



POSITION DESCRIPTION

Position Title:	Autonomous Systems Scientist
Position Reference Number:	ECRWCD010b
Division	Weapons and Combat Division
Position Classification:	S&T 3-4
Position Location:	Edinburgh, SA
Security Level:	NV 1
Enquiries:	Thong Nguyen thong.nguyen@dst.defence.gov.au (08) 7389 6412

Aerospace/ Aeronautical Engineering, Naval Architecture	Chemical, Radiological, Biological, Foodsciences	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

Effective autonomous capability is essential to achieving the full potential of modern defence systems. As part of the Autonomous Systems Discipline, the Autonomous Systems Scientist will conduct research and experimental analysis in autonomous system applications to enhance the capability of Combat and Mission systems. The research will involve developing and analysing novel AI and Machine Learning algorithms, and the development of decision aids and tools. Simulation-based experimentation will be used to explore and evaluate algorithms and decision aids.

The role provides exposure to S&T challenges in automation and decision aid development for Combat and Mission Systems. In addition, there exists the opportunity to work closely with Australian and international research partners, Defence clients and industry partners. The successful candidate will also be supported with training in aspects of Combat and Mission Systems as required, and encouraged to further develop their scientific expertise and engage with the scientific community.

Position Duties

Under broad guidance and as part of a multidisciplinary team, the Autonomous Systems scientist will:

1. Contribute to research developing, adapting and applying Artificial Intelligence and/or Machine learning techniques towards Combat and Mission Systems applications.
2. Develop software as required to support the development and evaluation of algorithms.
3. Prepare scientific publications and reports, present outcomes, demonstrate technologies and interact with academic/scientific community.
4. Maintain up to date knowledge in specific areas of AI and ML and broaden knowledge across areas relating to Combat and Mission Systems.
5. Enhance S&T capability through targeted collaboration and/or interaction with other DST Group teams, academia, industry, military stakeholders, and other research agencies in Australia or oversea.

Other Requirements

- Appointees will be required to undertake occasional interstate and overseas travel, and occasionally attend land, air or sea trials.
- Appointees will be initially be engaged on a **BASELINE** security clearance with an upgrade to a **Negative Vetting 1 (NV 1)** security clearance required upon commencement.