

RESEARCH FELLOW

DEPARTMENT/UNIT	Department of Software Systems and Cybersecurity
FACULTY/DIVISION	Faulty of Information Technology
CLASSIFICATION	Level B
DESIGNATED CAMPUS OR LOCATION	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 www.monash.edu.

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.monash.edu/it.

The **Department of Software Systems and Cybersecurity (SSC)** is a world leader in cybersecurity research. As technology becomes more deeply integrated into our everyday lives, the smarter and more alert we need to become. Through our work we seek to understand and address the challenges created by the constant re-imagining of technology. We navigate the ever-changing public perspectives on issues such as privacy and self-disclosure, and the expectation of convenience and trust in online services.

Every individual, business and society who uses online services is exposed to a range of vulnerabilities. Privacy violations, financial fraud and service interruptions, to name a few. That's why we focus on developing sophisticated applications to store, access and manipulate data – to ensure its integrity, reliability and safety.

Our areas of cybersecurity research expertise include:

- Blockchain: consensus, security, scalability, user privacy
- Cryptography: cryptographic foundations and primitives, applied cryptography, post-quantum cryptography
- Data Security: database security, cloud security
- AI & Human-Centric Security: AI security and privacy, Human factors in cybersecurity, cybersecurity issues in digital health and smart energy

Monash University [strongly advocates diversity, equality, fairness and openness](#). We fully support the gender equity principles of the [Athena SWAN Charter](#) and invite you to join us in celebrating [women in STEMM](#). The Department of Software Systems and Cybersecurity (SSC) is a proud sponsor and partner of [STEMM Women Academic Network \(SWAN\)](#).

POSITION PURPOSE

A Level B research-only academic is expected to carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise relevant to the particular field of research.

As a research role, research fellow – cybersecurity will engage in and research of cutting-edge and contemporary interdisciplinary cybersecurity technologies and practices in one of our key areas in AI & human-centric security.

Reporting Line: The position reports to the relevant senior academic within the Department of Software Systems and Cybersecurity

Supervisory Responsibilities: Not applicable

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
10. Other duties as directed from time to time

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
9. Advanced computer skills with experience using Microsoft Word, Excel and PowerPoint; specific experience in working with a range of analytical software
10. Subject-matter expertise in applying AI (particularly NLP) in cybersecurity demonstrated by research publications and/or relevant experience
11. Demonstrated ability to conduct human-centric cybersecurity research and experience in collecting and analysing data

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.