



SENIOR LECTURER - CRYPTOGRAPHY

DEPARTMENT/UNIT	Cyber Security and Systems (CSS)
FACULTY/DIVISION	Faculty of Information Technology
CLASSIFICATION	Level C
WORK 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 multi-disciplinary, 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.

Cyber Security and Systems Group (CSS)

The proliferation of mobile devices, sensors and social networks has created massive amounts of data about individuals, groups and organisations. The accessibility of this data through online computing services and communication devices has brought with it an abundance of security challenges, from privacy violations through to financial fraud and service interruptions. Supported by three of the leading research groups in Australia – the Monash Cyber Security Group, Database Systems Group and Software Systems Group – research in cyber security at Monash aims to enforce security without compromising the convenience of online services.

Our areas of research expertise include:

- Cyber Security: cryptography and blockchain technology, database security, hardware and software security, modelling and verification of system security
- Database Systems: Internet of Things (IoT) and sensor data capturing, storage and query processing (big data), location and spatial based query processing, data integration and fusion
- Software Systems: human aspects of software engineering, software design and testing, search-based software engineering, automated fault localisation and bug repair, verification and quality assurance, and software engineering of IoT systems

POSITION PURPOSE

A Level C academic is expected to make significant contributions to the teaching effort of a department, school, faculty or other organisational unit or an interdisciplinary area. An academic at this level is also expected to play a major role in scholarship, research and/or professional activities.

As part of the teaching and research role, the Senior Lecturer – Cryptography will engage in teaching, including the development of education resources and new course units; and research of cutting-edge and contemporary cryptography technologies and practices, for example applied cryptography and database security.

Reporting Line: The position reports to the lead of Cyber Security and Systems Group (CSS)

Supervisory Responsibilities: This position may provide direct supervision for 1-5 staff members

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level C academic may include:

1. The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and/or studio sessions
2. Initiation and development of subject material
3. Course coordination
4. The preparation and delivery of lectures and seminars
5. Supervision of major honours or postgraduate research projects
6. Supervision of the program of study of honours students and of postgraduate students engaged in course work
7. The conduct of research
8. Significant role in research projects including, where appropriate, leadership of a research team
9. Involvement in professional activity
10. Consultation with students
11. Broad administrative functions
12. Marking and assessment
13. Attendance at departmental, school and/or faculty meetings and a major role in planning or committee work

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - A doctoral qualification in the relevant discipline area

Knowledge and Skills

2. Possess a high level of interpersonal skills and demonstrated ability to work independently and as part of a team across both the education and service sectors
3. Demonstrated research ability; including developing a solid track record of refereed research publications and/or attracting research funding

4. Proven track record of national and international research collaborations
5. Ability to do research with potential impact in industry and/or society
6. Ability to work positively and cooperatively with students, internal and external teams and external organisations
7. Demonstrated teaching experience in a tertiary environment
8. Proven ability, commitment and passion for engaging in professional and research activities
9. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
10. Maintain and broaden collaborative partnerships with cross-university stakeholders

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

LEGAL COMPLIANCE

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.