

Postgraduate Scholarships in Intelligent Transportation Systems and V2X

Three full-time postgraduate scholarships are available for suitably qualified candidates with a good honours degree or equivalent in engineering, science or mathematics to undertake research studies leading to **PhD in Intelligent Transportation Systems and V2X** at the University of Technology Sydney.

The successful candidates will be supervised by Prof Guoqiang Mao, Professor of Wireless Networking, IEEE Fellow, IET Fellow, University of Technology Sydney and conduct research in one of the following topic areas:

- Sensing and communication infrastructure design for smart roads
- High-precision localization techniques for autonomous vehicles in complex environments
- Road-vehicle cooperation techniques to overcome the sensing and communication limitations of vehicle on-board devices
- Big data modelling and analysis of road traffic data
- Advanced road sensing techniques
- Road structural health monitoring and analysis techniques

BRIEF DESCRIPTION OF RESEARCH AREA: Connected and autonomous vehicles (CAVs) are set to completely disrupt countless aspects of daily personal life, business, and technology in the decades to come. The safe and efficient mass deployment of CAVs are simply not feasible without the support of revolutionary, next generation smart road infrastructure. This project tackles the critical problem of smart infrastructure design by investigating road sensing and communication infrastructure to support accurate and reliable vehicle sensing and localisation in complex environments.

ABOUT UTS: UTS is a dynamic and innovative university in central Sydney. One of Australia's leading universities of technology, UTS has a distinct model of learning, strong research performance and a leading reputation for engagement with industry and the professions.

The most prestigious international rankings agencies have ranked and rated UTS highly in recent years. Here are some of our recent achievements:

- Highest performing university in Australia under 50 years old (Times Higher Education Young University Rankings 2017), (QS Top 50 Under 50 2018)
- Ranked in to the Top 200 universities globally (QS World University Rankings 2018)
- Winner, Hybrid Learning Award (QS Reimagine Education Awards 2015)
- 8th highest performing university in the world under 50 years old (QS Top 50 Under 50 2018)
- 5 stars for excellence across all 8 categories (QS Stars Rating 2015–2017)

ELIGIBILITY: Applicants should have solid mathematical, telecommunications, electrical or civil engineering background. **The scholarship is only for PhD candidates.** Successful applicants should meet the admission requirements for PhD and are expected to start their enrolment at the University of Technology Sydney in Semester 2, 2018 or Semester 1, 2019. **Preference may be given to candidates who can start early.**

AMOUNT AWARDED: The scholarship is currently valued at **A\$27,082 per annum** (tax exempt) and may be renewed for up to three and half years, subject to satisfactory progress. **Successful applicants from overseas may also be awarded a tuition fee waiver scholarship.**

APPLICATION GUIDE: Further information can be obtained from Professor Guoqiang Mao (E-mail: guoqiang.mao@uts.edu.au). Applications should be sent directly to Prof Mao at the above address and should include a curriculum vitae, a copy of an academic transcript, a research proposal in the aforementioned mentioned areas, and the names and contact details of at least two referees. For overseas students, English test results, e.g. IELTS or TOFEL, should be included.

CLOSING DATE: The offer is available until the position has been filled