Position description

Greater together

Position title:	Research Fellow, Robotics
Institute/School/Centre/ Directorate/VCO:	Institute of Innovation, Science and Sustainability/Centre for Smart Analytics
Campus:	Gippsland Campus. Travel between campuses may be required.
Classification:	Academic Level B
Time fraction:	Full-time
Employment mode:	Fixed-term employment
Reason for fixed term:	Specific task or project
Probation period:	This appointment is offered subject to the successful completion of a probationary period.
Further information from:	Associate Professor Gayan Kahandawa Appuhamillage, Associate Professor, Mechatronics Telephone: (03) 51228612 Email: g.appuhamillage@federation.edu.au
Recruitment number:	JR100970

Position summary

The Research Fellow will be an integral member of our robotics research team. In this role, you will focus on conducting high-quality research in robotics and intelligent systems, with an emphasis on developing innovative solutions and advancing fundamental knowledge in the field. You will contribute to collaborative research projects, prepare publications in high-impact journals, and support the development of competitive research funding applications. The role will also involve supervision of higher-degree research students and active engagement with industry and academic partners to strengthen the Institute's research profile.

Portfolio

The Institute of Innovation Science and Sustainability offers undergraduate and postgraduate degrees in Engineering (Civil, Mechanical, Mechatronics and Mining), Mathematics, Information Technology, and Science (primarily Metallurgy and Geology). The Institute is undertaking a renewal of a range of degrees in Engineering aligned to Federation University Australia's Co-operative Education Model supporting the industry sectors in the regions. The Institute also offers a number of Graduate Certificate, Graduate Diploma and Masters by coursework qualifications, with Maintenance and Reliability Engineering being particularly well known internationally. These courses are offered on campus and at a number of locations throughout Australia and overseas.

The Robotics Research group is dedicated to advancing knowledge and innovation in robotics, mechatronics, and intelligent control systems, with applications spanning mobile robot navigation, autonomous systems, and experimental hardware development. Our core activities focus on high-quality research leading to impactful publications and meaningful collaborations with industry and academic partners.

Background

At Federation University, we are driven to make a real difference to the lives of every student, and to the communities we serve.

We are one of Australia's oldest universities, known today for our modern approach to teaching and learning. For 150 years, we have been reaching out to new communities, steadily building a generation of independent thinkers united in the knowledge that they are greater together.

Across our University and TAFE campuses in Ballarat, Berwick, Gippsland, and the Wimmera, we deliver world-class education and facilities. With the largest network of campuses across Victoria, we are uniquely positioned to provide pathways from vocational education and skills training at Federation TAFE through to higher education.

To be successful at Federation University you must be willing to enthusiastically embrace the University's ambition as expressed in the 2021–2025 University Strategic Plan and share the University's values of:

INCLUSION, we celebrate our diversity, particularly valuing Aboriginal and Torres Strait Islander cultural heritage, knowledge and perspectives.

INNOVATION, we are agile and responsive to emerging opportunities.

EXCELLENCE, we act with integrity and take responsibility for achieving high standards.

EMPOWERMENT, we create a supportive environment to take informed risks in pursuit of success.

COLLABORATION, we establish genuine partnerships built on shared goals.

Key responsibilities

1. Conduct research in robotics, with a focus on mobile robot navigation and control.
2. Design, build, and test robotic systems, integrating hardware and software.
3. Develop and prepare findings in high-impact journals.
4. Collaborate with academic and industry partners to secure research funding.
5. Supervise and mentor research students.
6. Reflect and embed the University's strategic plan, and operational purpose, priorities, and goals.
7. Undertaking the responsibilities of the position adhering to:
    - the Staff Code of Conduct, Child Safe Code of Conduct, and Conflict of Interest Policy and Procedure;
    - Equal Opportunity and anti-discrimination legislation and requirements;
    - the requirements for the inclusion of people with disabilities in work and study;
    - Occupational Health and Safety (OHS) legislation and requirements; and
    - Public Records Office of Victoria (PROV) legislation.

Level of supervision and responsibility

The Research Fellow is expected to be able to independently undertake the required research activities and be an active contributor to Centre for Smart Analytics. The incumbent will be mentored and guided by senior academic staff and will be expected to develop their expertise in research, teaching, and administration with an increasing degree of autonomy.

Position and organisational relationships

The Research Fellow will work under the broad direction of the Associate Professor in Mechatronics, and work as a key part of the research and evaluation team, liaising with stakeholders and research partners.

Key selection criteria

Applicants must demonstrate they are able to undertake the inherent responsibilities of the position as contained in the position description and are able to meet the following key selection criteria:

Training and qualifications

1. The Research Fellow will hold at least a master's degree in Robotics, Mechatronics, Control Engineering, Electrical/Electronic Engineering, or a related field. A PhD is desirable.
2. All academic positions delivering education and/or services to children (a child for this purpose is considered to be someone below the age of 18 years) in first-year undergraduate courses must hold a valid Working with Children Check (WWCC) or hold a current registration with the Victorian Institute of Teaching (VIT).

Experience, knowledge and attributes

3. Demonstrated research expertise in mobile robot navigation and control engineering.
4. Demonstrated evidence of research expertise and an active research profile.
5. Strong track record of publications in high-impact journals or leading robotics/control conferences.
6. Demonstrated experience in hardware implementation and experimental validation of robotic systems.
7. Demonstrated proficiency in robotics programming and simulation environments (e.g., ROS, MATLAB/Simulink, C++, Python).
8. Demonstrated ability to work both independently and collaboratively.
9. Demonstrated problem-solving, analytical, and communication skills.
10. Demonstrated working knowledge and application of the Child Safety Standards.
11. Demonstrated knowledge and application of appropriate behaviours when engaging with children, including children with a disability and from culturally and/or linguistically diverse backgrounds.

The University reserves the right to invite applications and to make no appointment.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.

Key Minimum Standards for Academic Levels (MSALs)

Research academic staff

Level B

A Level B research academic will normally have experience in research or scholarly activities which have resulted in publications in refereed journals or other demonstrated scholarly activities.

A Level B research academic will carry out independent and/or team research. A Level B research academic may supervise postgraduate research students or projects and be involved in research training.

The standards are not exhaustive of all tasks in academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels.

Federation University Australia
Union Enterprise Agreement
Academic and General Staff Employees
2023–2026