Māori and Pacific populations, Auckland also offers distinctive cultural perspectives and research opportunities that cannot be found elsewhere. Students benefit from studying in a dynamic international city while enjoying easy access to beaches, forests, outdoor recreation, and a supportive academic environment.

The University of Auckland has a long-standing and valued partnership with the China Scholarship Council (CSC), supporting talented Chinese students to undertake doctoral study in New Zealand. Through this collaboration, outstanding students have the opportunity to work with leading academics across the University's Signature Research Areas, which bring together interdisciplinary expertise to address some of the most important challenges facing our world.

This document introduces supervisors currently available to support prospective PhD candidates from China and highlights their areas of expertise within these research themes. We warmly invite you to explore these opportunities and discover how your research aspirations can be advanced through doctoral study at the University of Auckland.



Interested in studying at the University of Auckland?

On the following pages you will find tables featuring academics who are available and have capacity to supervise. These have been collated under our Signature Research Areas. (Supervisors may be listed under multiple Signature Research Areas if their expertise applies to more than one area.)

Application procedure

1. Use the links for each supervisor to view their profile or search our website to find a suitable supervisor and research project. Contact the potential supervisor to see if they are able to support your application. Once you have the support of a potential supervisor, apply for admission as the next step.
2. Submit an online Application for Admission to the University of Auckland before the closing date (1 February). The sooner you apply, the better.
3. In your online application, under the funding section, list "CSC Scholarship" under the name of scholarship or funding source you have or intend to apply for. This will allow us to prioritise your application.
4. If we are able to make you an offer of admission, we will issue you an offer of place as soon as possible. Please note that CSC will not accept offers conditional on English. Therefore, you must meet the University of Auckland's English language proficiency requirements to be endorsed by the University for a CSC scholarship. *Please note that the Fee Waiver Endorsement is only for CSC Applicants under the Collaborative Channel* (国外合作项目) *(i.e., via mutual agreement between CSC and the University of Auckland). This fee waiver endorsement does not apply to CSC applicants under the Individual Channel, Joint PhD channel or other channels. Please refer to our CSC Scholarship page for more information.*
5. The CSC tuition fee waiver letters will be issued to successful applicants under the Collaborative Channel (国外合作项目) on or before 1 March. Unsuccessful applicants will also be notified via email on or before 1 March.
6. Submit your scholarship application to CSC or work with your home university to submit an application to CSC. Please note that University of Auckland does not recognise the individual application channels and queries about these need to be directed to the CSC.

Ma Kiwi Te Moana Nui E Whakaumu

Blue Pacific Horizons



Building resilient, just and sustainable future – grounded in the Pacific, relevant to the world

The Pacific is at the forefront of some of the world's most significant environmental, social and economic transformations. What we learn here can help shape more resilient futures around the world.

Located in the world's largest Pacific city and home to the largest Māori and Pacific research communities globally, the University brings together the expertise, relationships and perspectives needed to support resilience, environmental justice and sustainable prosperity.

Blue Pacific Horizons connects expertise from ocean and environmental science, engineering, health, law, humanities, Māori and Pacific knowledge systems. Our aim is to better understand what resilience looks like – and how it can be achieved for the Pacific and the world.

From sustainable fisheries and aquaculture to renewable ocean energy, coastal livelihoods and environmental stewardship, this work recognises that the future of the Pacific is about more than economics or infrastructure alone. It's about the connections between healthy oceans, thriving communities, cultural identity and long-term prosperity.

As part of the Pacific region, Aotearoa New Zealand has both an opportunity and a responsibility to contribute.

The future of the Pacific won't be determined by any one country, discipline or perspective. It will be built together.

By bringing together researchers, communities and knowledge from across the Blue Pacific, we can help create resilient, just and sustainable futures – grounded in the Pacific, relevant to the world.

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Jagir Hussan	r.jagir@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Food Science; Computer Systems Engineering	Genomically-Informed Digital Twinning: Predicting impact of climate change on NZ Food crops and Farm animals
Assoc. Prof. Emily Parke	e.parke@auckland.ac.nz	Faculty of Arts and Education	Philosophy	
Dr Karen Huang	k.huang@auckland.ac.nz	Faculty of Arts and Education	Linguistics; Asian Languages and Cultures	
Dr Matt Rankine	m.rankine@auckland.ac.nz	Faculty of Arts and Education	Philosophy	
Dr Arezoo Rahimi	arezoo.rahimi@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	
Assoc. Prof. Rick Henry	rs.henry@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Seismic design and sustainability of resilient low-damage precast concrete structures
Prof. Naresh Singhal	n.singhal@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Climate-Driven Shifts in Freshwater Quality: Assessing Organic Chemicals, Pathogens, and Microbial Community Dynamics
Assoc. Prof. Nawawi Chouw	n.chouw@auckland.ac.nz	Faculty of Engineering and Design	Earthquake Engineering; Climate Change Adaptation; Structural Engineering	Future generation of low-damage seismic design Current seismic design philosophy tolerates a degree of damage at locations predefined by the designer, provided that complete structural collapse is precluded. Low-damage seismic design, in contrast, avoids damage to structural members by allowing the activation of rigid-like body movement. (2) Title: Eco-friendly composite structures The research focuses on developing zero-carbon composite materials made from natural materials. The composite structures are designed to withstand multiple extreme loads.
Assoc. Prof. Mike O'Sullivan	michael.osullivan@auckland.ac.nz	Faculty of Engineering and Design	Operations Research; Engineering Science	
Dr Hongyu Jin	hongyu.jin@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering; Operations Research; Property	

