Work Placement Position
CSU Research - Insider Threat Detection

Charles Sturt University offers a unique work placement opportunity for students to participate in a cutting-edge research project on insider threat detection. This project aims to develop and implement advanced techniques for identifying and mitigating insider threats within organisational networks. Participants will gain hands-on experience with state-of-the-art tools and methodologies in cybersecurity and data science.

Subject:	Session 2 (60): ITC599 (140 Hours)
Specialisation:	Cyber Security, Data Science, Software Development, Networking and AI
Location:	Port Macquarie
Availability:	1 position
Further information:	**Key Responsibilities:** • Assist in the development and deployment of insider threat detection models. • Conduct data analysis and curate datasets relevant to insider threat scenarios. • Collaborate with the research team to refine methodologies and improve detection accuracy. • Participate in regular project meetings and contribute to preparing research reports and presentations. • Implement and test security measures within simulated environments using on-premises systems and IoT devices. **Learning Opportunities:** • Gain practical experience in cybersecurity, data science and governance. • Work with advanced security systems and IoT devices. • Develop skills in data analysis, threat modelling, and security testing. • Enhance understanding of the MITRE ATT&CK framework for threat analysis. • Collaborate with experienced researchers and industry professionals. **Requirements:** • Enrolment in ITC599 at Charles Sturt University. • Strong interest in cybersecurity and data science. • Basic understanding of network security principles and data analysis techniques. • Ability to work both independently and as part of a team.

Position: Software Development CSU Student Research Assistant

- Position: Software Development CSU Student Research Assistant
- Project: Insider Threat
- Location: Port Macquarie Campus
  Supervisor: Research Assistant

Role Overview: We seek a talented Software Development student to join our Insider Threat Project team. The successful candidate will assist in developing software solutions for threat detection, integrating security tools, and collaborating with other teams to enhance the overall security architecture.

Key Responsibilities:

- Develop and maintain software solutions for threat detection and monitoring.
- Integrate security tools like EDR, DLP, and SIEM with existing systems.
- Write and test code for various components of the project.
- Collaborate with the cybersecurity and data science teams to enhance threat detection models.
- Document software development processes and contribute to technical documentation.
- Conduct code reviews and ensure software quality and security standards are met.
- Stay updated on the latest software development practices and security trends.
- Contribute to literature reviews and assist in paper writing using Overleaf.
- Report to the Research Assistant and support their tasks as needed.
- Participate in project administration using Notion and facilitate collaboration through Google Chat/Workspace.

Qualifications:

- Currently enrolled in a Software Development program.
- Proficiency in programming languages such as Python, Java, or C++.
- Experience with software development tools and methodologies.
- Basic understanding of cybersecurity principles and tools.
- Strong analytical and problem-solving skills.
- Ability to work independently and as part of a team.
- Good written and verbal communication skills.

Position:

How to apply:

Email cover letter, résumé and academic transcript to:

- Dr. Sabih Rehman (sarehman@csu.edu.au); and

- Supervisor: Louis Hourany, Lecturer, School of Computing, Mathematics and Engineering. Email: lhourany@csu.edu.au

Start and end date: 01/08/2024 – 25/10/2024