

Yuchen Wang

Passionate engineer and researcher in computer science striving to solve real-world or challenging problems. Researching at Vector Institute focusing on auto-tuning algorithms.

LINKS

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 Github:// [yuchenWYC](#)
 LinkedIn:// [yuchenWYC](#)

AWARDS

(May 20) **UofT Excellence Award** \$6,000
Awarded to about three students each year.
 (Dec 19) **The Dorothy Walters Scholarship** \$600
Awarded to top 18 students in Woodsworth College.
 (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
 Seaborn

EDUCATION

University of Toronto | SEP 2017 - APRIL 2021 (EXPECTED)

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

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 - Present | Supervisor: Roger Grosse

Designing 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, Shannxi, China

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

PROJECTS

Project X Research Competition | Sep - 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.