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Prof. Kobus van Zyl	k.vanZyl@auckland.ac.nz	Faculty of Engineering and Design	Water and Sewer Pipe Systems	
Assoc. Prof. Alice Chang-Richards	yan.chang@auckland.ac.nz	Faculty of Engineering and Design	Earthquake Engineering; Disaster Resilience; AI/Machine Learning/Deep Learning	
Prof. Rolando Orense	r.orense@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Studies in earthquake geotechnical engineering
Dr Michael MacDonald	michael.macdonald@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Various projects available in high-fidelity computational fluid dynamics (CFD), turbulence, heat transfer and aerodynamics
Dr Juhri Selamet	juhri.selamet@auckland.ac.az	Faculty of Engineering and Design	Design; Communication; Asian Languages and Cultures	
Dr Wendy Liu	wen.liu@auckland.ac.nz	Faculty of Engineering and Design	Planning; Geography; Population Health	The relationship between city life, the built environment, social conditions, and health outcomes, particularly through factors such as air quality, food environment, and nature contact. How urban policy and city environments influence people's physical, mental, and social health, and how urban environments can be designed to improve health and well-being.
Prof. Ajit K Sarmah	a.sarmah@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering; Environmental Science; Chemical and Materials Engineering	
Prof. Claire Postlethwaite	c.postlethwaite@auckland.ac.nz	Faculty of Science	Mathematics	Modelling behaviour in intransitive competition networks
Prof. Jennifer Salmond	j.salmond@auckland.ac.nz	Faculty of Science	Environmental Science; Geography	Air pollution studies at local to urban scales
Prof. Shane Cronin	s.cronin@auckland.ac.nz	Faculty of Science	Geology; Earth Sciences; Environmental Sciences	
Dr Jennifer Eccles	j.eccles@auckland.ac.nz	Faculty of Science	Geology	Geophysical investigations of Natural Hazard forming processes
Assoc. Prof. Pablo Saenz-Agudelo	pablo.saenz-agudelo@auckland.ac.nz	Faculty of Science	Marine Science	Development of high-throughput, mechanistic bioassays for priority marine pest control.

Mātauranga Tuku Iho

Ancestral Futures

Shaping research with Indigenous knowledge to solve global challenges.

For generations, Indigenous communities have developed deep knowledge of people, place and the relationships that connect them. Yet too often, this knowledge is treated as something from the past, rather than a powerful guide for the future.

Ancestral Futures creates space for Indigenous knowledge to stand alongside science, technology, policy and innovation – not as an alternative, but as a partner. By bringing different knowledge systems together, it creates new pathways for addressing complex local and global challenges.

Grounded in Te Tiriti o Waitangi and Aotearoa New Zealand's place in the Pacific, the University is uniquely positioned to lead this work.

Home to the world's largest Māori and Pacific research communities, we bring together world-leading expertise, enduring relationships and diverse perspectives that few institutions can offer.

By connecting Indigenous knowledge, excellent research and real-world partnerships, we support solutions that are community-led, globally relevant and built for the long term.

Because some of the most important breakthroughs don't come from choosing one way forward. They begin when different ways of seeing the world meet.

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Fleur Te Aho	f.teaho@auckland.ac.nz	Auckland Law School	Law	
Dr Karen Huang	k.huang@auckland.ac.nz	Faculty of Arts and Education	Linguistics; Asian Languages and Cultures	
Dr Matt Rankine	m.rankine@auckland.ac.nz	Faculty of Arts and Education	Philosophy	
Dr Jesin James	jesin.james@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering; Computer Systems Engineering; Software Engineering	Incoporating Lingusitics knowledge into Speech Technology Development
Dr Juhri Selamet	juhri.selamet@auckland.ac.nz	Faculty of Engineering and Design	Design; Communication; Asian Languages and Cultures	
Assoc. Prof. Ludmila Adam	l.adam@auckland.ac.nz	Faculty of Science	Geophysics; Earth Science; Geology	Planetary Experimental Geophysics

Hangarau Haputa

Frontier Technologies

Making sure tomorrow's technologies work for our communities today..

Technology is moving faster than ever.

Artificial intelligence. Space technologies. Advanced engineering. New ways of collecting, modelling and understanding data.

These breakthroughs are transforming how we live, work and solve some of the world's biggest challenges.

But technology alone isn't enough.

The real opportunity lies in bringing together the people who create technology with the people who shape how it's used.

Frontier Technologies is where these worlds meet.

At the University, we bring together expertise across artificial intelligence, photonics, space systems, data science and advanced engineering to explore how new technologies can move from discovery to real-world impact.

Researchers work alongside industry, government, communities and global partners to test ideas, solve practical challenges and accelerate the path from innovation to application.

As a small, connected and high-trust country, Aotearoa New Zealand offers something few places can: the ability to rapidly trial, evaluate and scale new technologies in real-world settings. Combined with the University's strong track record of translating research into impact, it creates a living lab for the technologies shaping our future.

Just as importantly, innovation is guided by values and helping to ensure new technologies are trusted, ethical and designed to benefit society.

Because the question isn't simply what technology can do. It's how we choose to develop it, govern it and apply it.

And the best answers emerge when different ways of thinking come together to shape what comes next.

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. David Nickerson	d.nickerson@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Biomedical Science	AI-powered digital twins for computational physiology in health and disease
Assoc. Prof. Kenneth Tran	k.tran@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Development of digital twins to improve cardiac health using advanced AI and computational modelling
Dr Jagir Hussan	r.jagir@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Food Science; Computer Systems Engineering	Genomically-Informed Digital Twinning: Predicting impact of climate change on NZ Food crops and Farm animals
Dr James McKeage	james.mckeage@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Understanding microneedle-assisted jet injection
Dr Hayley Reynolds	Hayley.Reynolds@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	
Dr Julie Choisne	j.choisne@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	A new motion capture technique using body surface scanners and wearable sensors for paediatric 3D Gait Analysis.
Prof. Justin Fernandez	j.fernandez@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Biomedical Engineering	Computational biomechanics
Prof. Mark Billinghurst	mark.billinghurst@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Computer Science; Design	Using Augmented and Virtual Reality to enhance face to face and remote collaboration
Prof. Alys Clark	alys.clark@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Novel technologies to improve pregnancy health
Prof. Leo Cheng	l.cheng@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Mechatronics Engineering	
Prof. Alistair Young	a.young@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Medical Imaging	Enhancing Cardiac Imaging with AI
Prof. Craig Elliffe	c.elliffe@auckland.ac.nz	Auckland Law School	Law	
Prof. Alexandra Andhov	alexandra.andhov@auckland.ac.nz	Auckland Law School	Law and Artificial Intelligence; Corporate Governance; Capital Market Law	
Dr Kerry Lee	k.lee@auckland.ac.nz	Faculty of Arts and Education	Education; Innovation & Entrepreneurship; Design	
Assoc. Prof. Rick Henry	rs.henry@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Seismic design and sustainability of resilient low-damage precast concrete structures

