School of Computing and Information Systems
Melbourne School of Engineering

Research Fellow in Ubiquitous Computing

In line with the special measure H103/2014 provided for under section 12 of the Equal Opportunity Act 2010 (VIC), the Melbourne School of Engineering strongly encourages applications from suitably qualified female candidates.

POSITION NO	0043294
CLASSIFICATION	Research Fellow Grade 2 (Level B)
SALARY	$98,775 - $117,290 p.a.
SUPERANNUATION	Employer contribution of 9.5%
EMPLOYMENT TYPE	Full-time (fixed term) position available for 3 years
Fixed term contract type: Research

The Melbourne School of Engineering 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. |
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Vassilis Kostakos
Email: Vassilis.kostakos@unimelb.edu.au, tel. +61 3 9035 8966

Please do not send your application to this contact |

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

Position Summary

The University of Melbourne's School of Computing and Information Systems is seeking a Research Fellow to develop techniques for context sensing using mobile & wearable devices, and behavioural modelling. The research will focus on the development of mobile sensing techniques to capture and model human behavior. Candidates should demonstrate extremely strong skills in developing for mobile platforms, and data analysis and machine learning techniques. A strong publication record in a relevant field is essential. Experience with Ubiquitous Computing and Human Computer Interaction is highly desirable, particularly experience in conducting experimental studies with human participants. This position is available as part of a major investment by the University of Melbourne to substantially expand its UbiComp and HCI research.

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 Melbourne School of Engineering, and will join the Microsoft Research Centre for Social Natural User Interfaces at the University of Melbourne. You will be expected to be an active member of the School, collaborating with other researchers. You may undertake small amounts of teaching and research supervision directly related to your area of research, as required.

The University plan seeks to increase the diversity of the workforce and the representation of women in areas they have been traditionally under-represented. Consistent with this, the School is seeking to increase the representation of women in the academic workforce across engineering disciplines. Under a Special Measure, under Section 12 (1) of the Equal Opportunity Act 2010 (Vic) the School is seeking to lift the representation of women from 20% in 2014 to at least 25% over the next 5 years, and strongly encourages applications from suitably qualified female candidates.

1. Selection Criteria

1.1 ESSENTIAL

- PhD in Human-Computer Interaction, Computer Science, or equivalent;

- Well-developed and demonstrable skills in programming for mobile devices, smartphone sensing, smartphone application development, and source code management skills;

- Experience in conducting experiments and user studies with human participants and using statistical software for data analysis (e.g. R)

- A track record of quality research as evidenced by research publications in leading conferences and journals commensurate with opportunity, particularly in the area of behaviour modelling, data analytics, sensor data analysis, or related field;

- Demonstrated ability to perform independent research and a commitment to interdisciplinary research;

- Excellent ability in analysing data, problem solving, maintaining accurate research records and developing new experimental protocols;

- Excellent interpersonal skills, including an ability to interact with internal and external stakeholders (academic, administrative and support staff), and to work co-operatively in a multi-disciplinary team environment in a courteous and effective manner;

- Demonstrated project management skills, including high level organisational and time management skills, ability to manage competing priorities and excellent record keeping skills;

- Excellent written and verbal communication skills, to technical and non-technical audiences, including presentation of research results at conferences, internal forums and through manuscript submissions.

1.2 DESIRABLE

- A track record of robust, high quality contributions to software projects, e.g., open source contributions;

- Research experience in machine learning and relevant tools;

- Experience in supervision of graduate students and/or research assistants;

- Experience in the successful completion of human ethics applications and submission of grant applications;

- Experience in a leadership role within a research team.

2. Special Requirements

None

3. Key Responsibilities

3.1 RESEARCH – ADVANCEMENT OF THE DISCIPLINE

3.1 Independently plan and carry out research on the nominated research project and work towards completion of the aims of the project;

3.2 Develop software for mobile and wearable devices to collect data in field studies, maintain the software and ensure it operates as expected.

3.3 Perform sensor data analysis, and be responsible for qualitative and statistical analysis of research data and to communicate this information to the Chief Investigators and collaborators;

3.4 Regularly write technical reports on the outputs of the experiments conducted, and maintain accurate and detailed records of all experiments conducted;

3.5 Participate in preparation of manuscripts for publication in peer-reviewed journals;

3.6 Liaise effectively with collaborators with a variety of internal and external stakeholders;

3.7 Assist other researchers in carrying out experiments in order to work as a team and further the school's research output;

3.8 Contribute to the development of the School's strong research program in Ubiquitous Computing;

3.9 Develop independent research and apply for grants;

3.10 Perform administrative functions primarily connected with the research project, including generating written summaries of discussions, developing detailed

research plans with the project investigators and writing these into a project plan, and contributing to ethics submissions.

3.2 TEACHING AND LEARNING

3.11   Contribute to teaching, training, scientific mentoring and supervision of students;

3.12   Supervise junior research staff in the appointee's area of expertise;

3.13   Conduct lectures, tutorials, mark and undertake laboratory duties as required by the School.

3.3 ENGAGEMENT

3.14   Active participation in some outreach activities relating to research and scholarship;

3.15   Effective liaison with external networks to foster collaborative partnerships;

3.16   Involvement in professional activities, including consultations and referrals;

3.17   Present experimental results at local, national and international forums;

3.18   Attend and actively participate in school seminars, meetings and/or committee memberships.

3.4 SERVICE AND LEADERSHIP

3.19   Undertake administrative duties and general laboratory duties including maintenance of the laboratory and equipment and ordering of supplies;

3.20   Lead and contribute in the preparation and submission of competitive grant applications relating to the appointee's research program;

3.5 OTHER

3.21   Perform other tasks as requested by the supervisor or the Head of the School;

3.22   Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5.

4. 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 University's People Strategy 2015-2020 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.

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 deserve to service for excellence and reach the targets of Growing Esteem.

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

http://www.cis.unimelb.edu.au

The School of Computing and Information Systems is an amalgamation of the former Department of Computer Science and Software Engineering and the Department of Information Systems. It offers a comprehensive range of computing courses at all levels. It is at the forefront of computing research in Australia and internationally with close links to a number of major computing research initiatives, including the Victorian Life Sciences Computing Initiative (VLSCI), the IBM Collaboratory, and the Microsoft Research Centre for Social Natural User Interface (SNUI), and DATA61 (formerly NICTA). It was ranked 13th in the 2015 QS World University Ranking exercise by discipline.

6.2 MELBOURNE SCHOOL OF ENGINEERING

http://www.eng.unimelb.edu.au/

The Melbourne School of Engineering is one of Australia's leading Engineering Schools and aims to be the school of choice for the highest performing students and research staff in Australia and within the Time Higher Education Supplement top ten Schools of Engineering internationally by 2020.

6.3 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The University offers staff many benefits and prospective staff are encouraged to view the following web links:

www.unimelb.edu.au

www.growingesteem.unimelb.edu.au

www.unimelb.edu.au/careers

6.4 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 http://www.unimelb.edu.au/unisec/governance.html.