Senior Research Postdoctoral Fellow
Cyber Security Cooperative Research Centre (CRC)
Research Theme: Privacy Preserving Data Sharing in a Hyper-Connected World

Classification	Level B
Delegation Band	Delegations and Authorisations Policy (see Section 3)
Nature of Employment	Full-time, Fixed Term (up to 3 years)
Workplace Agreement	Charles Sturt University Enterprise Agreement
Date Last Reviewed	September 2018

Our University Values

Insightful — Understanding people and the world

Inclusive — Stronger together

Impactful — Outcome driven

Inspiring — Leading for the future

Our Core Competencies

Charles Sturt University (CSU) staff are expected to demonstrate the following competencies:

Set Direction and Deliver Results
- Creating and innovating.
- Delivering results and meeting customer expectations.
- Entrepreneurial and commercial thinking.

Collaborate with Impact
- Relating and networking.
- Working with people.
- Persuading and influencing.

Lead Self and Others
- Adhering to principles and values.
- Deciding and initiating action.
- Adapting and responding to change.

Organisational Environment

Charles Sturt University (CSU) is member of the consortium which has been successful in establishing a $140 million Cyber Security CRC (Cooperative Research Centre). The Cyber Security CRC consists of 23 participants including leading companies such as Optus, CSCIO, Datacom and Tata Consulting and crucial government agencies such as the Attorney General's department and the Australian Federal Police (AFP). State governments including from New South Wales to Western Australia are also members of this industry led consortia.

CSU leads and co-leads the Cyber Security CRC projects on:
- Privacy preserving data in a hyper-connected world;
- On real time monitoring of cyber threats; and
- Actively contributes in other themes in the CRC.

CSU is the largest provider of post-graduate degrees in IT with a strong focus in cyber security through its School of Computing and Mathematics in Australia. Courses offered at CSU reflect the research expertise in this area. On the national security front of cyber security CSU offers programs in intelligence analysis and a Masters of Terrorism and Security Studies through its Australian Graduate School of Policing and Security. Our newly launched programs in this area, the Master of Cyber Security and Master of Cyber Security and Investigations have been well received with a large number of student enrolments in 2018.

See https://bjbs.csu.edu.au/research/areas/internet-security#horizontalTab3

Organisational Chart
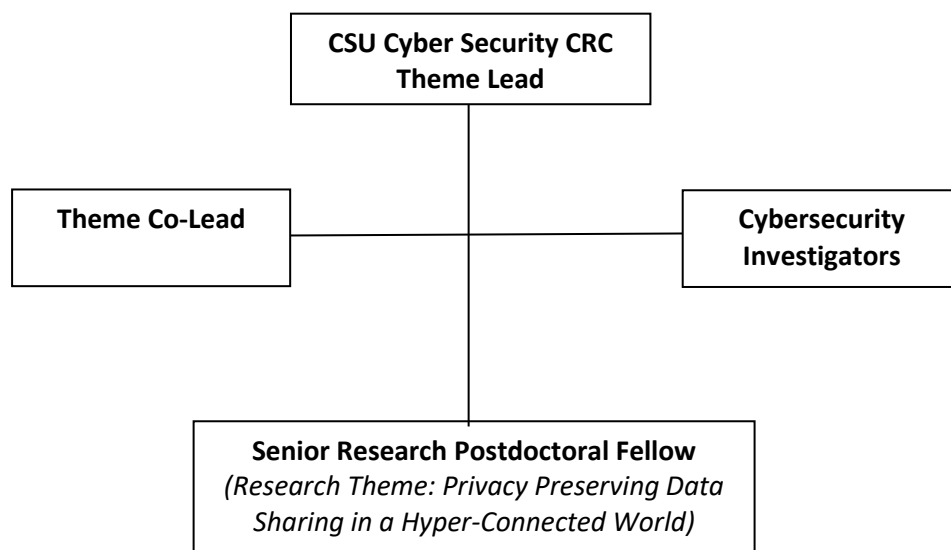
Key Working Relationships

CSU Cyber Security CRC: Theme Lead
CSU Cyber Security CRC project team
Research Office
Faculty and School Staff

Reporting Relationships

This position reports to: CSU Cyber Security CRC Theme Lead
This position supervises: Nil

Position Overview

As a member of the CSU Cyber Security CRC team, the Senior Postdoctoral Fellow will undertake research as directed by the Theme Lead / Co-Theme Lead in the area of "Privacy preserving data sharing in a hyper-connected world" focusing on the following sub areas:

- Propose new model and methodology for discovering and measuring sensitive information in object locations, features and labels, and user habits.
- Develop new theories and methods for privacy protection for different categories of objects.
- Propose efficient and dynamic index structures to support fuzzy searching for privacy-protected objects.
- Develop new theories and methods for intelligent secure searching and fusion of searching results.
- Propose a secure end-to-end cloud based service framework for the IoT that supports application data analysis, storage and processing to provide data security.
- Investigate techniques for enabling context-aware privacy preservation on IoT middleware platforms.
- Investigate the applicability of block chain technology for designing a decentralised, lightweight and secure architecture for accessing IoT data.