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Nawawi Chouw	n.chouw@auckland.ac.nz	Faculty of Engineering and Design	Earthquake Engineering; Climate Change Adaptation; Structural Engineering	Future generation of low-damage seismic design Current seismic design philosophy tolerates a degree of damage at locations predefined by the designer, provided that complete structural collapse is precluded. Low-damage seismic design, in contrast, avoids damage to structural members by allowing the activation of rigid-like body movement. (2) Title: Eco-friendly composite structures The research focuses on developing zero-carbon composite materials made from natural materials. The composite structures are designed to withstand multiple extreme loads.
Assoc. Prof. Mike O'Sullivan	michael.osullivan@auckland.ac.nz	Faculty of Engineering and Design	Operations Research; Engineering Science	
Assoc. Prof. Avinash Malik	avinash.malik@auckland.ac.nz	Faculty of Engineering and Design	Computer Systems Engineering; Electrical and Electronics Engineering	
Assoc. Prof. Manfredo Manfredini	m.manfredini@auckland.ac.nz	Faculty of Engineering and Design	Architecture; Urban Design	
Assoc. Prof. Morteza Biglari-Abhari	m.abhari@auckland.ac.nz	Faculty of Engineering and Design	Computer Systems Engineering; Computer Science	Projects are related to: Security Enhanced Computer Architecture, Secure and Privacy-Preserved Artificial Intelligence, Embedded Computer Vision Systems
Assoc. Prof. Waleed Abdulla	w.abdulla@auckland.ac.nz	Faculty of Engineering and Design	Computer Systems Engineering	Developing Novel Architectures for AI Systems: Algorithms and Applications
Assoc. Prof. Yusuke Hioka	y.hioka@auckland.ac.nz	Faculty of Engineering and Design	Mechatronics	Speech intelligibility improvement for drone audio broadcasting using ego noise modelling
Assoc. Prof. Meng Wai Woo	wai.woo@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	
Assoc. Prof. Alice Chang-Richards	yan.chang@auckland.ac.nz	Faculty of Engineering and Design	Earthquake engineering, disaster resilience, AI/machine learning/deep learning	
Assoc. Prof. Andrew McDaid	andrew.mcdaid@auckland.ac.nz	Faculty of Engineering and Design	Mechatronics Engineering; Innovation and Entrepreneurship; Bioengineering	

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Kevin Wang	kevin.wang@auckland.ac.nz	Faculty of Engineering and Design	Internet of Things; Anomaly Detection (time series and computer vision); Human Activity Recognition	
Assoc. Prof. Lee Beattie	l.beattie@auckland.ac.nz	Faculty of Engineering and Design	Urban Design; Urban Planning	
Assoc. Prof. Sadiq J. Zarrouk	s.zarrouk@auckland.ac.nz	Faculty of Engineering and Design	Engineering Science; Mechanical Engineering; Chemical Engineering	Supercritical/Superhot Geothermal Reservoir Engineering and Drilling Technology - Geothermal Heat Pile and Energy Storage Technology - Geothermal Surface Engineering (Steam Field and Power Plant Design)
Dr Anthony Brand	anthony.brand@auckland.ac.nz	Faculty of Engineering and Design	Architecture	
Dr Ferdinand Oswald	ferdinand.oswald@auckland.ac.nz	Faculty of Engineering and Design	Architecture; Resilience and Sustainability	Approaches of conceptual and fundamental solutions to optimize natural ventilation in buildings
Dr Andrew Hall	a.hall@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Ventilated metamaterials and metasystems
Dr Wen Zhang	zhang.wen@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	
Dr Allan Fowler	allan.fowler@auckland.ac.nz	Faculty of Engineering and Design	Design	
Dr Minh Kieu	minh.kieu@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering; Engineering Science; Geography	Autonomous Vehicles, Intelligent Transport Systems and Resilience
Dr Nam Kyeun Kim	nam.kim@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Development of bio-based Flame Retardants for High-performance Sustainable Composite Panels
Dr Yuqian Lu	yuqian.lu@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering; Mechatronics Engineering	Robot skill learning for ultra-flexible product assembly; Embodied intelligence for robust factory automation
Dr Filicia Wicaksana	f.wicaksana@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	Various projects are available in the area of membrane separation technology for water/wastewater treatment, resource recovery, and food processing applications. Key areas of research include novel strategies to mitigate membrane fouling, ion-selective membranes, emerging membrane separation processes, and hybrid membrane systems.
Dr Junrui Zhang	junrui.zhang@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Harakeke Fibre-Reinforced Lime Mortar for Low-Carbon Heritage Strengthening

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Mohsen Mohammadzadeh	mohsen.mohammadzadeh@auckland.ac.nz	Faculty of Engineering and Design	Planning; Urban Design; Engineering	Governing Shared Autonomous and Electric Mobility; Urban AI and Digital Twins for Inclusive Planning and Climate-Resilient Solutions
Dr Jesin James	jesin.james@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering; Computer Systems Engineering; Software Engineering	Incorporating Linguistics knowledge into Speech Technology Development
Dr Timothy Welch	t.welch@auckland.ac.nz	Faculty of Engineering and Design	Planning	
Dr Hongyu Jin	hongyu.jin@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering; Operations Research; Property	
Dr Michael MacDonald	michael.macdonald@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Various projects available in high-fidelity computational fluid dynamics (CFD), turbulence, heat transfer and aerodynamics
Dr Anastasios Giouvanidis	a.giouvanidis@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	
Dr Maedeh Amirpour	m.amirpourmolla@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Composite Materials; 3D printing; Computational Modelling; Prosthetics; Bone scaffolds
Dr Ruanui (Ru) Nicholson	ruanui.nicholson@auckland.ac.nz	Faculty of Engineering and Design	Mathematics; Engineering Science; Medical Imaging	
Dr Dulsha Kukaratba-Abeywardana	d.abeywardana@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering	
Dr Elham Bahmanteymouri	e.bahmanteymouri@auckland.ac.nz	Faculty of Engineering and Design	Urban and Regional Planning	AI, Digital Technologies and Urban Transformation: Urban Planning, Economics, Housing, and Governance
Prof. Naresh Singhal	n.singhal@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Climate-Driven Shifts in Freshwater Quality: Assessing Organic Chemicals, Pathogens, and Microbial Community Dynamics
Prof. Simon Bickerton	s.bickerton@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering; Mechatronics Engineering	AI-Enabled Vision-Based Non-Destructive Sensing for Real-Time Quality Control in Composites Manufacturing
Prof. Roberto Armellin	roberto.armellin@auckland.ac.nz	Faculty of Engineering and Design	Aerospace Engineering	Spacecraft autonomous guidance / Space situational awareness
Prof. Peter Xu	p.xu@auckland.ac.nz	Faculty of Engineering and Design	Mechatronics Engineering; Mechanical Engineering	Robotics, Embodied AI, Physical AI, Mechatronics

