

TUAN DUNG (JOSH) NGUYEN

josh.nguyen@anu.edu.au

<https://joshnguyen.net>

EDUCATION

The Australian National University

Master of Philosophy – MPhil in Computer Science

Supervisor: Lexing Xie and Colin Klein

March 2021 –

Canberra, ACT, Australia

The University of Melbourne

Bachelor of Science in Computer Science

First Class Honours

February 2018 – December 2020

Melbourne, VIC, Australia

EXPERIENCE

Summer Research Scholar

Computational Media Lab, the Australian National University

- Supervisors: Lexing Xie and Colin Klein

December 2020 – March 2021

Canberra, ACT, Australia

Tutor and Demonstrator

- Elements of Data Processing (COMP20008, UniMelb)
- Artificial Intelligence (COMP30024, UniMelb)
- Optimisation (COMP4691, ANU)
- Machine Learning and Data Mining (COMP5318, USyd)

March 2020 –

Research Intern

University of Sydney

- Supervisor: Dr. Nguyen Tran
- Part of the Winter Research Internship Program
- Project: *Personalized Federated Learning with Moreau Envelopes*

July 2020 – August 2020

Sydney, NSW, Australia

Summer Research Scholar

University of Sydney Faculty of Engineering

- Supervisor: Dr. Nguyen Tran
- Part of the Summer Research Program
- Project: *Federated Learning with Stochastic Variance Reduced Gradient Algorithms*

December 2019 – February 2020

Sydney, NSW, Australia

Vacation Research Scholar

Melbourne School of Mathematics and Statistics

- Supervisor: Dr. Charl Ras
- Part of the School of Mathematics and Statistics Vacation Research Program
- Project: *Analysing and Designing R-Resilient Graphs*

November 2019 – December 2019

Melbourne, VIC, Australia

AWARDS AND ACHIEVEMENTS

- Master of Philosophy Scholarship Tuition and Stipend Scholarships, ANU (2021)
- Dean's Honour List, UniMelb (2019 – 2021, top 1.5% of the BSc. cohort)
- Housing Bursary, UniMelb (2020)
- Research Scholarship, Faculty of Engineering, USyd (2020)
- Studentship, School of Mathematics and Statistics, UniMelb (2019)

TECHNICAL SKILLS

| | |
|--|--|
| Programming/Scripting Languages | C/C++, Python, Java, \LaTeX , MATLAB |
| Numerical and Learning Packages | PyTorch, TensorFlow, scikit-learn, numpy, pandas |
| Frameworks and Tools: | Git |
| Databases | MySQL |

LEADERSHIP EXPERIENCE

| | |
|---|-------------|
| UniMelb Competitive Programming Club (UMCPC) | 2019 – 2020 |
| • Position: Secretary | |
| UniMelb Mathematics and Statistics Society (MUMS) | 2019 – 2020 |
| • Position: Undergraduate Representative | |
| UniMelb Internet of Things Club | 2018 – 2020 |
| • Positions: Marketing Director (2019) and Events Director (2020) | |
| UniMelb Student Union | 2018 – 2020 |
| • Host at the Orientation Week Program | |
| • Tutor at the VCE Summer School | |

PUBLICATIONS

- Canh T. Dinh, Nguyen H. Tran, and Tuan Dung Nguyen. 2020. Personalized Federated Learning with Moreau Envelopes. In *34th Conference on Neural Information Processing Systems*.
- Canh T. Dinh, Nguyen H. Tran, Tuan Dung Nguyen, Wei Bao, Albert Y. Zomaya, and Bing B. Zhou. 2020. Federated Learning with Proximal Stochastic Variance Reduced Gradient Algorithms. In *49th International Conference on Parallel Processing*.
- Tuan Dung Nguyen, Amir R. Balef, Canh T. Dinh, Nguyen H. Tran, Duy T. Ngo, Tuan Anh Le, and Phuong L. Vo. 2021. Accelerating Federated Edge Learning. *IEEE Communications Letters*, 25(10):3282–3286.