2019/2020 EIS Summer Research Scholarship

Supervisor: A/Prof. Lam Phung

A scholarship of \$5000 is provided for an excellent UOW undergraduate student to participate on a 10-week research project between 12/2019 and 02/2020.

Project Title: Camera-based Pedestrian Path Detection for Assistive Navigation of Blind People

<u>Project Description</u>: The aim of this project is to develop a portable camera-based system to locate the pedestrian path in crowded scenes in real-time. The system, intended for assistive navigation of blind people, will utilise recent advances in deep learning and fully convolutional neural networks for semantic image segmentation. In the past decade, deep learning has gained fervent interests in machine learning, computer vision, signal processing and many other fields. It has been judged by MIT Technology Review as one of the top-10 breakthrough technologies in 2013. This project will involve data collection, algorithm implementation, and computer programming for image and video processing. This project is open to undergraduate students (computer engineering, electrical engineering, computer science, or related majors) at the University of Wollongong. It is suitable for motivated students with a mathematical background, programming experience (either MATLAB, Python, C/C++, or Java), and an interest in pursuing a further research study.

To apply online: Visit http://eis.uow.edu.au/scholarships/summer/index.html

Application deadline: 08/11/2019.