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POSITION DESCRIPTION

Research Associate

Hypersonic boundary layer transition

Faculty/Division	UNSW Canberra (ADFA)
Position Level	Academic A
School	School of Engineering and Technology
Position number	00198525
Original document creation	18 June 2024

Position Summary

The Research Associate position is situated within the School of Engineering and Technology. As a member of the Hypersonics research team, the Research Associate will undertake research as directed by the Chief Investigators (CIs). The position will involve research activity in multidisciplinary settings requiring skills in theoretical and numerical modelling, coding as well as data analysis. The Research Associate will contribute to the development of research results and their publication in international journals, and participate at a national and/or international conference/s. The role of Research Associate reports to the CIs of the grant.

Accountabilities

Specific accountabilities for this role include:

- Develop theoretical framework and implement numerical model in a programming language, e.g. Python.
- Perform analysis of existing time-series data, e.g. spectral and single- and two-point correlation methods.
- Conduct research as directed by the CIs.
- Prepare reports summarizing the results gained from the research.
- Prepare journal and conference publications based on the research.
- Contribute to the preparation of research proposal submissions to external funding bodies.
- Interact with undergraduate and postgraduate students and assist in their supervision.
- 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 and the UNSW Code of Conduct.

Skills and Experience

- A relevant undergraduate degree in Engineering or Science, and a PhD in Applied Mathematics or in an area related to Fluid mechanics.
- A demonstrated ability to conduct innovative and independent research in a relevant area.
- A demonstrated ability to write reports and preferably a record of papers in high quality journals and/or conferences of high ranking in the field.
- 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 – If applicable
- Criminal History Check
- Identification Check
- Australian Work 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.