





# **RESEARCH FELLOW**

**DEPARTMENT/UNIT** Cybersecurity and Systems

FACULTY/DIVISION Information Technology

CLASSIFICATION Level B

WORK LOCATION Monash Clayton campus

#### 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 <a href="https://www.monash.edu">www.monash.edu</a>.

The **Faculty of Information Technology** aims to lead global IT research and education. Our strong reputation and international profile attracts the best students worldwide and we offer a range of accredited courses that transform our graduates into highly skilled and sought after IT professionals, equipped to work globally. Our research is multidisciplinary, multi-campus and multi-national, giving us a unique capacity to reach out further and deeper than any other institution in Australia. Our research priorities are both technically ambitious and embedded in everyday life.

To learn more about the Faculty and the exciting work we do, please visit www.infotech.monash.edu.au/.

## **POSITION PURPOSE**

This Research Fellow, one of four on this ARC Laureate Fellowship programme, will focus on incorporating human-centric requirements into model-driven engineering. The idea is to incorporate a wide range of human-centric software requirements in design models and use these when generating code and configurations from these models. These models will be formalised using Domain-Specific Visual Language (DSVL)-based models. The Research Fellow will contribute with other Research Fellows and PhDs to work on design principles for these DSVLs, and development of new human-centric DSVL models for requirements and designs.

The Research Fellow will contribute to the work on using human-centric requirements during software testing and defect detection, to ensure produced software meets target requirements. They will work with other research fellows and PhDs with industry partners to try out these new human-centric model-driven engineering and testing approaches on real-world problems.

Each research fellow will lead an aspect of the Laureate programme's engagement activities. One will take charge of student projects associated with the Laureate programme e.g. Honours students, Masters students, Final year

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capstone projects, and Monash Generator projects. One will take charge of schools outreach activities and relationships for the Laureate programme. One will take the lead in developing and maintaining industry partnerships for the Laureate programme.

While the role is research-focused, a small amount of teaching, ideally aligned to the programme goals and in software engineering areas, can be accommodated depending on the Senior Research Fellow's interest and opportunities. At the least, supervision of related research projects by Honours and Masters students will be expected.

In line with this Laureate programme's aims to improve the incorporation of human diversity into software engineering processes and engineered software, a diverse team is desired. Applications from people from underrepresented groups are strongly encouraged. While the role is intended to be full-time, a part-time role will also be considered for the best candidate.

Reporting Line: The position reports to the ARC Laureate Professor

Supervisory Responsibilities: Co-supervise up to 3-4 PhDs

Financial Delegation: Not applicable

**Budgetary Responsibilities: Not applicable** 

## **KEY RESPONSIBILITIES**

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

- 1. The conduct of research either as a member of a team or independently and the production of conference and seminar papers and publications from that research
- 2. Supervision of research-support staff involved in the staff member's research
- 3. Guidance in the research effort of junior members of research-only Academic staff in their research area
- **4.** Contribution to the preparation or, where appropriate, individual preparation of research proposal submissions to external funding bodies
- **5.** Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- **6.** Administrative functions primarily connected with their area of research
- 7. Occasional contributions to the teaching program within the field of the staff member's research
- **8.** Co-supervision or, where appropriate, supervision of major honours or postgraduate research projects within the field of the staff member's area of research
- 9. 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

# **KEY SELECTION CRITERIA**

# **Education/Qualifications**

- 1. The appointee will have:
  - A doctoral qualification in the relevant discipline area; or
  - equivalent qualifications or research experience

#### **Knowledge and Skills**

- **2.** Demonstrated statistical analysis and manuscript and research proposal preparation skills; including a solid track record of refereed research publications
- **3.** Experience in successfully supervising, mentoring and coaching to support the development of research staff and/or a demonstrated trajectory of leadership capability
- 4. Experience in supervising and working with major honours or postgraduate students within the discipline
- **5.** The ability to work both independently in a research environment and as part of an inter-disciplinary research team
- 6. High level organisational skills, with demonstrated capacity to establish and achieve goals
- 7. Excellent written and oral communication skills
- 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

# **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.