



THE UNIVERSITY OF
MELBOURNE

Melbourne School
of Engineering



THE MELBOURNE CONNECT
CHAIR OF DIGITAL
INNOVATION FOR SOCIETY

MESSAGE FROM MARK CASSIDY, DEAN, MELBOURNE SCHOOL OF ENGINEERING



For over 150 years, our School has been the leading provider of engineering and IT education and research in Australia. We are built around three key pillars: world-class research, exceptional teaching and learning and a focus on wider engagement both with industry and the community. Our global reputation ensures we attract top academic staff and students who share our commitment to knowledge for the betterment of society.

In 2015 we commenced MSE 2025, our bold 10-year vision to transform engineering and IT at the University of Melbourne. Worldclass thought leadership, the continued high quality of our graduates and the impact of our research to help address global problems are key areas which MSE 2025 will focus on. This vision will be realised through significant investment in new infrastructure, strengthening industry engagement and growing the size and diversity of our staff and student base to drive innovation and develop the transformative technologies of the future. MSE 2025 will see unprecedented opportunity for collaboration and knowledge bringing together some of the world's brightest IT and engineering minds.

Our School will open two major new sites within the next ten years. In late 2020 our innovation precinct, Melbourne Connect, will open its doors. The precinct is next to the University's main Parkville campus and will become Australia's leading innovation hub for data science and information technologies, hosting researchers, businesses, government bodies and community members.

Our new campus at Fishermans Bend will facilitate collaboration with leading local and international organisations across the transport, energy, manufacturing, water, food, mining, defence and infrastructure sectors.

Diversity and inclusion in engineering and IT is central to us achieving this vision. We are committed to creating an environment that values, supports and respects the unique views, knowledge and individual experience of our staff and students. Our best work is done in collaboration, immersed in a supportive environment and a culture where new ideas and diverse perspectives thrive. We commit to ensuring our staff are clear about expectations, feel supported and encouraged to contribute their ideas and know where to turn if they require support.

We are implementing innovative strategies to engage effectively with industry, government, alumni and our communities to increase the impact and relevance of our teaching and research.

There has never been a more exciting time to join the School. Help us achieve our bold vision.

"We are committed to creating an environment that values, supports and respects the unique views, knowledge and individual experience of our staff and students."

MESSAGE FROM UWE AICKELIN - HEAD OF SCHOOL OF COMPUTING AND INFORMATION SYSTEMS



The School of Computing and Information Systems (CIS) is an international research leader in artificial intelligence, computer science, information systems and interaction design, ranking number one in Australia and 32nd in the world in these areas in the 2020 QS World University Rankings. Our work is dedicated to delivering impact – developing innovative solutions to derive value from data, leveraging tools, techniques and architecture to develop and operate connected systems and creating applications that directly improve our business and personal lives. The significant growth of the School is central to a bold 10-year strategy to transform the future of engineering and IT at the University and is a major initiative within the University's Growing Esteem strategy.

The School is at the forefront of computing research in Australia and internationally with close links to major computing research initiatives, including Melbourne Bioinformatics, IBM Research and DATA61 (formerly NICTA). Expertise in the areas of health informatics/digital health, information systems, software engineering, cybersecurity or high-performance and distributed systems are of particular interest, but applicants whose work is aligned with any of the research groups in the School are encouraged to apply. Academics are encouraged to collaborate in research within the School, the University, industry and government bodies.

We currently offer a large range of courses, including the Master of Science in Bioinformatics, Master of Science in Computer Science, Master of Information Systems, Master of Information Technology, Master of Data Science and Master of Engineering programs in Mechatronics, Software and Spatial Engineering. At the undergraduate level we

teach five information technology majors within the Bachelor of Science and the Bachelor of Design. You will join an internationally recognised group of academics and make a significant contribution to the teaching, research and administration of the School of Computing and Information Systems.

The School is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position. We strongly encourage applications from talented female candidates. You can find a little more about Melbourne School of Engineering's diversity and inclusion endeavours in the subsequent pages.

It's an incredibly exciting time to be joining MSE and CIS!

