



POSITION DESCRIPTION

Position Title:	Software & Systems Security Researcher
Position Reference Number:	PDCEWD003
Division	Cyber and Electronic Warfare Division
Position Classification:	S&T4
Position Location:	Edinburgh
Security Level:	TS NV2 minimum
Minimum Academic Qualification:	PhD
Enquiries:	Joshua Green, Joshua.Green@dst.defence.gov.au , (08) 7389 4135

Academic Disciplines

Aerospace/ Aeronautical Engineering, Naval Architecture	Chemical, Radiological, Biological, Food sciences	Materials Science
Computer Sciences, IT, Software Engineering, Telecommunications	Mathematics and physics	Psychology and Social Sciences
Mechanical and Mechatronic Engineering (including robotics)	Electronic/ Electrical Engineering	Other

Position Overview

As part of a Science & Technology (S&T) team, the Software & Systems Security Researcher will undertake applied research towards developing software systems for Autonomous Cyber Operations (ACO) through development of cyber security and cyber warfare functions, and the integration with Artificial Intelligence (AI) and Machine Learning (ML) techniques.

The role calls for an active researcher, or research engineer, with a background in computer science and cyber security, an interest in AI and ML techniques, and experience developing novel prototypes and technology.

The role provides exposure to S&T challenges in cyber security and operations in both military and intelligence contexts from the perspective of achieving autonomy. In addition, there exists the opportunity to work closely with Australian and international research partners, Defence clients and cyber security domain experts.

The successful candidate will be supported with training in aspects of cyber security as required, and encouraged to further develop their scientific or engineering expertise.

Position Duties

Under guidance and as part of a multi-disciplinary team, the candidate will:

- Contribute to software development and research activities to develop and apply cyber security, AI and ML technologies towards Autonomous Cyber Operations.
- Design and develop software systems, manage source code, work with virtual/cloud computing environments.
- Prepare publications and reports, present outcomes, demonstrate technologies and interact with clients and cyber security communities.
- Maintain up to date knowledge in chosen scientific or engineering disciplines and broaden knowledge across related areas include cyber security and operations.
- Enhance S&T capability through targeted collaboration with other DST Group teams, academia, industry and other national/international research agencies.

Other Requirements

Applicants must meet eligibility criteria to obtain **Top Secret Negative Vetting 2** security clearance.