

PhD Scholarship in software testing and machine learning

PhD Scholarship in software testing and machine learning – Australian Research Council Linkage Project at the University of Wollongong

Department/School Name

School of Computing and Information Technology
University of Wollongong, NSW, Australia

Students are invited to apply for a Doctor of Philosophy scholarship in the interdisciplinary area of software engineering (in particular, software testing) and machine learning, to closely collaborate with a software testing company in industry.

ABOUT THE SCHOLARSHIP

The scholarship is being offered by the University of Wollongong and will contribute to an Australian Research Council Linkage Project that involves close collaboration with industry to develop innovative software testing technologies for machine learning, big data, and cyber security applications.

The successful candidate will conduct research to explore the interplay between software testing and machine learning. On the one hand, the student will develop innovative software testing techniques to solve difficult problems in testing machine learning applications such as those for self-driving cars, big data analytics, image and natural language processing, as well as cyber security. On the other hand, the student will apply machine learning techniques to improve software testing techniques, including testing effectiveness and efficiency. Various test coverage criteria, test oracles, metamorphic testing, random and adaptive random testing, fuzz testing, among others, will be studied.

STIPEND

The scholarship is for three (3) years full-time for doctoral candidates with a stipend of \$AUD 27,082 per annum (tax free and indexed annually) plus tuition fee waiver.

CONDITIONS FOR APPLICATION

Applications are invited from

- Students who will be commencing their PhD study at the University of Wollongong in 2018.
- Applicants are expected to commit to full-time study and have the capacity to be based at the Wollongong campus.
- Both domestic and international prospective students are encouraged to apply.

APPLICATION CRITERIA

Applicants should hold an Honours 1 or high 2A (or equivalent) undergraduate degree in a relevant discipline related to computer science or software engineering, or the equivalent combination of professional experience and academic qualifications, or a research master's degree related to computer science or software engineering.

APPLICATION PROCESS

Applicants should send a CV with the names and email addresses for two referees, and a statement outlining relevant experience and expertise and a 2-3 page summary of their proposed project.

The application should be attached to an EMAIL sent to Associate Professor George Zhou zhiquan@uow.edu.au. Please format as a single document (pdf) that includes cover letter, Curriculum Vitae, copy of academic transcript, a brief research proposal (3 pages maximum) and contact details for 2 referees.

ASSESSMENT

Applicants will be assessed against criteria of:

- Academic excellence and practical experience
- Research interests and experience
- Relevant experience in software industry and/or software testing
- Strengths and suitability of the candidate

Submit application or any enquiries to Associate Professor Zhiquan (George) Zhou by email at: zhiquan@uow.edu.au

Applications close: 28 Feb 2018