## Position Summary

The Research Centre for Integrated Transport Innovation (rCITI) which is part of the School of Civil and Environmental Engineering, represents a strategic effort with research, government and industry partners that unites and substantially augments the wide range of interdisciplinary research across campus. The Research Associate will work collaboratively with academic colleagues at rCITI to build and develop large-scale transport network models that assist in planning cities.

The role of Research Associate reports to Professor S. Travis Waller and has no direct reports.

## Accountabilities

Specific accountabilities for this role include:

* Conducts research in the area of transport network modelling and optimisation; transport infrastructure development and policy; facility deployment for driverless electric vehicles; traffic flow theory; accident prediction and prevention; road/rail transportation or transport engineering independently and as part of a team, including leading some areas of the project where the opportunity arises and where appropriate.
* Contribute to the writing of scientific papers and reports for international journals and progress reporting to other researchers and industry partners.
* 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 funding bodies and actively seek collaboration with industry partners as appropriate.
* Participate in and/or present at conferences and/or workshops relevant to the project as required.
* Assist with the supervision of research students in the research area where required.
* Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](https://unsw.sharepoint.com/sites/values-in-action) and the [UNSW Code of Conduct](https://www.gs.unsw.edu.au/policy/documents/codeofconduct.pdf).
* 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.

## Skills and Experience

* BSc, MSc or PhD in computer science or related discipline.
* Solid and well-established experience with various computer programming languages including python, R and JavaScript, and smartphone app development.
* Demonstrated commitment to undertake and develop research in blockchain platforms, and related programming languages.
* Demonstrated understanding about shared economies and shared mobility options.
* Deep understating about data analytic methods including statistical, and data mining methods.
* Demonstrated ability to conduct independent research with limited supervision.
* Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
* Strong interpersonal skills with demonstrated ability to communicate (written and oral in English) and interact with a diverse range of stakeholders and students.
* An understanding of and commitment to UNSW’s aims, objectives and values in action, together with relevant policies and guidelines.
* Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

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.