NSID001 Postdoc: Radar Signatures

Location: Edinburgh, South Australia

Overview:
As member of DST's National Security Intelligence Surveillance and Reconnaissance Division, you will undertake electromagnetic modelling, analysis of measured data, and conduct research into high resolution radar signatures in order to improve Defence's radar signature capabilities. You will be a member of the Signatures and Phenomenology Science and Technology Capability (STC). The STC is concerned with the radar scattering properties of platforms and other targets of interest to Defence. Investigations are carried out using computer models, scaled measurements and trials with Defence assets. In addition to determining radar signatures, the STC develops radar signature control strategies for Defence platforms, and conducts research into signature features and phenomenology with potential surveillance/counter-surveillance and target identification applications.

The STC has strong links with other parts of Defence, universities, industry and international partners.

Academic Requirements:	**Other Role Specific Requirements:**
A PhD in: • Physics • Electronic engineering • Computer systems engineering • Mathematics	Demonstrated experience, or ability, in any or all of the following areas: • Computational electromagnetics • Radar signal processing • Computer programming to support modelling, simulation, data capture and analysis • Design and analysis of radio frequency (RF) experiments

Notes:
Appointees will be initially engaged on a **BASELINE** security clearance with an upgrade to a **Secret/ Negative Vetting 1 Security Clearance** required upon commencement.

The successful applicant will be expected to participate in field trials in remote locations.

Written Application Position Specific Question (400 words max)

How can your knowledge, skills and attributes be applied to the field of radar signatures 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 computational electromagnetics, radars and/or radio frequency (RF) systems.
• Your experience in programming and developing software models and data analysis tools.