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Prof. Peng Cao	p.cao@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	
Prof. Pierre Quenneville	p.quenneville@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Resilient structural systems
Prof. Jason Ingham	j.ingham@auckland.ac.nz	Faculty of Engineering and Design	Civil engineering	
Prof. Xun Xu	x.xu@auckland.ac.nz	Faculty of Engineering and Design	Industrie 4.0, Industry 5.0 - Cyber-Physical Production Systems (CPPS) and Digital Twins - Cloud manufacturing and AI	AI-empowered smart manufacturing
Prof. Kobus van Zyl	k.vanZyl@auckland.ac.nz	Faculty of Engineering and Design	Water and Sewer Pipe Systems	
Prof. Rolando Orense	r.orense@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	Studies in earthquake geotechnical engineering
Prof. Bruce MacDonald	b.macdonald@auckland.ac.nz	Faculty of Engineering and Design	Computer Systems Engineering; Software Engineering; Electrical and Electronics Engineering	Robotics, Social Companion Robot design
Prof. Simon Bickerton	s.bickerton@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Processing and Performance of Natural Fibre-Reinforced Thermoplastic Composites Under High Consolidation Pressures
Prof. Aiguo Patrick Hu	a.hu@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering; Bioengineering	Power converters and control for wireless power transfer /wireless charging systems
Prof. Udaya K Madawala	u.madawala@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering (Energy, Power Electronics, Wireless Power Transfer Technology)	
Prof. Charles Unsworth	c.unsworth@auckland.ac.nz	Faculty of Engineering and Design	Engineering Science; Biomedical Engineering	Neural Engineering
Prof. Nirmal Nair	n.nair@auckland.ac.nz	Faculty of Engineering and Design	Power Systems	
Prof. Ajit K Sarmah	a.sarmah@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering; Environmental Science; Chemical and Materials Engineering	

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Wei Yu	w.yu@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	
Assoc. Prof. Bruce Chiu-Wing Sham	b.sham@auckland.ac.nz	Faculty of Science	Algorithmic Optimisation; FPGA-Hardware Co-Design and Edge AI	Small Language Model (SLM) Implementation on Edge-devices (such as FPGAs).
Assoc. Prof. Cameron Weber	cameron.weber@auckland.ac.nz	Faculty of Science	Chemistry	Switchable solvents and materials for sustainable chemical processes
Assoc. Prof. Erin Leitao	erin.leitao@auckland.ac.nz	Faculty of Science	Chemistry	Safe-by-design alternatives to forever chemicals
Assoc. Prof. Nicholas Rattenbury	n.rattenbury@auckland.ac.nz	Faculty of Science	Physics; Engineering Science; Mechanical Engineering	
Assoc. Prof. Pablo Saenz-Agudelo	pablo.saenz-agudelo@auckland.ac.nz	Faculty of Science	Marine Science	Development of high-throughput, mechanistic bioassays for priority marine pest control.
Assoc. Prof. Fan Zhu	f.zhu@auckland.ac.nz	Faculty of Science	Food Science; Food Technology	
Assoc. Prof. Dan Furkert	d.furkert@auckland.ac.nz	Faculty of Science	Chemistry; Pharmacology	(1) New reaction discovery for efficient synthesis of drug scaffolds and natural products. (2) Allosteric modulators of the CB1 cannabinoid receptor for chronic pain therapeutics.
Assoc. Prof. Burkhard Claus Wuensche	burkhard@cs.auckland.ac.nz	Faculty of Science	Computer Science; Design; Education	Applied Visual Computing - Using Games, AR/VR, and Visualizations for improving Education, Training, Healthcare and Communication and Understanding of Complex Data
Assoc. Prof. Ludmila Adam	l.adam@auckland.ac.nz	Faculty of Science	Geophysics; Earth Science; Geology	Planetary Experimental Geophysics
Assoc. Prof. Jianyong Jin	j.jin@auckland.ac.nz	Faculty of Science	Chemistry	Polymer Chemistry
Assoc. Prof. Simone Linz	s.linz@auckland.ac.nz	Faculty of Science	Mathematics; Computer Science	Combinatorics for phylogenetic networks
Dr Jennifer Eccles	j.eccles@auckland.ac.nz	Faculty of Science	Geology	Geophysical investigations of Natural Hazard forming processes

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Qian Liu	liu.qian@auckland.ac.nz	Faculty of Science	Computer Science	Reliable Agent based on Large Language Modelling for Long-horizon Tasks
Dr Elke Pahl	Elke.Pahl@auckland.ac.nz	Faculty of Science	Physics; Condensed Matter Physics; Computational Material Science	
Dr John Bray	john.bray@auckland.ac.nz	Faculty of Science	Physics	
Dr Karine DAVID	k.david@auckland.ac.nz	Faculty of Science	Biological Sciences	
Dr Francesco Merola	francesco.merola@auckland.ac.nz	Faculty of Science	Physics	Smart Hives: AI and laser technology for pest control
Dr Marc Vinyals	marc.vinyals@auckland.ac.nz	Faculty of Science	Computer Science; Mathematics	Computational complexity of circuits, communication, and proofs
Dr Miao Qiao	miao.qiao@auckland.ac.nz	Faculty of Science	Computer Science	
Dr Aniket Mahanti	a.mahanti@auckland.ac.nz	Faculty of Science	Computer Science	
Dr Yun Suen Pai	yun.suen.pai@auckland.ac.nz	Faculty of Science	Computer Science	
Dr Wei Fan	wei.fan@auckland.ac.nz	Faculty of Science	Computer Science; Computer Systems Engineering	
Dr Mohammed Abdelbassit	mohammed.abdelbassit@auckland.ac.nz	Faculty of Science	Chemistry; Physics	Designing Hybrid Organic–Inorganic Perovskites for Solar Energy and Optoelectronic Applications
Dr Elliott Wen	elliott.wen@auckland.ac.nz	Faculty of Science	Software Engineering; Computer Science; Computer Systems Engineering	
Dr Augusto Simoes-Barbosa	a.barbosa@auckland.ac.nz	Faculty of Science	Biological Sciences; Biomedical Sciences	Molecular and genomic mechanisms of host-microbiome-parasite interactions
Dr Christopher Larsen	christopher.larsen@auckland.ac.nz	Faculty of Science	Chemistry	Photochemical approaches to catalysis, energy conversion and next generation medicine
Prof. Yun Sing Koh	y.koh@auckland.ac.nz	Faculty of Science	Computer Science	Artificial Intelligence including continual learning, open world modelling and multimodality.
Prof. Tom ter Elst	terelst@math.auckland.ac.nz	Faculty of Science	Mathematics	
Prof. Neil Broderick	n.broderick@auckland.ac.nz	Faculty of Science	Physics	New Laser sources for quantum technologies