**Learn about Melbourne
Connect, the innovation
precinct set to become CIS'
new home in 2020, at:
[youtube.com/
watch?v=g6EJRbhl0U4](https://youtube.com/watch?v=g6EJRbhl0U4).**

MELBOURNE CONNECT

In late 2020 CIS will move to a new home, Melbourne Connect, which will be one of the foremost innovation precincts in the world. Through the co-location of talented researchers, scientists, academics and students with private enterprise and government partners, Melbourne Connect seeks to unlock the value and global reach of the University's research and people. The pivotal work to be undertaken in Melbourne Connect will address major societal challenges by identifying solutions that are data driven, digitally enabled and socially responsible.

This innovation precinct is where a large proportion of MSE will be relocated, together with a number of industry partners. The Precinct will also be home to Creator Space, Science Gallery Melbourne, new retail tenancies, childcare, student accommodation for post-graduates and visiting academics and new public open spaces.

Melbourne Connect is a major initiative that aligns with the University's strategic intent of greater enterprise engagement for enhanced research translation and impact.

Current activity is focused on a number of parallel and inter-dependent workstreams: infrastructure planning and development work; ongoing engagement with government and industry partners to build research and innovation artnerships and secure tenancies; and delivery of an 'activation' program of curated events, activities and exhibitions to enhance interactions between the University academic staff, Melbourne Connect precinct tenants, and the wider community.



OUR PURPOSE, VISION AND MSE2025

PURPOSE

Our purpose is to benefit society through the creation and application of knowledge in engineering, digital and data with our students and the global community we serve.

MODERN ENGINEERING, GLOBAL IMPACT

Our vision and strategy

A bigger, better and bolder MSE – preparing outstanding graduates and achieving global impact through our teaching and research, together with our partners.

Our vision implies:

- » We are Australia's number one engineering and IT school and will strive to be considered among the greatest in the world.
- » We will be the cornerstone of a multi-precinct, thriving Melbourne-based engineering and IT community characterised as scholarly, entrepreneurial and driven by discovery and innovation.
- » We will be a school of choice for students and employers locally and internationally, attracting diverse and exceptional global talent and developing outstanding graduates who are prepared to shape society and progress as industry leaders.
- » We will be recognised globally for our leadership in innovative solutions that resolve some of society's biggest challenges, and a trusted voice that can influence policy and corporate vision.

Achieving our vision will require an uncompromising pursuit of excellence in our teaching and research, underpinned by deep and genuine collaboration with our partners and community.



UNIVERSITY OF MELBOURNE
WILL STRENGTHEN ITS
POSITION AS AUSTRALIA'S
NUMBER ONE UNIVERSITY



ONE OF THE TOP 20
ENGINEERING AND IT SCHOOL
IN THE WORLD



TOP 2 IN G08 FOR
STUDENT EXPERIENCE



INCREASED STUDENT DIVERSITY,
ENHANCING OUR LEADERSHIP
AROUND FEMALE PARTICIPATION
IN OUR PROGRAMS



WE WILL TEACH OVER
7,000 STUDENTS



EVERY STUDENT HAS
MULTIPLE OPPORTUNITIES
FOR EXPERIENTIAL AND
WORK-INTEGRATED LEARNING



OVER 500 FTE ACADEMIC STAFF

OUR RESEARCH

The School of Computing and Information Systems is an international research leader in computer science, information systems and software engineering. We are focused on delivering impact in the following key areas.

We continue to attract top academic staff and students with a global reputation and have a commitment to knowledge for the betterment of society.

Our iconic research outcomes include the bionic eye and next-generation internet technologies.

The school of Computing and Information Systems is home to four (4) core research groups:

- » Artificial Intelligence
- » Computer Science
- » Information Systems
- » Human - Computer Interaction Design

Five(5) leading Research Centres:

- » Academic Centre of Cyber Security Excellence (ACCSE)
- » ARC Training Centre in Cognitive Computing for Medical Technologies
- » Centre for Artificial Intelligence and Digital Ethics (CAIDE)
- » Melbourne Centre for Data Science (MCDS)
- » Centre for Digital Transformation of Health



OUR STUDENTS AND PROGRAMS

Our research priorities guide our curriculum to ensure our graduates are positioned to contribute to high-impact fields, transforming the communities we live in and the lives we lead. Our focus on teaching excellence includes the development and expansion of teaching and research laboratories. Increased industry engagement will enhance work-based learning experiences and international opportunities, ensuring our students are well prepared for the global workforce.

