



## POSITION DESCRIPTION

School of Computing and Information Systems  
Faculty of Engineering and Information Technology

# Research Fellow in Ubiquitous Computing and Human-Computer Interaction

<b>POSITION NO</b>	0058749
<b>CLASSIFICATION</b>	Level A
<b>SALARY</b>	\$77,171 - \$104,717 p.a. (pro rata for part-time)
<b>SUPERANNUATION</b>	Employer contribution of 17%
<b>WORKING HOURS</b>	Full-time (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)
<b>EMPLOYMENT TYPE</b>	Fixed term for 12 months (with possibility of extension)
<b>OTHER BENEFITS</b>	<a href="https://about.unimelb.edu.au/careers/staff-benefits">https://about.unimelb.edu.au/careers/staff-benefits</a>
<b>CURRENT OCCUPANT</b>	New
<b>HOW TO APPLY</b>	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
<b>CONTACT FOR ENQUIRIES ONLY</b>	Professor Vassilis Kostakos Email <a href="mailto:vassilis.kostakos@unimelb.edu.au">vassilis.kostakos@unimelb.edu.au</a>  <i>Please do not send your application to this contact</i>

For information about working for The University of Melbourne, visit our website:  
[about.unimelb.edu.au/careers](http://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. Those seeking support in submitting an application are welcome to contact the Faculty HR team at [feit-hr@unimelb.edu.au](mailto:feit-hr@unimelb.edu.au)

## Position Summary

A postdoctoral Research Fellow is sought to join the School of Computing & Information Systems, The University of Melbourne, and contribute research to the school's thriving **Human-Computer Interaction** group. You will join a world-class interdisciplinary and multi-institution project which aims to make basic research discoveries across.

The successful candidate will work within the CATCH project: Cybersecurity Assurance for Teams of Computers and Humans. This project brings together 6 universities in Australia and the U.S.: led by the University of Melbourne, and joined by the University of Newcastle and Macquarie University in Australia, and Carnegie Mellon University, the University of Wisconsin, and the University of California San Diego in the U.S. You will be encouraged and supported to collaborate across partners in this exciting and unique project. You can read more about CATCH here: <https://catch-muri.org>

In this role, you will be expected to bring your expertise to study, and develop new ways, in which teams of humans and computers can work together in the context of cybersecurity. This could be done from a range of perspectives, such as sensing human behaviour, usable security, interface design, quantitative analysis. The scope of the project is quite broad, and you will have the opportunity to propose and pursue novel new directions in this broad area. You will work alongside experts in security, formal methods and machine learning.

Being located in the School of Computing & Information Systems within the Faculty of Engineering and Information Technology, you will be expected to be an active member of the School, collaborating with other researchers. You will have opportunity to contribute to teaching, as desired, and will be expected to contribute to research supervision related to your area of research. In addition, you will be part of the Human-Computer Interaction group, which is one of the leading groups in the world. The group has brand new purpose built facilities, including a state-of-the-art usability lab for human subjects experiments, and an Interactive Technologies lab which is a playground for developing novel interactive computing prototypes.

### 1. Selection Criteria

#### 1.1 ESSENTIAL

- ▶ A higher degree in computer science, or closely related discipline;
- ▶ Strong quantitative skills, and experience with human subjects experiments;
- ▶ 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.

## 1.2 DESIRABLE

- ▶ A PhD in computer science, or closely related discipline;
- ▶ A record of quality research as evidenced by publications in leading conferences or journals (e.g. CHI, IMWUT, UIST, SOUPS, PerCom, PMC) commensurate with opportunity;
- ▶ Experience in supervision of students and/or research assistants;
- ▶ Experience in the completion of ethics applications and attracting research funding;
- ▶ Ability to structure, engage and present information clearly to various audiences;

## 2. Key Responsibilities

### 2.1 CONTRIBUTION TO TEACHING AND LEARNING

- ▶ Contribute to teaching, training, scientific mentoring and supervision of students;
- ▶ Conduct lectures, tutorials, mark and undertake laboratory duties as required by the School (if required).

### 2.2 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 programme;
- ▶ Perform data 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 research conducted;
- ▶ Undertake administrative functions and obligations primarily connected with the staff member's area of research.
- ▶ Work towards building an independent research project;
- ▶ Liaise effectively with collaborators with a variety of internal and external stakeholders;

### 2.3 LEADERSHIP AND SERVICE

- ▶ Present results at local, national, and international forums, and to external industry and government stakeholders;
- ▶ Effective liaison with external collaborators and sponsors to foster partnerships and opportunities for impact;
- ▶ Active participation in some outreach activities relating to research and scholarship;
- ▶ Leadership and participation in preparation of manuscripts for publication in peer-reviewed conference proceedings and journals;
- ▶ Attend and actively participate in School seminars, meetings and committees as required by your supervisor;
- ▶ Assist other researchers in carrying out research in order to work as a team and further the School's research output;

- ▶ Involvement in professional activities, including consultations, referrals, and reviewing.

## 2.4 OTHER

- ▶ Perform other tasks as requested by the supervisor or the Head of the School;
- ▶ Complete all compliance trainings within the probation period.

## 3. *Special Requirements*

- ▶ Employment in this position is conditional upon receipt and maintenance of a Working with Children Check.
- ▶ Occasional work out of ordinary hours, travel, etc.

## 4. *Equal Opportunity, Diversity and Inclusion*

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 University's People Strategy and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

All FEIT employees are required to behave in a manner that creates; supports and encourages an inclusive and safe work environment for all.

<https://eng.unimelb.edu.au/diversity>

## 5. *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:

<http://safety.unimelb.edu.au/topics/responsibilities/>

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

## 6. *Other Information*

### 6.1 SCHOOL OF COMPUTING AND INFORMATION SYSTEMS

<https://cis.unimelb.edu.au/#about>

The School of Computing and Information Systems (CIS) at the University of Melbourne is an international leader in computing research and teaching.

CIS is one of the highest-profile schools in the country, regularly ranked top in Australia for Computer Science (THE and QS). It is one of only two Australian divisions to be

ranked "5 – Well above world standard" in both Information and Computing Sciences (FOR 08) and Information Systems (FOR 0806).

The School is committed to attracting and retaining the highest-quality staff available in order to produce outstanding and impactful research. CIS has highly successful research teams in the key areas of Computer Science (CS), Artificial Intelligence (AI), Human-Computer Interaction (HCI) and Information Systems (IS).

CIS provides majors in the three-year undergraduate 'Melbourne Model' degrees and has a range of specialist graduate programs. It also has a large cohort of active graduate research students, both domestic and international, who are regularly publishing in top venues and engaging with the community.

In early 2021 CIS moved to a new home, Melbourne Connect, which aspires to be one of the foremost innovation precincts in the world. Through co-location of talented researchers, scientists, academics and students with private enterprise and government partners in a series of connected buildings; the University seeks to unlock the value of its research in addressing major societal challenges by identifying solutions that are data driven, digitally enabled and socially responsible.

## 6.2 FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

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>

## 6.3 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's 10-year strategy, Advancing Melbourne will enable the University to contribute to advancing the state and national interest and make vital contributions to Australia's standing on the world stage. We seek to be a leading force in advancing Australia as an ambitious, forward-thinking country while increasing its reputation and influence globally. <https://about.unimelb.edu.au/strategy/advancing-melbourne>

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>