

# PhD Scholarships for “Deep Learning for Graphs”

Graph Research Lab, ANU School of Computing

June 2021

We are a research team at the School of Computing, Australian National University. Our overarching research goal is to explore and understand graph-structured data. Supported by a grant from the Australian Research Council, we are currently looking for new PhD students with passion, talent and grit to join the team. You will have the chance to work on the grand challenges at the intersection of deep learning and graph theory. You will be involved in discussing important and interesting questions in this challenging area, developing new heuristic techniques and theories to advance state-of-the-art methodologies, and evaluating their applications in solving real-world problems. Each PhD student will have their own PhD project under the joint supervision of Prof. Brendan McKay and A/Prof. Qing Wang, and may collaborate on other related projects in the team.

**Scholarship information:** Two PhD scholarships are available, each including a living allowance of \$28,597 per annum with a waived tuition fee, in accordance with the standard of ANU University Research Scholarships. The successful applicants will be supported by the scholarship for 3.5 years.

**Eligibility (please do not apply if these conditions are not met):**

- A Bachelor/Masters degree in computing or mathematics with first-class honours or equivalent;
- Excellent programming skills;
- Strong interest in mathematics or theoretical computer science;
- Good knowledge of machine learning/deep learning (e.g., have undertaken courses in machine learning).

**Preferences:** The following conditions are preferred but not compulsory: (1) have previously done some research work, particularly in the area of machine learning, and (2) have a good knowledge of graph theory or related subjects.

**Application:** Please email your inquiries/applications to A/Prof. Qing Wang (qing.wang@anu.edu.au) with the subject 'PhD Application' and the following documents:

- (1) You need to attach a motivation letter (max one page) on why you would like to join our team and about your research interests.
- (2) Please also attach a CV, academic transcripts, previous research work, e.g., Honors/Masters thesis, papers, etc. There is no need to send certificates.
- (3) Please indicate whether you are in Australia (on-shore) or outside of Australia (off-shore). Also, please indicate your country of citizenship.

Please note that short-listed applicants for these PhD scholarships will need to apply for admission to a PhD program following the ANU HDR policy and meet the language requirements by ANU. We will provide you further information once you are selected.

**Timeline:** We will start reviewing applications from early July 2021, until the positions are filled. For on-shore students, you can start this year as soon as you receive an offer or early 2022. For off-shore students, due to the current border restriction in Australia, you can start in the first half of 2022 or earlier as soon as the Australian border restriction is lifted.

**Other information:**

- Graph Research Lab: <https://qingnz.github.io/Graphlab/>
- ANU School of Computing: <https://cs.anu.edu.au/>
- ANU College of Engineering and Computer Science webpage for PhD & MPhil applicants: <https://cecs.anu.edu.au/study/phd-mphil>
- Webpage of Brendan McKay: <http://users.cecs.anu.edu.au/~bdm/>
- Webpage of Qing Wang: <http://users.cecs.anu.edu.au/~u5170295/>