The establishment of a Teaching and Learning Lab in 2021 will ensure our continued leadership in teaching methods; offering all staff support and thought leadership in the new evolving ways to engage and educate students.



POSITION DESCRIPTION AND SELECTION CRITERIA

The Melbourne Connect Chair of Digital Innovation for Society will be tasked with further enhancing the national and global visibility of the School's research, and developing large-scale initiatives with industry, government, and defence. The appointee is expected to provide leadership in teaching, research, strategic planning, project development and planning, project management, and supervise staff and students across the Melbourne Connect project.

Position Description

This Melbourne Connect Chair has been created to provide academic leadership around our 'Digital Innovation for Society' activities and to foster new research opportunities in the School of Computing and Information Systems (CIS).

Digital innovations have the capacity for significant impacts on shaping society. This capacity comes with responsibility for ethical conduct, and approaches that improve the quality of life for everyone, not just a select elite few. The Chair should have an understanding of, and experience in, leadership in ethical considerations of research and development of digital technology. The Chair should also have a track record of high impact research, leadership and scholarship in the above areas.

The Chair of Digital Innovation for Society is a role that should address all aspects of innovation – including, but not limited to, algorithmic fairness, ethics, human rights, minority representation, and social, legal and technical approaches to privacy. The Chair will be able to engage with technologists and social scientists alike.

At the same time, the Chair must have the ability to recognise and address problematic uses of technology with a commitment to equity, so that digital advances not only help, but also include minorities. The Chair must lead and encourage leadership in developing technologies that reduce, rather increase, inequality. Engaging with cultural differences and individual vs collective advances should be key to this work.

The Chair cannot work alone and shall be connected with other experts across the University, industry and community to coordinate approaches and expertise and

increase the capacity of staff within the school to address problems through different lenses, such as critical theory, STS, historical perspectives, anthropology and linguistics. The inclusion of an associated research group supporting the role, and led by the Chair, would enable the attraction of international researchers, as well as in-residence experts from industry, research ethics, human rights and other relevant societal areas to enhance and expand on the work done within this area.

The University and CIS have strong and growing activity in digital and data science across all academic divisions and has nationally-leading computing infrastructure and data analytics capability. Specific academic initiatives include, but are not limited to, digital ethics, cybersecurity, data science, digital health, clinical and health informatics, and digital humanities. CIS also has world-leading research groups in optimisation, artificial intelligence, machine learning and algorithms.

The Chair of Digital Innovation for Society will work with all of these teams and projects to increase the School's global presence and footprint.

Further aspects of the role are to strengthen relationships with Melbourne Connect (MC) and its key research partners, other University groups, external research organisations and industry partners.

Selection criteria

Research Impact

- » A research doctorate or equivalent in Computer Science, or another relevant field;
- » Distinguished career in an academic or research institution in an area broadly related to Digital Innovation;
- » A demonstrated record of research impact

and translation to practice;

- » Proven excellence in attracting research funding from competitive grant agencies and other sources including industry;
- » Strong track record of encouraging and progressing research and innovation programs and processes;
- » A distinguished high-profile international standing body of research in Digital Innovation;
- » Exhibited commitment to the highest standards of scientific and ethical integrity;

Partnerships/collaborations

- » An international reputation in leading research innovation and fostering collaboration with researchers from other organisations as part of multi-disciplinary teams;
- » A track record of building and sustaining partnerships with a wide range of stakeholders in complex settings: including Australian and international research agencies; industry; government; and/or community;
- » An outstanding track record of industry-engaged research in Digital Innovation;
- » The capacity for innovative design, coordination and delivery of undergraduate and postgraduate subjects and create opportunities for students to be exposed to strong industry experiences;

Leadership

- » Demonstrated excellence in leadership and management to build strong, sustainable teams, embedding change and driving performance in a large complex organisational environment;
- » Strong track record of encouraging and progressing research and innovation programs and processes;
- » Demonstrated experience of high-quality supervision of graduate students;

Key responsibilities

University expectations of a Professor

For applications at Level E, your attention is drawn to the paper, “Leadership Roles of Melbourne Professors” which clarifies the expectations of a Professor at The University of Melbourne. You will find it at the end of this document.

