

## CEWD002 CYBER SECURITY SCIENTIST/ TECHNOLOGIST- CYBER MISSION ANALYTICS

**Location:** Edinburgh, South Australia

### Overview:

As a Cyber Security Researcher in the Automated Analytics & Decision Support group, within the Cyber & Electronic Warfare Division, you will work on novel techniques and software technologies to understand and improve the security posture and operational survivability of complex cyber-physical systems of importance to Australia; specifically to our Military and National Security communities.

Under guidance of senior staff, your role will include the following activities and objectives:

- Participate in R&D activities with a focus on the development of software technologies to support Defensive Cyber Operations Teams who defend mission dependent cyber-physical systems such as Military Ships and Aircraft against sophisticated cyber threat actors;
- Investigate and develop new concept demonstrators and software technology elements relevant to cyber mission modelling, impact assessment of cyber-attack, threat modelling and automated vulnerability analysis;
- Develop and deliver technology addressing the requirements of Military and National Security clients;
- Prepare to scientific publication standard, papers discussing the work undertaken;
- Assist in the installation and maintenance of group S&T infrastructure, including computer systems and networks in support of R&D and client tasks

### Academic Requirement:

A PhD in one of the following areas (or similar):

- Computer Science
- Computer Systems Engineering

With specific research focus in areas such as:

- Data Science
- Artificial Intelligence
- Machine Learning
- Mathematics

### Other Role Specific Requirements:

Demonstrable understanding and practical experience in several of the following:

- Artificial Intelligence & Machine Learning
- Data Analytics
- Complex Systems Analysis
- Modelling & Simulation
- Programming or Software Development

Knowledge and practical experience in the following is desirable:

- Cyber Security
- Visual Analytics

### Notes:

Appointees will be initially be engaged on a **BASELINE** security clearance with an upgrade to a **Top Secret Negative Vetting (TSNV) Security Clearance** required upon commencement.

A TSNV clearance is the minimum security clearance requirement for this role although higher security clearances may be required after commencement.

### Position Specific Written Application Question: (400 words max)

“Explain how your knowledge, skills and attributes can be applied to the field of cyber security research?”

You may wish to consider aspects such as:

- Your personal attributes such as problem solving , initiative, teamwork and learning ability
- Your technical knowledge in areas such as Artificial Intelligence, Machine Learning, Data Science and Cyber Security.
- Your experience in programming and developing software applications.