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Prof. Steven Galbraith	s.galbraith@auckland.ac.nz	Faculty of Science	Mathematics	Post-quantum cryptography
Prof. Graham Donovan	g.donovan@auckland.ac.nz	Faculty of Science	Mathematics	
Prof. Jadranka Travas-Sejdic	j.travas-sejdic@auckland.ac.nz	Faculty of Science	Chemistry	Novel biosensors for early detection of lang cancer
Prof. Frederique Vanholsbeeck	f.vanholsbeeck@auckland.ac.nz	Faculty of Science	Physics	Using optical coherence tomography and multimodal imaging to detect and understand non-communicable diseases.
Prof. Christian Hartinger	c.hartinger@auckland.ac.nz	Faculty of Science	Chemistry	Research projects in Medicinal (anticancer drug development), Supramolecular (cage compounds for drug delivery), Biological Inorganic and Bioanalytical Chemistry (Protein-binding metal complexes) are available
Dr Claude Aguergaray	c.aguergaray@auckland.ac.nz	Faculty of Science	Physics; Biological Sciences; Medical Imaging	

Pūngao Toitū

The Energy Movement

Accelerating the transition to cleaner, more resilient and accessible energy systems for everyone.

The shift to cleaner energy is one of the defining challenges of our time. But building a more sustainable energy future isn't simply a technology problem.

It requires engineers and economists. Researchers and regulators. Industry, communities and government working together to redesign how energy is generated, shared and used.

As countries navigate climate change, geopolitical uncertainty and growing demand, the need for energy that is reliable, resilient, affordable and low carbon has never been greater. Aotearoa New Zealand offers a powerful place to lead this work.

With globally significant geothermal resources, abundant hydro, wind and solar energy, and one of the world's most renewable electricity systems, New Zealand has many of the building blocks of a sustainable energy future already in place. Yet challenges remain. Energy security. System resilience. Infrastructure investment. Affordability and equitable access.

As a small, connected system undergoing rapid change, New Zealand provides a powerful real-world test bed for understanding not just how energy is produced, but how it is regulated, distributed, accessed and experienced by the people who depend on it every day.

The Energy Movement brings together expertise from across the University with industry, policymakers, communities and global partners to tackle these challenges as one connected system.

From advancing geothermal energy, power systems and energy technologies through world-leading expertise, to shaping the legal frameworks, market design and policy settings that enable change, The Energy Movement connects innovation with implementation.

Energy systems that are more resilient, more accessible and better able to support households, communities and industries through the transition ahead. Energy that works for all.

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Timothy Welch	t.welch@auckland.ac.nz	Faculty of Engineering and Design	Planning	
Prof. Aiguo Patrick Hu	a.hu@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering; Bioengineering	Power converters and control for wireless power transfer / wireless charging systems
Prof. Udaya K Madawala	u.madawala@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering (Energy, Power Electronics, Wireless Power Transfer Technology)	
Dr Michael MacDonald	19ucklan.macdonald@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Various projects available in high-fidelity computational fluid dynamics (CFD), turbulence, heat transfer and aerodynamics
Dr Anastasios Giouvanidis	a.giouvanidis@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	
Dr Wendy Liu	wen.liu@auckland.ac.nz	Faculty of Engineering and Design	Planning; Geography; Population Health	The relationship between city life, the built environment, social conditions, and health outcomes, particularly through factors such as air quality, food environment, and nature contact. How urban policy and city environments influence people's physical, mental, and social health, and how urban environments can be designed to improve health and well-being.
Assoc. Prof. Lee Beattie	l.beattie@auckland.ac.nz	Faculty of Engineering and Design	Urban Design; Urban Planning	
Dr Ruanui (Ru) Nicholson	ruanui.nicholson@auckland.ac.nz	Faculty of Engineering and Design	Mathematics; Engineering Science; Medical Imaging	
Dr Seho Kim	seho.kim@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering	Advancing power electronics with novel magnetic designs
Prof. Abhisek Ukil	a.ukil@auckland.ac.nz	Faculty of Engineering and Design	Renewable Energy Power Systems; Electronics DC Grid and EV integration	
Dr Eylem Kaya	e.kaya@auckland.ac.nz	Faculty of Engineering and Design	Engineering Science; Geology; Environmental Science	

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Shanghai Wei	s.wei@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	
Assoc. Prof. Stuart Norris	s.norris@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Understanding turbulent vertical natural convection in a stratified channel from DNS data
Dr Amar Auckaili	a.auckaili@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering; Engineering Science	
Dr Jingjing Liu	jingjing.liu@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering; Electrical and Electronics Engineering	High-Temperature Proton Exchange Membrane Fuel Cells
Prof. Nirmal Nair	n.nair@auckland.ac.nz	Faculty of Engineering and Design	Power Systems	
Dr Wei Yu	w.yu@auckland.ac.nz	Faculty of Engineering and Design	Chemical and Materials Engineering	
Assoc. Prof. Sadiq J. Zarrouk	s.zarrouk@auckland.ac.nz	Faculty of Engineering and Design	Engineering Science; Mechanical Engineering; Chemical Engineering	Supercritical/Superhot Geothermal Reservoir Engineering and Drilling Technology – Geothermal Heat Pile and Energy Storage Technology - Geothermal Surface Engineering (Steam Field and Power Plant Design)
Prof. Ajit K Sarmah	a.sarmah@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering; Environmental Science; Chemical and Materials Engineering	
Dr Dulsha Kukaratba-Abeywardana	d.abeywardana@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering	
Prof. Shane Cronin	s.cronin@auckland.ac.nz	Faculty of Science	Geology; Earth Sciences; Environmental Sciences	
Dr Jennifer Eccles	j.eccles@auckland.ac.nz	Faculty of Science	Geology	Geophysical investigations of Natural Hazard forming processes
Dr Wei Fan	wei.fan@auckland.ac.nz	Faculty of Science	Computer Science; Computer Systems Engineering	
Dr Mohammed Abdelbassit	mohammed.abdelbassit@auckland.ac.nz	Faculty of Science	Chemistry; Physics	Designing Hybrid Organic–Inorganic Perovskites for Solar Energy and Optoelectronic Applications

