



POSITION DESCRIPTION

Position Title:	Computer Vision Scientist
Position Reference Number:	ECRMD011b
Division	Maritime Division
Position Classification:	S&T 3-4
Position Location:	Fishermans Bend (VIC)
Security Level:	NV1
Enquiries:	Vivienne Wheaton Vivienne.wheaton@dst.defence.gov.au

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

The Computer Vision Scientist will contribute to the development of evaluation tools for assessment of detectability of maritime and land platforms in visible and infra-red videos. Under limited direction the Computer Vision Scientist will work as part of a small team and will contribute to the development of algorithms to quantify the detectability of targets in visible and infra-red videos, experimental design for measuring detectability of targets in the laboratory and in the field, software development, analysis of field and laboratory data and reporting. Familiarity with object detection, target tracking, machine learning, and the application of virtual reality would be advantageous.

Position Duties

Under limited direction, the Computer Vision Scientist will:

- Develop and implement advanced digital signal processing, image processing and video processing techniques to measure the detectability of targets in visible and infra-red videos.
- Develop laboratory-based human observer trials to measure the detectability of maritime and land platforms in videos.
- As part of a team, undertake field trials to measure the visible and infra-red signature of maritime and land platforms.
- Work collaboratively with team members from DST and academia to improve digital signal processing algorithms, and human observer trials for measuring the detectability of targets from videos.
- Prepare reports of research outcomes that are suitable for publication in the scientific literature.
- Provide advice to military partners in the form of verbal and written reports of research outcomes.

Other Requirements

Appointees will be initially engaged on a **BASELINE** security clearance with an upgrade to a **Negative Vetting 1 (NV1)** Security Clearance.

Infrequent interstate travel will be required. Participation in field trials within Australia is a requirement of the position.