



POSITION DESCRIPTION

Position Title:	Communication Network Knowledge Researcher
Position Reference Number:	R&ICEWD002
Division	Cyber and Electronic Warfare Division
Position Classification:	S&T 3
Position Location:	Edinburgh
Security Level:	NV2
Minimum Academic Qualification:	Bachelors Degree in a relevant Engineering or Science field
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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 Communication Network Knowledge Researcher will research and develop techniques to model and reason about communication networks for enhanced Cyber situational awareness. By applying artificial intelligence and information fusion to diverse and complex sources of data, Network Knowledge aims to build a complete and accurate model of the network from all available data. The model represents network structures, components and behaviours, thereby enabling automation of tasks such as constructing topologies, determining paths through the network, and identifying anomalies.

The successful candidate will have opportunities to collaborate with Defence clients, academia and overseas research partners. There are further opportunities for training, tertiary education, secondments to Australian and overseas partners, workshops, and conferences. Underpinning this is a strong Science & Technology career path within DST Group, allowing development as a technical leader or deep specialisation in a chosen field.

Position Duties

- Develop deep technical expertise and undertake challenging applied research in AI, knowledge representation, information fusion, and automated reasoning for Network Knowledge.
- Develop expertise in communication network protocols and network devices.
- Conduct software development to prototype tools and techniques.
- Engage with clients and other stakeholders to identify requirements and deliver outcomes.
- Represent and communicate research to clients, visitors and other stakeholders
- Explore, evaluate, and provide advice on new and emerging network technologies of significance to Defence and National Security clients.
- Build constructive relationships with team members and stakeholders.
- Assist sustaining CNR S&T infrastructure, including computer and networking systems.

Other Requirements

Appointees will initially be engaged on a BASELINE security clearance with an upgrade to a Top Secret Negative Vetting (TS NV2) security clearance required upon commencement as the minimum clearance for this position. A preparedness to submit to a Top Secret Positive Vetted clearance is essential for this role.