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Ludmila Adam	l.adam@auckland.ac.nz	Faculty of Science	Geophysics; Earth Science; Geology	Planetary Experimental Geophysics
Dr Christopher Larsen	christopher.larsen@auckland.ac.nz	Faculty of Science	Chemistry	Photochemical approaches to catalysis, energy conversion and next generation medicine
Prof. Tilo Söhnel	t.soehnel@auckland.ac.nz	Faculty of Science	Chemistry	

Hangarau Hāpai Hauora

Future Health



Using Aotearoa New Zealand as a living lab to turn cutting-edge health research into solutions that work for all.

We're focused on one of the biggest challenges in healthcare: turning promising innovations into better health outcomes.

Health technologies* have the potential to transform how we prevent, diagnose and treat disease. But technology alone does not improve health outcomes. For innovation to make a lasting difference, it must be trusted, adopted and designed to meet the needs of patients, whānau, clinicians and communities.

Aotearoa New Zealand offers a powerful place to lead this work. Its public health system, integrated data infrastructure and diverse communities create opportunities to develop, test and evaluate new technologies in real-world settings.

As a connected system, it provides insights that are both locally relevant and globally valuable.

Future Health brings together clinicians and engineers, researchers and health providers, data scientists, innovators, policymakers and communities to rapidly move new ideas from discovery to impact. Our capabilities span the full breadth of modern healthcare innovation.

Our strengths in health, engineering, data science and clinical research are connected with expertise in social sciences, law, ethics and policy. This helps ensure that trust, equity, regulation and responsible use are considered from the outset.

Strong partnerships with iwi, Pacific communities, clinicians, industry and government help ensure innovation is culturally grounded, responsive to community aspirations and positioned for equitable uptake.

Improving health outcomes in New Zealand and beyond.

*These technologies span medicines, medical devices, assistive technologies and clinical techniques and procedures, reflecting the full breadth of modern healthcare innovation.

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr James McKeage	james.mckeage@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Understanding microneedle-assisted jet injection
Assoc. Prof. David Nickerson	d.nickerson@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Biomedical Science	AI-powered digital twins for computational physiology in health and disease
Prof. Justin	j.fernandez@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Biomedical Engineering	Computational biomechanics
Dr Hayley Reynolds	Hayley.Reynolds@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	
Prof. Mark Billinghurst	mark.billinghurst@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Computer Science; Design	Using Augmented and Virtual Reality to enhance face to face and remote collaboration
Prof. Merryn Tawhai	m.tawhai@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Cardiopulmonary digital twins
Dr June-Chiew Han	j.han@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Hormone and the Heart
Dr Toan Pham	toan.pham@auckland.ac.nz	Auckland Bioengineering Institute	Biomedical Science; Bioengineering; Physiology	
Prof. Alys Clark	alys.clark@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Novel technologies to improve pregnancy health
Assoc. Prof. Kenneth Tran	k.tran@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	Development of digital twins to improve cardiac health using advanced AI and computational modelling
Prof. Leo Cheng	l.cheng@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Mechatronics Engineering	
Dr Julie Choisne	j.choisne@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering	A new motion capture technique using body surface scanners and wearable sensors for paediatric 3D Gait Analysis.
Prof. Alistair Young	a.young@auckland.ac.nz	Auckland Bioengineering Institute	Bioengineering; Medical Imaging	Enhancing Cardiac Imaging with AI
Assoc. Prof. Carrie Leonetti	carrie.leonetti@auckland.ac.nz	Auckland Law School	Law; Public Policy; Gender Studies	
Dr Matt Rankine	m.rankine@auckland.ac.nz	Faculty of Arts and Education	Philosophy	
Assoc. Prof. Mike O'Sullivan	michael.osullivan@auckland.ac.nz	Faculty of Engineering and Design	Operations Research; Engineering Science	
Assoc. Prof. Andrew McDaid	andrew.mcdaid@auckland.ac.nz	Faculty of Engineering and Design	Mechatronics Engineering, Innovation and Entrepreneurship; Bioengineering	

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Kevin Wang	kevin.wang@auckland.ac.nz	Faculty of Engineering and Design	Internet of Things; Anomaly Detection (time series and computer vision); Human Activity Recognition	
Prof. Bruce MacDonald	b.macdonald@auckland.ac.nz	Faculty of Engineering and Design	Computer Systems Engineering; Software Engineering; Electrical and Electronics Engineering	Robotics, Social Companion Robot design
Prof. Charles Unsworth	c.unsworth@auckland.ac.nz	Faculty of Engineering and Design	Engineering Science; Biomedical Engineering	Neural Engineering
Dr Juhri Selamet	juhri.selamet@auckland.ac.nz	Faculty of Engineering and Design	Design; Communication; Asian Languages and Cultures	
Dr Wendy Liu	wen.liu@auckland.ac.nz	Faculty of Engineering and Design	Planning; Geography; Population Health	The relationship between city life, the built environment, social conditions, and health outcomes, particularly through factors such as air quality, food environment, and nature contact. How urban policy and city environments influence people's physical, mental, and social health, and how urban environments can be designed to improve health and well-being.
Dr Maedeh Amirpour	m.amirpourmolla@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Composite Materials; 3D printing; Computational Modelling; Prosthetics; Bone scaffolds
Assoc. Prof. Lee Beattie	l.beattie@auckland.ac.nz	Faculty of Engineering and Design	Urban Design; Urban Planning	
Dr Ruanui (Ru) Nicholson	ruanui.nicholson@auckland.ac.nz	Faculty of Engineering and Design	Mathematics; Engineering Science; Medical Imaging	
Dr Dulsha Kukaratba-Abeywardana	d.abeywardana@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering	
Dr Nicholas Matzke	n.matzke@auckland.ac.nz	Faculty of Science	Biological Sciences	Phylogenetics/evolution - especially using new models in: biogeography; protein structure; traits; fossils
Assoc. Prof. Fan Zhu	f.zhu@auckland.ac.nz	Faculty of Science	Food Science; Food Technology	
Prof. Jadranka Travas-Sejdic	j.travas-sejdic@auckland.ac.nz	Faculty of Science	Chemistry	Novel biosensors for early detection of lang cancer

