

CYBER SECURITY COOPERATIVE RESEARCH CENTRE (CSCRC) GRADUATE SCHOLARSHIPS

The CSCRC aims to inspire the next generation of cyber security professionals through working with some of the best cyber security researchers in Australia, and engagement with the CSCRC Industry & Government Participants.

About this Postgraduate Research Scholarship

Scholarship provider: Cyber Security Cooperative Research Centre (CSCRC)

Level of study Postgraduate Research, PhD

Available for: Full time domestic and international applicants
Stipend value: Refer to 'Remuneration and additional benefits'

Period of stipend support: 3 years **Number of scholarships:** 1

Applications open:3/09/2019Applications close:30/11/2019

School(s) or Centre(s): School of Computer Sciences

About Cyber Security CRC

The goals of the Cyber Security CRC (CSCRC) is to be an independent and collaborative centre where industry, government and research partners work together to create new products, services and systems that deliver a secure and resilient national cyber security capability, and enhance cyber expertise for the nation, making Australia a safer place to do business. CSCRC also aims to attract, inspire, mentor and develop the next generation of cyber security professionals by offering the best and brightest students scholarships through our participating universities.

The field of cyber security aims to secure the confidentiality, integrity and availability of data by preventing unauthorised access or disruption to systems. It is primarily a domain of computer science, but there are range of problems related to cyber security that are best solved by cross-disciplinary approaches to the subject. Graduates are welcome to apply for a PhD or Masters scholarship in cyber security based on one of the following themes:

- Resilient Systems: To automate the assessment of high-volume network traffic to identify 'red flags' that enable cyber security professionals to better prioritize their time on higher value-adding activities.
- IoT Systems Security and Configuration: To develop new approaches to identify threats and secure the deployment of the Internet of Things.
- Next Generation Authentication Technologies: To develop authentication technologies to protect access to control systems used in the water, power, and mining industries.
- **Emerging Threats Network Forensics and Response:** To develop techniques to trace (at a forensic level) where cyber threats have originated, and automate this ability across complex infrastructure and architecture environments.
- Platform and Architecture for Cyber Security as a Service: To develop a secure integrated platform that will enable cyber security providers to offer robust security services.
- Security Automation and Orchestration: To develop technologies for security orchestration that can be provisioned as cyber security solutions as a service.
- **Privacy Preserving Data Sharing in a Hyperconnected World:** To develop techniques for sharing threat data whilst ensuring data remains confidential, and provide algorithms for accessing and analysing threat data, metadata and patterns.
- Real-Time Monitoring of Cyber Security Threats: To develop visualization techniques that enable rapid situational awareness of
 cyber threats and risks that will deliver confidence in the quality and provenance of shared information.
- Law and Policy: To develop theoretical frameworks, practical knowledge for studying and addressing the cyber security
 challenges with implications for legal, policy, economic, psychological aspects.

Further details of the CSCRC Government and Industry Participants may be found at: https://www.cybersecuritycrc.org.au

Remuneration and additional benefits:

The CSCRC Scholarships are provided by the CSCRC for three years (with a possible 6 months extension) for a PhD and 1.5 years full-time (or 3.5 years part-time) for a Masters (by Research) with a possible 6 months extension. Scholarships of \$50,000 per annum are available for Australian, New Zealand students, or Permanent Residents of Australia. Scholarships of \$37,000 per annum are available for International students. Further, depending on the thesis topic and industry supporter, a top-up of up to \$13,000 per annum may be available. Top-up CSCRC Research Scholarships of \$23,000 per annum are available for Australian, New Zealand students, or Permanent Residents of Australia, and \$10,000 per annum for International students for any student who already has a Graduate Scholarship such as through the Research Training Program.

Access to authorised travel, tailored professional development training and research project funds will also be available. Students will enjoy the added advantage of also working within the CSCRC network that includes industry participants.

How to Apply

The potential applicants should discuss your qualification and research interest with the University of Adelaide's lead researcher in the CSCRC: ali.babar @adelaide.edu.au

For a detailed feedback on your qualification and Expression of Interest (EOI), you are encouraged to send the following documents to ali.babar@adelaide.edu.au:

- Your CV (2 pages).
- A research proposal closely aligned with one of the CSCRC Research Themes.
- Copies of your academic transcripts.
- A one-page statement outlining which CSCRC Scholarship Category (outlined above) you are seeking to apply for, and why you
 would be a suitable CSCRC Scholar.

Applications close

CSCRC Graduate Scholarship applications will be considered throughout the year.

For further information

For a confidential discussion regarding this position, contact: **Professor Ali Babar**School of Computer Sciences
P: +61 (0) 831 34478

E: ali.babar@adelaide.edu.au

The University of Adelaide is an Equal Employment Opportunity employer. Women and Aboriginal and Torres Strait Islander people who meet the requirements of this position are strongly encouraged to apply.