POSITION DESCRIPTION

School of Computing and Information Systems

Faculty of Engineering and Information Technology

Research Fellow in Computer Vision

POSITION NO	0063971
CLASSIFICATION	Research Fellow Grade 2 (Level B)
SALARY	$119,231 - $141,581 per annum
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-time (1.0 FTE)
BASIS OF EMPLOYMENT	Fixed Term 2 years 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
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Tom Drummond Email: tom.drummond@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Commitment to Diversity and Inclusion

The Faculty of Engineering and Information Technology (FEIT) is committed to creating a diverse and inclusive environment that welcomes and values all people. We recognise that diversity is essential in contributing to the success of FEIT. Women, Aboriginal and Torres Strait Islanders, the LGBTIQ+ community, people living with disability and those from a culturally and linguistically diverse background, are strongly encouraged to apply.

Position Summary

You will conduct independent research, leading to the preparation and publication of research outcomes in conferences and journals. You will be located in the School of Computing and Information Systems in the Faculty of Engineering and Information Technology (FEIT) and will be expected to be an active member of the School, collaborating with other researchers. You will also be expected to spend 20% of your time teaching within the School. You may also undertake small amounts of research supervision directly related to your area of research, as required.

1. Key Responsibilities

The University of Melbourne sets 'Minimum Standards for Academic Levels' (MSALs) which are expected from academic staff. The levels are differentiated by level of complexity, degree of autonomy, leadership requirements of the position, and level of achievement of the academic and may be amended from time to time.

1.1 TEACHING AND LEARNING

- Coordinate and conduct lectures and tutorials at undergraduate and postgraduate level, including engagement in teaching innovation and improvement.

- Preparation of project work to support student learning.

- Perform marking and assessment duties and be responsible for supervision of project marking in subjects as lecturer-in-charge.

- Provide adequate access for and effective student consultation.

- Be proactive in the development of subject materials and delivery, including the use of web resources as appropriate.

- Act as Subject Coordinator with responsibility for the design, development, coordinated delivery and ongoing improvement of that subject and keep the Teaching Liaison Coordinator informed of changes to personnel and/or requirements.

- Consult with students.

- Demonstrate interest in the continued improvement of teaching quality.

1.2 RESEARCH AND RESEARCH TRAINING

- Independently plan and carry out research on the nominated research project and work towards completion of the aims of the project.

- Develop effective timelines and milestones based on goals of the research program.

- Perform data and microstructure analysis and be responsible for qualitative and statistical analysis of research data and to communicate this information to the Chief Investigators and collaborators.

- Regularly write technical reports on the outputs of the experiments conducted and maintain accurate and detailed records of all experiments conducted.

- Participate in preparation of manuscripts for publication in peer-reviewed journals.

- Liaise effectively with collaborators with a variety of internal and external stakeholders.

- Assist other researchers in carrying out experiments in order to work as a team and further the department's research output.

- Contribute to the development of the Department's and the School's strong research program in AI, Representation Learning and Natural Language Processing.
- Work towards building an independent research project.

1.3 LEADERSHIP AND SERVICE

- Active participation in the communication and dissemination of research.
- Identify sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in the discipline.
- Effective supervision of research support staff.

1.4 ENGAGEMENT

- Active participation in some outreach activities relating to research and scholarship.
- Effective liaison with external networks to foster collaborative partnerships.
- Involvement in professional activities, including consultations and referrals.
- Present results at local, national forums.
- Attend and actively participate in departmental seminars, meetings and/or committee memberships.

2. Selection Criteria

2.1 ESSENTIAL

- A PhD in Computer Vision, AI, Machine Learning, Natural Language Processing, or closely related discipline.
- A record of quality research as evidenced by publications in leading journals and at conferences commensurate with opportunity.
- Ability to perform independent research and a commitment to interdisciplinary research.
- Demonstrated capacity to communicate research concepts to technical and non-technical audiences.
- Excellent ability in analysing data, problem solving and maintaining accurate research records.
- Capability for innovative research, as evidenced by scholarly publication.
- Experience in using initiative, working with minimal supervision and ability to prioritise tasks to achieve project objectives within timelines.
- Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums and through manuscript submissions.
- Excellent interpersonal skills, including an ability to interact with internal and external stakeholders (academic, administrative and support staff) in a courteous and effective manner.
- An outstanding background in the project area.
- Demonstrated ability to perform independent research and a commitment to interdisciplinary research.

- Demonstrated ability to work with limited supervision in a self-directed manner and as a member of a research team, and to interact in a courteous and effective manner with academic, administrative and support staff.

2.2 DESIRABLE

- Experience in Deep Learning Frameworks (e.g. Pytorch, Tensorflow).

- Experience in C++/CUDA programming.

- Experience in supervision of students and/or research assistants.

- Experience in the completion of ethics applications and submission of grant applications.

- Ability to structure, engage and present information clearly to various audiences.

2.3 SPECIAL REQUIREMENTS OF THE ROLE

This position requires the incumbent to hold a current and valid Working with Children Check.

Perform other tasks as requested by the supervisor or the Head of the Department.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 THE SCHOOL OF COMPUTING & INFORMATION SYSTEMS

The School of Computing & Information Systems (CIS) undertakes research and teaching across a range of information technology disciplines including Software Engineering, Information Systems, and Computer Science. CIS is the most highly ranked School of Computing and Information Systems in Australia according to all major rankings (THE, QS, ARWU). It offers a comprehensive range of IT and IS courses at all levels, including offerings in science, engineering, and business, and is at the forefront of computing research in Australia and internationally with close links to major computing research initiatives, including Melbourne Bioinformatics, CSL, The Cremorne Digital Hub and CSIRO's DATA61.

The School's aim is to attract and retain outstanding staff available in order to maintain its lead in research and teaching. We have an existing highly successful research team in the area of the appointment, a large number of PhD students, and a substantial cohort of graduate students in our coursework Masters programs.

To find out more about CIS, visit: http://www.cis.unimelb.edu.au/

5.2 FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

The Faculty of Engineering and Information Technology (FEIT) has been the leading Australian provider of engineering and IT education and research for over 150 years. We are a multidisciplinary School organised into three key areas; Computing and Information Systems (CIS), Chemical and Biomedical Engineering (CBE) and Electrical, Mechanical and Infrastructure Engineering (EMI). FEIT continues to attract top staff and students with a global reputation and has a commitment to knowledge for the betterment of society.

FEIT has never been better positioned as a global leader, anchored in the dynamic Asia Pacific region, creating and curating knowledge to address some of the world's biggest challenges. Through our students and our relationships with communities, we can not only respond to society's needs but anticipate and create engineering and IT solutions for the future.

https://eng.unimelb.edu.au/
https://eng.unimelb.edu.au/about/join-feit

Our ten-year strategy, FEIT 2025, is our School's commitment to bring to life the University-wide strategy Advancing Melbourne and reinforce the University of Melbourne's position as one of the best in the world.

To achieve our ambitions, we will continue to build new infrastructure to enable our teaching, research and engagement; we continue to recruit outstanding people from around the world; and we continue to attract high-quality students from across the globe who are at the heart of our enterprise.

https://eng.unimelb.edu.au/about/feit-2025

5.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers

5.4 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.

- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.

- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.

- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at https://about.unimelb.edu.au/strategy/governance