RESEARCH

- » Provide academic leadership across all aspects of the discipline;
- » Lead and drive research in the discipline;
- » Obtain significant research funding from a variety of sources, including national competitive grants and especially other external partners including industry and government;
- » Support the establishment of effective collaborations between multidisciplinary groups across the School, the University, national and international research partners required to support this agenda;
- » Publish papers on findings from research conducted; and make presentations at national and international scientific conferences and industry forums;
- » Attract, supervise and mentor junior researchers and HDR students; and
- » Mentor staff and research students to publish in top tiered refereed journals, books or monographs, reports and refereed conference proceedings.

TEACHING AND LEARNING

- » Review current teaching programmes to provide rational and cohesive courses at the highest international level for undergraduate and postgraduate students;
- » Collaborate with the MSE Teaching Lab to incorporate lab experiences and project-based learning into the curriculum
- » Guide the development of Masters coursework programmes in the discipline; and
- » Coordinate and teach subjects and courses as required and in line with Melbourne School of Engineering work load models and Subject Evaluation Survey expectations.

LEADERSHIP AND SERVICE

- » Actively contribute to the overall leadership and strategic goals of EMI, and actively contribute to resource management and planning in MSE;
- » Contribute to strategic planning and policy decision making processes by actively participating on relevant committees for Fishermans Bend and MSE;
- » Foster excellence in research and teaching and develop best practice standards for the School;
- » Develop collaborative opportunities with Australian and international industry and research facilities;
- » Foster existing strategic relationships between the University and industry and develop new ones;

- » Foster a harmonious workplace environment that is conducive to productivity, promotes creativity, and rewards and recognises individuals and group achievement; and
- » Make a significant contribution to the governance and collegial life inside and outside of the School.

ENGAGEMENT

- » Drive the national and international profile for the University;
- » Develop and implement education and research models which can be applied across a broad range of government and industry settings;
- » Engage in activities to support and influence relevant government policies and industry practices by coordinating activities across the University as appropriate;
- » Champion discussion, education and community engagement;
- » Develop a communication strategy that targets a range of audiences and links with government, national and international bodies as appropriate; and
- » Liaise with others in the Melbourne School of Engineering and University to develop a collaborative approach to enhance educational and research programs of the School.



HOW TO APPLY

The process and anticipated timeframes

- » Applications close
August 2020
- » Initial longlisting of candidates
September 2020
- » First Round Interviews being held
Late September 2020
- » Final Interviews & Campus visit
(3-day schedule)
October - November 2020
(Indicative only - pending changes to current travel restrictions)

Applications are to be made via the University's careers portal.

Further details here: jobs.unimelb.edu.au

Expression of interest

- » Cover letter of no more than 2 pages addressing your rationale for applying and how you would leverage this opportunity.
- » A current curriculum vitae (CV) which includes the names and contact details of at least four referees (preferably including a current or previous supervisor and three international referees of high standing with whom you have not collaborated directly).

Referees

- » Applicants must provide full contact details for four referees who have agreed to supply confidential references if requested by the University
- » State your relationship to the referees and why they have been nominated
- » Referees will only be contacted if you proceed for the face to face interviews stage
- » The University reserves the right to request for alternate referee reports from experts in the field other than those already nominated

The University reserves the right to invite applications and not make an appointment.



SELECTION AND APPOINTMENT PROCESS

Three (3)-day campus visits -

Process for final shortlisted candidates

Seminar Presentation

- » We will confirm the seminar time and venue with you prior to your arrival.
- » Candidates are asked to present a (strictly) 30 minute talk on a topic related to their research. The seminar audience will comprise a general audience with 30 minutes allocated for Q&A.
- » We will need a brief write-up on the seminar to promote it internally.

