POSITION DESCRIPTION

Research Associate
Quantum Estimation and Control

Position Level: Level A
Faculty/Division: UNSW Canberra (ADFA)
School: School of Engineering and Information Technology
Position Number: 00097739
Original Document creation: 27/09/2021

Position Summary

The Research Associate position is situated within the School of Engineering and Information Technology. As a member of a research team, the Research Associate will undertake research on the project Efficient Parameter Identification and Robust Control of Quantum Systems which is supported by U.S. Office of Naval Research Global and led by Associate Professor Daoyi Dong and Professor Ian Petersen. The Research Associate will contribute to the development of research results and their publication in international journals, participate at a national and/or international conference/s and undertakes possible teaching duties.

The role of Research Associate reports to the Chief Investigator (CI) of the grant Efficient Parameter Identification and Robust Control of Quantum Systems.

Accountabilities

Specific accountabilities for this role include:

- Conduct research in Quantum Estimation and Control, both independently and as part of a team.
- Contribute to the writing of scientific papers and reports for international journals and progress reporting to other researchers.
- Assist with the coordination of research activities and actively contribute to research outputs to meet project milestones.
- Contribute to the preparation of research proposal submissions to external funding bodies.
- Contribute to School teaching activities as required.
- Interact with undergraduate and postgraduate students and assist in their supervision.
- Undertake a range of administrative tasks as directed.
• Contribute to the common activities of the School, Faculty and University.

• Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others

• Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](https://www.unsw.edu.au/values) and the [UNSW Code of Conduct](https://www.unsw.edu.au/about-us/unsw-code-conduct).

Skills and Experience

• A PhD (or PhD thesis submission by 1 December 2021) in Quantum Physics, Electrical Engineering or an area related to quantum information and quantum optics.

• A demonstrated ability to conduct innovative and independent research.

• A record of papers in high quality journals and/or conferences of high ranking in the field.

• Ability to conduct high quality teaching in a University environment and willingness to undertake teaching duties as required.

• Excellent interpersonal, oral and written communication skills appropriate for interacting effectively team members, collaborators and colleagues across the Faculty.

• Demonstrated ability to work as a member of a multi-disciplinary team showing initiative and taking direction as appropriate to the situation.

• Demonstrated ability to complete tasks within agreed time frames, with suitable supervision.

• Knowledge of health and safety responsibilities and the ability and capacity to implement required UNSW health and safety policies and procedures.

Pre-Employment checks required for this position

• Verification of Qualifications

• Criminal History Check

• Identification Check

• Australian Working Rights Check

About this document

This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.