

# TUAN DUNG (JOSH) NGUYEN

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<https://joshnguyen.net>

## EDUCATION

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### **The Australian National University**

*Master of Philosophy – MPhil in Computer Science*

Supervisor: Lexing Xie

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

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### **Summer Research Scholar**

*Computational Media Lab, the Australian National University*

December 2020 – March 2021

*Canberra, ACT, Australia*

- Supervisor: Prof. Lexing Xie
- Project: *Analysing Real-world Moral Dilemmas from Online Discussions*

### **Tutor and Demonstrator**

*Melbourne School of Engineering*

March 2020

*Melbourne, VIC, Australia*

- Elements of Data Processing (COMP20008)
- Artificial Intelligence (COMP30024)

### **Research Intern**

*The University of Sydney*

July 2020 – August 2020

*Sydney, NSW, Australia*

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

### **Summer Research Scholar**

*The University of Sydney Faculty of Engineering*

December 2019 – February 2020

*Sydney, NSW, Australia*

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

### **Vacation Research Scholar**

*Melbourne School of Mathematics and Statistics*

November 2019 – December 2019

*Melbourne, VIC, Australia*

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

## AWARDS AND ACHIEVEMENTS

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- Master of Philosophy Scholarship Tuition and Stipend Scholarships, ANU (2021)
- Summer Research Scholarship, College of Engineering and Computer Science, ANU (2020)
- Dean's Honor List, UniMelb (2019 and 2020, 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

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<b>Programming/Scripting Languages</b>	C/C++, Python, Java, L <sup>A</sup> T <sub>E</sub> X, MATLAB
<b>Numerical and Learning Packages</b>	PyTorch, TensorFlow, scikit-learn, numpy, pandas
<b>Frameworks and Tools:</b>	Git
<b>Databases</b>	MySQL

## LEADERSHIP EXPERIENCE

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

## PUBLICATIONS

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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 - ICPP*.