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Dan Furkert	d.furkert@auckland.ac.nz	Faculty of Science	Chemistry; Computer Science	(1) New reaction discovery for efficient synthesis of drug scaffolds and natural products. (2) Allosteric modulators of the CB1 cannabinoid receptor for chronic pain therapeutics.
Prof. Graham Donovan	g.donovan@auckland.ac.nz	Faculty of Science	Mathematics	
Assoc. Prof. Burkhard Claus Wuensche	burkhard@cs.auckland.ac.nz	Faculty of Science	Computer Science; Design; Education	Applied Visual Computing - Using Games, AR/VR, and Visualizations for improving Education, Training, Healthcare and Communication and Understanding of Complex Data
Dr Yun Suen Pai	yun.suen.pai@auckland.ac.nz	Faculty of Science	Computer Science	
Prof. Frederique Vanholsbeeck	f.vanholsbeeck@auckland.ac.nz	Faculty of Science	Physics	Using optical coherence tomography and multimodal imaging to detect and understand non-communicable diseases.
Dr Wei Fan	wei.fan@auckland.ac.nz	Faculty of Science	Computer Science; Computer Systems Engineering	
Dr Alan Cameron	alan.cameron@auckland.ac.nz	Faculty of Science	Chemistry; Biomedical Science; Molecular Medicine	
Dr Sam Trowsdale	s.trowsdale@auckland.ac.nz	Faculty of Science	Environmental Science; Environmental Engineering; Geography	Sponge City; Wastewater-based epidemiology
Dr Hilary Sheppard	h.sheppard@auckland.ac.nz	Faculty of Science	Biomedical Sciences; Biological Sciences	Gene editing in primary human cells for biomedical applications
Dr Elliott Wen	elliott.wen@auckland.ac.nz	Faculty of Science	Software Engineering; Computer Science; Computer Systems Engineering	
Dr Augusto Simoes-Barbosa	a.barbosa@auckland.ac.nz	Faculty of Science	Biological Sciences; Biomedical Sciences	Molecular and genomic mechanisms of host-microbiome-parasite interactions
Assoc. Prof. Jianyong Jin	j.jin@auckland.ac.nz	Faculty of Science	Chemistry	Polymer Chemistry
Dr Christopher Larsen	christopher.larsen@auckland.ac.nz	Faculty of Science	Chemistry	Photochemical approaches to catalysis, energy conversion and next generation medicine

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Prof. Christian Hartinger	c.hartinger@auckland.ac.nz	Faculty of Science	Chemistry	Research projects in Medicinal (anticancer drug development), Supramolecular (cage compounds for drug delivery), Biological Inorganic and Bioanalytical Chemistry (Protein-binding metal complexes) are available
Assoc. Prof. Simone Linz	s.linz@auckland.ac.nz	Faculty of Science	Mathematics; Computer Science	Combinatorics for phylogenetic networks
Dr Claude Aguergaray	c.aguergaray@auckland.ac.nz	Faculty of Science	Physics; Biological Sciences; Medical Imaging	

Mōhiotanga Tōōpū

Advancing Trust in Knowledge

Strengthening the knowledge and trust that help societies understand, decide and act together.



A flourishing society depends on more than information. It depends on trust.

Trust in our institutions. Trust in each other. Trust in the knowledge that helps us make decisions, navigate uncertainty and respond to change.

But in a world of growing complexity, misinformation and competing voices, trust can't be taken for granted.

We explore how knowledge becomes something people can believe in, act on and use for the public good.

Because knowledge is strongest when it's not created in isolation. It becomes trusted when researchers, communities, policymakers, educators, media and citizens work together.

When different perspectives are heard, evidence is valued, and people can see themselves reflected in the conversations that shape their future. This is where the University is uniquely placed to lead.

New Zealand offers something few places can. Grounded in Te Tiriti o Waitangi and shaped by diverse communities, institutions and perspectives, its scale, diversity and connectedness make it possible to study how ideas move through society – how trust is built, challenged and restored over time.

Drawing on expertise from the humanities, social sciences, education, creative disciplines, health, science and technology, Advancing Trust in Knowledge brings together researchers, communities, government and other partners to explore fundamental questions like:

Where does trusted knowledge come from? How does it spread? And how does it shape the decisions that affect our lives?

The challenges facing society today won't be solved by information alone. They require trust, understanding and collective action.

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Toan Pham	toan.pham@auckland.ac.nz	Auckland Bioengineering Institute	Biomedical Science; Bioengineering; Physiology	
Prof. Warren Swain	w.swain@auckland.ac.nz	Auckland Law School	Contract; Torts; Equity and Private Law; Legal History and Theory	
Dr Peter Underwood (Pete)	peter.underwood@auckland.ac.nz	Auckland Law School	Law; Commercial Law	
Prof. Craig Elliffe	c.elliffe@auckland.ac.nz	Auckland Law School	Law	
Prof. Alexandra Andhov	alexandra.andhov@auckland.ac.nz	Auckland Law School	Law and Artificial Intelligence; Corporate Governance; Capital Market Law	
Assoc. Prof. Carrie Leonetti	carrie.leonetti@auckland.ac.nz	Auckland Law School	Law Public Policy Gender Studies	
Assoc. Prof. Mi Yung Park	my.park@auckland.ac.nz	Faculty of Arts and Education	Language, migration, and identity; Heritage language maintenance and shift; Teaching Korean as a second / foreign / heritage language	
Assoc. Prof. Emily Parke	e.parke@auckland.ac.nz	Faculty of Arts and Education	Philosophy	
Dr Karen Huang	k.huang@auckland.ac.nz	Faculty of Arts and Education	Linguistics; Asian Languages and Cultures	
Dr Anthony Brand	anthony.brand@auckland.ac.nz	Faculty of Engineering and Design	Architecture	
Dr Farzaneh Haghighi	f.haghighi@auckland.ac.nz	Faculty of Engineering and Design	Architecture	
Dr Mohsen Mohammadzadeh	mohsen.mohammadzadeh @auckland.ac.nz	Faculty of Engineering and Design	Planning; Urban Design; Engineering	Governing Shared Autonomous and Electric Mobility; Urban AI and Digital Twins for Inclusive Planning and Climate-Resilient Solutions
Dr Elham Bahmanteymouri	e.bahmanteymouri@auckland.ac.nz	Faculty of Engineering and Design	Urban and Regional Planning	AI, Digital Technologies and Urban Transformation: Urban Planning, Economics, Housing, and Governance
Dr Timothy Welch	t.welch@auckland.ac.nz	Faculty of Engineering and Design	Planning	

