



# PROFESSOR OF CYBER SECURITY

**DEPARTMENT/UNIT** Cyber Security and Systems (CSS)

FACULTY/DIVISION Faculty of Information Technology

CLASSIFICATION Level E

WORK LOCATION Clayton campus

#### ORGANISATIONAL CONTEXT

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation. For more information about our University and our exciting future, please visit 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.

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. The **Cyber Security and Systems Group (CSS)** is supported by three of the leading research groups in Australia – the Monash Cybersecurity 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: encryption and blockchain-based techniques for protecting outsourced databases, hardware and software security solutions, 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

Modified date: March 2019

## **POSITION PURPOSE**

A Level E academic is expected to exercise a special responsibility in providing leadership and in fostering excellence in research, teaching, professional activities and policy development in the academic discipline within the faculty or other comparable organisational unit, within the university, and within the community, both scholarly and general.

The Professor of Cyber Security is a lead role within the CSS group. Working in collaboration with key senior faculty academics, the role will advance the aligned research themes as well as develop and enhance the delivery of key strategic faculty goals.

The position will build partnerships between disciplines, increasing strategic collaborations with industry, as well as act as an authority on cyber security and drive the recognition of the faculty as the top cyber security research group globally.

The role will foster excellence in research, teaching, professional activities and policy development within the cyber security discipline, within the university and within the wider community.

Reporting Line: The position reports to the Group Lead - Cyber Security & Systems

Supervisory Responsibilities: This position provides direct supervision of post-doctoral staff

**Financial Delegation:** Not applicable **Budget Responsibilities:** Not applicable

#### **KEY RESPONSIBILITIES**

Specific duties may include:

- **1.** Lead the development and implementation of research strategy and actively engage in a specialist research area, by maintaining a substantial active publications record (high-quality refereed journals)
- 2. Supervise and mentor research students and other academics
- **3.** Foster research excellence through obtaining competitive external research funding, leading significant research projects and working with other staff to develop research links
- **4.** Make a distinguished personal contribution to the conduct of research at all levels by contributing to new knowledge and existing knowledge, generating new concepts, and methodologies to advance the discipline
- **5.** The preparation and delivery of lectures, tutorials, practical classes, demonstrations and workshops including assessment of student assignments and examinations
- **6.** Provide strong and committed leadership in teaching, curriculum development and research training by participating in the faculty's curriculum planning and development processes, academic committees, and relevant examination processes in addition to monitoring the quality of individual teaching in the relevant discipline
- **7.** Provide innovative and effective leadership for the expansion of the faculty's HDR program by attracting high quality HDR students
- **8.** Contribute to academic and administrative leadership within the faculty by participating in the development of policy and strategy
- **9.** Maintain and broaden collaborative partnerships with relevant faculties and departments/schools within the University and community
- **10.** Maintain and broaden collaborative partnerships with external agencies both nationally and internationally, making a significant contribution to the profession
- 11. Actively contribute to partnering with industry and diversifying funding avenues

# **KEY SELECTION CRITERIA**

# **Education/Qualifications**

- **1.** The appointee will have:
  - A doctoral qualification, or equivalent accreditation and standing, and recognised as a leading authority in the relevant discipline

#### **Knowledge and Skills**

- **2.** Evidence of outstanding scholarly activity of an international standard in cyber security and a demonstrated ongoing commitment to one or more programs of research
- **3.** Demonstrated ability to generate research income, including from both traditional and more innovative sources of research funding
- **4.** Record of successful supervision of postgraduate research students and the ability to make a significant contribution to postgraduate training programs in cyber security
- 5. Proven excellence in teaching at both undergraduate and postgraduate levels
- 6. Proven professional leadership qualities and capacity for executive administrative responsibilities
- **7.** Willingness and capacity to make a substantial contribution to all activities of the school/department, including administration and planning
- **8.** Evidence of sustained relationships with industry, business, government agencies, professional bodies as relevant to the particular position coupled with vision for the future needs and development of cyber security within Australia and internationally

# 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 will be 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.