Position Title:	**Intelligent Data Analytics for Decision Support**
Position Reference Number:	R&IJOAD004
Division	JOAD
Position Classification:	S&T3-4 Above
Position Location:	DST Edinburgh
Security Level:	NV1
Enquiries:	Dr Mark Nelson, mark.nelson@dst.defence.gov.au, ph: (08) 7389 5921

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 Australian Defence Force (ADF) and National Security agencies require trusted analytical methods to help them better understand the complex, congested and contested environments in which they conduct operations to ensure Australia's national interests. These analytical methods have to process increasing volumes of data and information to support sense-making of and operating environment with respect to the context, objectives and other guidance, in order to plan military operations and monitor their execution.

A wide range of methods are being investigated including: modelling, simulation, data mining, machine learning, knowledge representation and reasoning, autonomy and agent-based systems. Applicants should hold a bachelor degree in areas such as computer science and mathematics, while also possessing strong software engineering skills. This position provides a unique opportunity to work with staff across a range of disciplines and contribute to the development of new concepts and technologies for Defence decision support systems in the future.

Position Duties

Under guidance, the successful candidate will:
1. Collaborate with interdisciplinary S&T teams both within DST and external partners (international, industry or academic).
2. Liaise with stakeholders in Defence to understand their challenges, determine their prioritised requirements and manage their expectations.
3. Investigate and apply appropriate techniques to solve client problems which may entail the development of prototypes (including functional software) or extension of existing software applications.
4. Develop and maintain knowledge of emerging technologies and techniques applicable to decision support.
5. Undertake and contribute to research activities to enhance sense-making and decision support.
6. Be engaged in supporting related activities, including scenario definition, design of experiments, data collection and analysis, documentation of work performed, and reporting results to stakeholders in DST and elsewhere in Defence.

Other Requirements

There will be some interstate travel to engage with clients, and to attend courses, workshops and conferences.
The appointee must qualify for a Negative Vetting 1 (NV1) security clearance following commencement.