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Nawawi Chouw	n.chouw@auckland.ac.nz	Faculty of Engineering and Design	Earthquake engineering, Climate change adaptation, Structural engineering	Future generation of low-damage seismic design Current seismic design philosophy tolerates a degree of damage at locations predefined by the designer, provided that complete structural collapse is precluded. Low-damage seismic design, in contrast, avoids damage to structural members by allowing the activation of rigid-like body movement. (2) Title: Eco-friendly composite structures The research focuses on developing zero-carbon composite materials made from natural materials. The composite structures are designed to withstand multiple extreme loads.
Prof. Xun Xu	x.xu@auckland.ac.nz	Faculty of Engineering and Design	Industrie 4.0, Industry 5.0 - Cyber-Physical Production Systems (CPPS) and Digital Twins - Cloud manufacturing and AI	AI-empowered smart manufacturing
Dr Jesin James	jesin.james@auckland.ac.nz	Faculty of Engineering and Design	Electrical and Electronics Engineering, Computer Systems Engineering, Software Engineering	Incorporating Linguistics knowledge into Speech Technology Development
Assoc. Prof. Kevin Wang	kevin.wang@auckland.ac.nz	Faculty of Engineering and Design	Internet of Things; Anomaly Detection (time series and computer vision); Human Activity Recognition	
Prof. Bruce MacDonald	b.macdonald@auckland.ac.nz	Faculty of Engineering and Design	Computer Systems Engineering; Software Engineering; Electrical and Electronics Engineering	Robotics, Social Companion Robot design
Prof. Charles Unsworth	c.unsworth@auckland.ac.nz	Faculty of Engineering and Design	Engineering Science; Biomedical Engineering	Neural Engineering
Prof. Yun Sing Koh	y.koh@auckland.ac.nz	Faculty of Science	Computer Science	Artificial Intelligence including continual learning, open world modelling and multimodality.
Prof. Tom ter Elst	terelst@math.auckland.ac.nz	Faculty of Science	Mathematics	
Dr Nicholas Matzke	n.matzke@auckland.ac.nz	Faculty of Science	Biological Sciences	Phylogenetics/evolution - especially using new models in: biogeography; protein structure; traits; fossils

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Dr Marc Vinyals	marc.vinyals@auckland.ac.nz	Faculty of Science	Computer Science; Mathematics	Computational complexity of circuits, communication, and proofs
Dr Miao Qiao	miao.qiao@auckland.ac.nz	Faculty of Science	Computer Science	
DR Aniket Mahanti	a.mahanti@auckland.ac.nz	Faculty of Science	Computer Science	
Assoc. Prof. Burkhard Claus Wuensche	burkhard@cs.auckland.ac.nz	Faculty of Science	Computer Science; Design; Education	Applied Visual Computing - Using Games, AR/VR, and Visualizations for improving Education, Training, Healthcare and Communication and Understanding of Complex Data
Dr Yun Suen Pai	yun.suen.pai@auckland.ac.nz	Faculty of Science	Computer Science	
Prof. Frederique Vanholsbeeck	f.vanholsbeeck@auckland.ac.nz	Faculty of Science	Physics	Using optical coherence tomography and multimodal imaging to detect and understand non-communicable diseases.



Additional opportunities

The University's research capability extends into many areas of expertise. Across its faculties, schools, institutes and transdisciplinary centres, researchers combine deep disciplinary knowledge with advanced facilities, strong community relationships and partnerships with government and industry. This breadth enables doctoral candidates to pursue specialist questions while connecting their work to wider challenges in Aotearoa New Zealand, the Asia-Pacific and globally. Some of the specialities at UoA:

- Brain, neurological and ageing research
- Cancer biology, drug discovery, infectious disease and antimicrobial resistance
- Early-life development, nutrition, food science and metabolic health
- Materials science, nanotechnology, quantum optics and photonics
- Mathematics, statistics, complex systems and computational modelling
- Earth sciences, volcanology, natural hazards and disaster resilience
- Psychology, language, speech science and human behaviour
- Law, economics, business, public policy and international trade
- Architecture, urban planning, housing, transport and inclusive cities
- Humanities, languages, history, education, creative practice and social transformation

Academic	Email	Faculty / Research Institute	Subject Area	Project Title
Assoc. Prof. Gabriel Verret	g.verret@auckland.ac.nz	Auckland Bioengineering Institute	Mathematics	Vertex-transitive graphs with large automorphism groups
Dr Farzaneh Haghighi	f.haghighi@auckland.ac.nz	Faculty of Engineering and Design	Architecture	
Prof. Simon Bickerton	s.bickerton@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Processing and Performance of Natural Fibre-Reinforced Thermoplastic Composites Under High Consolidation Pressures
Dr Anastasios Giouvanidis	a.giouvanidis@auckland.ac.nz	Faculty of Engineering and Design	Civil Engineering	
Dr Emilio Garcia	e.garcia@auckland.ac.nz	Faculty of Engineering and Design	Architecture; Urbanism	Fairer Neighbourhoods
Dr Andrew Hall	a.hall@auckland.ac.nz	Faculty of Engineering and Design	Mechanical Engineering	Physical Characterisation and Perception of Internal Resistance in Wind Instruments
Dr Aniket Mahanti	a.mahanti@auckland.ac.nz	Faculty of Science	Computer Science	
Prof. Mike Taylor	mw.taylor@auckland.ac.nz	Faculty of Science	Biological Sciences	Microbiomes of threatened animal species
Assoc. Prof. Simone Linz	s.linz@auckland.ac.nz	Faculty of Science	Mathematics; Computer Science	Combinatorics for phylogenetic networks
Dr Claude Aguergaray	c.aguergaray@auckland.ac.nz	Faculty of Science	Physics; Biological Sciences; Medical Imaging	