

Telco Industry PhD Project

PhD Scholarship

Agent-Based Models for Simulation on Mobility Behaviour and Intelligence

PROJECT SUMMARY

The aim is to use Telco data together with other sources such as transport and land use information to build Mobility Intelligence Insights about people, places and movements, which can empower applications in transport, retail, telco network optimisation amongst others.

For this research topic it would be good to have some knowledge/interest in:

- developing methods to estimate and predict dynamic movements of mobile users in real-time using multi-source trajectory data, and
- develop network-related matrixes to evaluate the quality of mobile services

SELECTION CRITERIA

- Excellent degree (Master/First-Class Honours) in computer science, statistics, mathematics or similar programs
- Good knowledge of mathematical foundations of modern machine learning/AI algorithms and statistics
- Data processing, cleaning and fusing technique
- Knowledge in transport planning and modelling
- Fluency in coding using Python and experience in Python data analysis libraries such as pandas, numpy and scikit-learn
- Experience in cloud solutions is an advantage
- High degree of creativity, commitment, analytical competence, and teamwork
- High proficiency in English, both written and spoken

FUNDING

The successful candidate will receive an annual stipend of \$40,000 AUD (tax free) for 3 years (with the potential extension of six months), plus possible other supports for conference attendance and professional development.

BENEFITS

The student will gain real-world experience in the field of data science, transport modelling and ITS. The project will strengthen student's technical and soft skills and provide opportunities to meet potential employers and create an industry network early in the PhD studies.

ELIGIBILITY

The scholarship is open to both domestic and international applicants who are already in Australia. It is ideal to start the PhD in the first term of 2021.



HOW TO APPLY

Please email your CV to Associate Professor Taha Rashidi rashidi@unsw.edu.au

To apply for PhD admission and scholarship please visit <u>https://research.unsw.edu.au/submit-application</u>

Application is open until a suitable candidate is recruited.