Interview with the selection committee

- » We will confirm the interview time and venue with you prior to your arrival.
- » Interviews will be held as part of your three(3)- day campus visit and usually on a different day to your seminar.

Visit to the University of Melbourne, Parkville and Melbourne Connect campuses

- » We will confirm travel and accommodation details with you upon confirming your availability. Visits are usually held for two to three days where you will get to meet various academic and professional staff members within the School.
- » You will be hosted by a member of the School's team, who will be your 'go to'/tour guide during this time.
- » Your host will provide you with a schedule of your visit and introduce you to our Dean and other leaders in Melbourne School of Engineering.
- » You will also have an opportunity to meet with a member from the Human Resources team to answer any additional queries you may have and know more about the benefits and resources that are available to support you and your family. Some of the staff benefits have been included in the subsequent pages.

Enquiries

For discussion about this role, please contact:

Sarah Francis

Talent Acquisition Manager - Melbourne School of Engineering
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Uwe Aickelin

Head of School
Computing and Information Systems
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DIVERSITY AND INCLUSION

At Melbourne School of Engineering we recognise that our staff and students are unique individuals and we celebrate the richness that comes with differences in age, race, gender, nationality, sexual orientation, physical ability and background. We are committed to creating an environment that values, supports and respects your views, knowledge and individual experience.

Melbourne School of Engineering is working to:

- » Represent people with diverse attributes, experiences and backgrounds
- » Promote an inclusive culture in which staff feel valued, respected and comfortable being themselves in the workplace as well as a culture in which staff are encouraged to make meaningful and effective contributions at work
- » Implement a zero-tolerance of behaviour, attitudes and practices that run counter to this diversity and inclusion

For more information on our values see diversity.eng.unimelb.edu.au



PEOPLE AND BENEFITS

The University is committed to providing an intellectually stimulating and personally rewarding workplace which attracts people who are the best in their professional, academic and teaching fields. Outstanding academic staff are at the heart of the University's teaching, research and engagement endeavours. The University is proud of its many staff recognised through prestigious national and international awards and through membership of Australia's esteemed academic organisations.

The University offers an opportunity to be part of a dynamic world-class organisation which provides its staff with exceptional benefits and support at every stage of their life and career. These include:

- » Working in a culturally inclusive environment
- » Engaging in an active and vibrant campus life
- » A focus on health and wellbeing

Outstanding staff benefits in addition to competitive salary packages

Staff benefits on offer at the University include the opportunity to salary package everything from childcare and additional superannuation to subscriptions to the Melbourne Theatre Company. Benefits can be tailored to best suit individual needs and circumstances, including generous relocation support. Course fees can also be salary packaged and come at a 25 per cent discount for staff and their immediate families. The University has high numbers of women returning to work from parental leave and was one of the first winners of the Fair and Flexible Employer Recognition award.

For more information on benefits see about.
unimelb.edu.au/careers/working/benefits



LIVING AND WORKING IN MELBOURNE

Melbourne and surrounds

Melbourne is the capital city of Victoria and is the second largest city in Australia. It is set around the shores of Port Phillip Bay and is considered by many to be Australia's cultural capital.

The City of Melbourne covers the city centre as well as many inner-city suburbs and precincts, each with a unique personality and character.

Parkville campus

A short walk from Melbourne's city centre, the Parkville campus is a hub of music, exhibitions, sporting facilities and libraries. Stroll around the historic campus to encounter a wealth of cafes, coffee corners, shops and services.

Parkville is recognised as the hub of Australia's premier knowledge precinct, comprising eight hospitals and numerous leading research institutes and knowledge-based industries.

Melbourne Connect

Melbourne Connect is a new University of Melbourne innovation precinct where a large proportion of MSE will be relocated, together with a number of industry partners. The Precinct will also be home to Creator Space, Science Gallery Melbourne, new retail tenancies, childcare, student accommodation for post-graduates and visiting academics and new public open spaces.

