ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what’s expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The Faculty of Engineering is one of the largest in Australia, renowned worldwide for the quality and calibre of our teaching, research and graduates. We offer a comprehensive range of undergraduate, graduate, postgraduate and higher degree by research programs in a wide range of engineering disciplines. Our research activities provide a platform for establishing a thriving educational enterprise and our staff are committed to creating a dynamic learning environment. The research activities range from fundamental studies to research with a strong applications orientation. To learn more about the Faculty of Engineering, please visit our website.

The Department aims to provide high quality Civil Engineering education, research and professional services globally for the mutual benefit of the students, the staff, the University, industry, the profession and the wider community. We offer several undergraduate degrees as well as postgraduate coursework degrees via Off-Campus Learning. The Department actively pursues innovative and significant multi-disciplinary research to address the challenges for engineering in the 21st century. For more information about us and the work we do, please visit our website.
POSITION PURPOSE

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

The Research Fellow will focus on the modelling, control, and optimization of connected and automated vehicles, in intelligent transportation systems. The target of the project is to improve the energy efficiency of electrified vehicles under the connective environment. This position is also expected to contribute to the teaching activities within the group.

Reporting Line: The position reports to the relevant senior academic within the Department of Civil Engineering

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic may include:

1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
3. Limited administrative functions primarily connected with the area of research of the academic
4. Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
5. Occasional contributions to teaching in relation to their research project(s)
6. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
7. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
8. Advice within the field of the staff member’s research to postgraduate students
9. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
   - PhD in Mechanical Engineering, Control and Automation, Computer Science, Applied Mathematics, Transport Engineering or other related fields.
Knowledge and Skills

2. Demonstrated analytical and manuscript preparation skills; including a track record of refereed research publications
3. Solid modelling, programming, and good communication skills are required
4. Deep understanding of optimization, machine learning, and artificial intelligence
5. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
6. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
7. A demonstrated awareness of the principles of confidentiality, privacy and information handling
8. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

OTHER JOB-RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- A current satisfactory Working With Children Check is required

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.