# Yuchen Wang

Passionate engineer and researcher in computer science striving to solve challenging real-world problems. Researched at Vector Institute on machine learning algorithms.

# **LINKS**

WebSite: https://yuchenwyc.com Email: raina.wang@mail.utoronto.ca

Github://yuchenWYC LinkedIn://yuchenWYC

# **AWARDS**

(Jan 21) Konrad Group Women in Technology Scholarship \$2000

Awarded to a student who demonstrates innovation. (Jan 21) **The Dorothy Walters Scholarship** \$2000 (May 20) **UofT Excellence Award** \$6,000

Awarded to about three students each year.

(Dec 19) **The Dorothy Walters Scholarship** \$600 (All years) **Dean's List Scholar** 

#### **COURSEWORK**

#### **Graduate**

Computer Graphics (A+)
Computer Networks (A+)
Stochastic Processes (A+)
Methods of Data Analysis I (A+)
Probabilistic Learning and Reasoning (A+)
Neural Networks and Deep Learning (A+)

#### Undergraduate

Computer Organization (A+)
Data Structures and Analysis (A+)
Algorithm Design and Analysis (A+)
Operating Systems (A)
Real Analysis (A)
Vector Calculus (A+)
Linear Algebra II (A+)
Probability I (A)
Nonlinear Optimization (A+)
Introduction to Machine Learning (A+)
Effective Writing

# **SKILLS**

### **Specialized**

Python • C • R • Bash • LATEX • Git

#### **Familiar**

Android • Java • C++ • HTML & CSS • Julia MatLab • MySQL

#### **Machine Learning Libraries**

NumPy • PyTorch • Pandas • Autograd Matplotlib • ggplot2 • SciPy • Scikit-learn OpenCV2

#### **EDUCATION**

#### University of Toronto | SEP 2017 - APRIL 2021

Honours Bachelor of Science in Computer Science specialist, Statistics major & Mathematics minor cGPA: 3.98/4.00, Course Average: 92%

#### Stanford University | SEP 2021 (EXPECTED) - JUNE 2023

Master of Science in Computer Science

# **WORK EXPERIENCE**

#### University of Toronto | TEACHING ASSISTANT

Jan 2021 - April 2021 (Expected)

Marking assignments, holding office hours and leading tutorials in the course *Software Tools and Systems Programming*.

#### **Vector Institute** | Machine Learning Researcher

April 2020 - Jan 2021 | Supervisor: Roger Grosse
Designed and implemented hypernetwork algorithms to auto-tune
hyperparameters of Artificial Neural Networks during a single run.

#### University Health Network | Machine Learning Researcher

May 2019 - Dec 2019 | Supervisor: Bo Wang

Designed a data processing pipeline for electronic health records time-series, and engineered a sequential Artificial Neural Networks model that accurately predicts one-year and two-year outlook cause of death for post-organ-transplant patients.

#### DHC Software Co. Ltd | Web Development Intern

May 2018 - July 2018 | Xi'an, Shaanxi, China

Engineered a Oracle database for Office Automation system for Shaanxi Yanchang Petroleum using SQL queries, and consulted with customers to report defects in the system.

# **PROJECTS**

#### Project X Research Competition | Sep 2020 - Nov 2020

Led the UofT team to develop a new neural ordinary differential equation architecture that learns the dynamics of time series with multiple predictors (Winner, \$20,000 prize). [ArXiv preprint]

#### ASA Datafest 2020 | June 2020

Led a student group to classify sentiment on Twitter using deep learning models, then explored how the U.S. general public responds to breaking news in the COVID-19 pandemic. (Honourable mentions)

#### Mars Game Platform | Jan 2019 - March 2019

An open-source game platform that contains three well-designed games using Firebase Realtime Database that stores user credentials & scores. Implemented games Sliding Tiles and Sudoku in Java. Designed the user interface and interaction. Created comprehensive unittests and detailed documentations.