Principal Responsibilities

1. Conduct high quality research and contribute to knowledge through scholarship, publication and presentation and execute a research plan that aligns with CSU's Research Narrative and objectives including securing external funding and maintaining up-to-date research records within CSU's research database;

2. Support and liaise with the cyber security researchers within the university and across the CRC consortium to ensure high quality research outcomes;

3. Effectively liaise with staff across the University and with partners to ensure high quality research;

4. Contribute to the preparation of research proposal submissions to the CRC and external funding bodies;

5. Design experiments, collate results, write up, and contribute to the preparation of academic papers for submission in peer reviewed journals and conferences;

6. Attend meeting associated with the research wherever required and present research outcomes;

7. Build strong professional relationships with CRC partners;

8. Contribute to the governance, marketing and promotion, and administrative activities to facilitate the work of the CRC and wider University;

9. Assist in supervision of PhD and honours thesis students;

10. Other duties appropriate to the role as required.

Capabilities

1. Good policy, legal and ethical understanding of privacy and cybersecurity.

2. Well-developed skills in the computing area;

3. A proven ability to engage with a wide range of academics and industry partners;

4. Excellent oral and written communication and teaching skills.

Physical Requirements

1. Physically able to sit for an extended period of time to perform reading, writing and computing related activities, including keyboard and mouse operations;

2. On occasion travel in/drive a university vehicle within the terms of the University's Driving Hours Guidelines and Policy available at: https://policy.csu.edu.au/view.current.php?id=00176 and https://policy.csu.edu.au/view.current.php?id=00184.

Selection Criteria

Applicants are expected to address the following selection criteria when applying for this position.

Essential Criteria

A. A PhD relevant to the computing discipline, computer science, information technology or related areas in cybersecurity.

B. Excellent research track record in information security, privacy preserving and/or distributed systems, as demonstrated by publications in top-tier cyber security, or law, policy and ethics security privacy, and/or systems journals and conferences.

C. Demonstrated capabilities to conduct leading research in the area of information security, privacy preserving systems, distributed systems, including the measurement, modelling, law, policy and ethics and implementation of such systems and/or a record of research demonstrated capacity to make an autonomous contribution.

D. A demonstrated ability to effectively liaise with academic and industry colleagues and as well as administrative staff, and work as a member of a team.

E. Strong networking skills and an ability to support the national and international positioning of the university in cyber security.

F. Ability to work independently and as part of a team to complete tasks within agreed timeframes.

G. Capability in higher degree by research supervision.

H. Excellent written and oral communication and interpersonal skills including negotiating, presenting, active listening and the giving and receiving of constructive feedback.

Information for Prospective Staff

Your Application

E-recruitment is the method by which CSU manages its recruitment processes and it is preferred that all applications be lodged using this method. Please refer to www.csu.edu.au/jobs/.

If intending applicants are unable to access this website, please contact the HR Service Centre on 02 6338 4884.

Staff Benefits

CSU is committed to providing an employment environment that fosters teamwork, innovation, reflective practice, continual learning, knowledge sharing and opportunities for staff to achieve their full potential. CSU is committed to providing a flexible working environment that encourages employees to live a balanced lifestyle, combining work and family responsibilities.

To find out more: http://www.csu.edu.au/jobs/working-with-us/benefits-and-rewards.

Essential Information for Staff

- All employees have an obligation to comply with all the University's workplace health & safety policies, procedures and instructions and not place at risk the health and safety of any other person in the workplace;
- All employees are required to be aware of and demonstrate a commitment to the principles of equal opportunity in the workplace;
- All employees are to ensure the creation and maintenance of full and accurate records of official University business adheres to the University's Records Management Policies;   and
- All employees are expected to undertake an induction program on commencement.

Further information regarding the policy and procedures applicable to Occupational Health and Safety and Equal Opportunity can be found on the CSU website http://www.csu.edu.au/division/hr/.

Further information regarding the policies and procedures of CSU can be found in the CSU Policy Library at: https://www.csu.edu.au/about/policy.

The following links are listed from CSU Policy Library on relevant specific policies:

- Code of Conduct
- Staff Generic Responsibilities Policy
- Delegations and Authorisations Policy
- Outside Professional Activities Policy
- Intellectual Property Policy