THE UNIVERSITY OF MELBOURNE

School of Electrical, Mechanical and Infrastructure
Melbourne School of Engineering

Research Engineer

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	0045531
CLASSIFICATION	Academic Specialist (Level B)
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Fixed Term position available for 2 years Fixed-term contract type: Externally Funded
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
HOW TO APPLY	To apply online go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Len Sciacca Tel +61 3 8344 6954 Email len.sciacca@unimelb.edu.au *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

Position Summary

As part of its new strategy, MSE 2025 wants to strengthen its expertise in defence science and technology. The Department of Electrical and Electronic Engineering in conjunction with other Departments and Faculties across the University is enhancing its engagement with US and Australian Defence agencies and defence industry.

This role will work closely with the Enterprise Professor to further enhance and realise defence research contracting and engagement opportunities in advanced signal processing supporting Next Generation Technology Projects with Industry.

The projects involve systems engineering support, research in advanced signal processing, measurements and simulation supporting a contract with industry and Defence Science and Technology Group.

This position is available for 2 years and will be reviewed at the end of this period.

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.

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 Electrical and Electronic Engineering, or equivalent;
- Expert experience in signal processing, in particular, machine learning;
- Demonstrated capacity to communicate research concepts to technical and non-technical audiences;
- A track record of quality research and development in the discipline as evidenced by industry engagement and/or research publications in leading conferences and journals commensurate with opportunity;
- Excellent ability in analysing data, problem solving, excellent engineering and research capability;
- Demonstrated ability to perform independent research and development and a commitment to interdisciplinary research;
- Excellent communication and interpersonal skills, including an ability to interact with internal and external stakeholders (academic, industry and support staff), project management in a research environment and to work collaboratively in a multi-disciplinary team environment;
- Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums and through manuscript submissions.

1.2 DESIRABLE

- Experience in supervision of engineers and/or scientists;
- Experience in the successful completion of ethics applications and submission of grant applications.

2. Special Requirements

It is an inherent requirement of the role for the successful candidate to undergo, acquire and maintain security clearance from the Australia Government, Department of Defence. Therefore, as a minimum, Australian Citizenship will be required.

3. Key Responsibilities

3.1 RESEARCH

- In conjunction with industry and government stakeholders plan and carry out research on the nominated industry research project and work towards completion of the milestones and deliverables of the project;
- Develop effective timelines and milestones based on goals of the research program with industry;
- Regularly write technical reports on the outputs of the experiments or research conducted, and maintain accurate and detailed records of all research conducted;
- Participate in preparation of manuscripts for publication in peer-reviewed journals or project reports;
- Liaise effectively with internal and external collaborators and stakeholders;
- Assist other researchers in carrying out research in order to work as a team and further the department's research output;
- Contribute to the development of the Department's strong research program in Grand Challenge for Counter Threats and/or an emerging program in Advanced Antenna systems;
- 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 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 research and development results at local, national and/or international forums;
- Attend and actively participate in departmental seminars, meetings and/or committee memberships as required.

3.3 SERVICE AND LEADERSHIP

- Lead and contribute in the preparation and submission of competitive grant applications relating to the appointee's research program;
- Lead relationship management of key industry clients as directed by Enterprise Professor Defence Technologies.

3.4 OTHER

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

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 ELECTRICAL, MECHANICAL AND INFRASTRUCTURE ENGINEERING

The School of Electrical, Mechanical and Infrastructure Engineering undertakes teaching and research across a range of disciplines that are internationally recognised for their contribution to

fundamental research. It has a number of well-established industry linkages and international partnerships. It is building a vibrant profile of interdisciplinary research, working with industry with an aim to contribute to society. It offers a comprehensive range of accredited Masters of Engineering and Master of Information Technology programs taught through the Electrical, Mechanical and Infrastructure departments as well as professional Masters programs. It has a substantial cohort of research higher degree students.

The School's aim is to attract and retain outstanding staff. The School is highly supportive of increasing the number of female staff.

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

The Department of Electrical and Electronic Engineering is a vibrant community of internationally recognised researchers focused on addressing major challenges in Power Systems; Computation and Communication Networks; Electronic & Photonic Devices and Materials; and Systems Engineering. We have long-standing, strong partnerships with industry and government that support our researchers in conducting high impact research.

The Department offers both PhD and Masters level research degrees as well as the following postgraduate coursework degrees:

Professional Master of Engineering (Electrical)

Master in Telecommunications Engineering (MTE)

The Department also contributes to the Electrical Systems major in the Bachelor of Science. Further information about the Department can be found under www.ee.unimelb.edu.au/

6.2 MELBOURNE SCHOOL OF ENGINEERING

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 twenty 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 www.unimelb.edu.au/unisec/governance.html.