

Guanghan Wang

Toronto, ON | 647-854-2147 | xuanghdu.wang@mail.utoronto.ca | github.com/Xuanghdu | linkedin.com/in/GuanghanWang

EDUCATION

University of Toronto

Toronto, ON

Bachelor of Applied Science in Engineering Science, Machine Intelligence option

September 2019 – June 2024

- Current Year: 3 Expected Graduation Year: 2024 Cumulative Average: 3.92/4.0

ECE421H1 INTRODUCTION TO MACHINE LEARNING 99

ECE358H1 FOUNDATIONS OF COMPUTING 100

ECE352H1 COMPUTER ORGANIZATION 95

ECE361H1 COMPUTER NETWORKS I 95

CSC343H1 INTRODUCTION TO DATABASES 94

ROB311H1 ARTIFICIAL INTELLIGENCE In Progress

ECE324H1 MACHINE INTELLIGENCE, SOFTWARE & NEURAL NETWORK In Progress

ECE353H1 SYSTEMS SOFTWARE In Progress

ECE368H1 PROBABILISTIC REASONING In Progress

Coursera

DeepLearning.AI

Deep Learning Specialization by Andrew Ng ([certificate](#))

Summer 2021

TECHNICAL SKILLS & INTERESTS

Languages: Python, C, Dart(Flutter), ARM, NIOS II, Verilog, MATLAB, HTML/CSS/JavaScript, SQL, Java

Tools: Git/GitHub, Wireshark, Bash, L^AT_EX, Intel Quartus Prime, ModelSim, LTspice

Frameworks & Libraries: TensorFlow, NumPy, Matplotlib, React Native, pandas, scikit-learn

Interests: passionate about online education; Japanese anime and Chinese classic literature; course overloading

EXPERIENCE & PROJECTS

Summer Research on Deep Learning | *Python, TensorFlow*

Summer 2021 – Present

Toronto Systems Security Lab (UofT); Summer Research Assistant under Prof. David Lie

Toronto, ON

- Collected logs and code coverage using a fuzzer based on AFL
- Trained a LSTM neural network to predict code region coverage based on logs
- Achieved an accuracy of 90.59% on openssl/wolfssh pair

Summer Research on Audio Adversarial Machine Learning | *Python, TensorFlow* Summer 2020

CleverHans Lab (UofT and Vector Institute); Summer Research Assistant under Prof. Nicolas Papernot *Toronto, ON*

- Devised a genetic algorithm to tackle audio adversarial ML of speaker verification under a black box setting
- Self-learned NumPy and TensorFlow from scratch in the process
- Achieved the goal of lowering the model accuracy below 1%

Goal? Go! ([link](#)) | *React Native*

February 2021

Hackathon, Team Leader

Toronto, ON

- Developed a mobile application to help users keep track of their goals and share them with friends or the public
- Aimed to strengthen the connections among people and promote a more active lifestyle during pandemic
- Implemented in React Native and open-sourced the project on [GitHub](#)

Learning Scheduler ([link](#)) | *Python*

November 2020

Hackathon, Team Leader

Toronto, ON

- Developed an application generating schedules automatically to improve digital learning experience
- Designed a graphic user interface in PyQt5 and open-sourced the project on [GitHub](#)

Personal Website (Portfolio) ([link](#)) | *HTML/CSS/JavaScript*

September 2019 – Present

Student Organizations

September 2020 – August 2021

Student Clubs, Executive Member

Toronto, ON

- University of Toronto Application Development Association, Technology Department
- Associated of Chinese Engineers, Marketing Department, Web Master

HONOR & AWARDS

2020	The John M. Empey Scholarships (achieving the highest average percentage of marks in the year)
2019	University of Toronto Scholar
2018	Intensive Study on Computer Science, Stanford University
2018	AP Scholar with Distinction Award
2018	Chinese Informatics Olympiad Provincial (NOIP) Third Price
2018	Physics Bowl Contest Regional Top 10 & Global Top 100