

Yuchen Wang

Passionate software engineer and researcher, striving to solve challenging real-world problems.

LINKS

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

EDUCATION

Stanford University

SEP 2021 - JUNE 2023

Master of Science in Computer Science

University of Toronto

SEP 2017 - APRIL 2021

Honours Bachelor of Science

Computer Science specialist, Statistics major
& Mathematics minor

cGPA: 3.98/4.00, Course Average: A+

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) UofToronto Excellence Award \$6,000

Awarded to about three students each year.

(Dec 19) The Dorothy Walters Scholarship \$600

(All years) Dean's List Scholar

TEACHING

Stanford | TEACHING ASSISTANT

Fall 2021 & Spring 2022

CS 221: Artificial Intelligence

Winter 2022

CS 161: Design and Analysis of Algorithms

UofToronto | TEACHING ASSISTANT

Jan 2021 - April 2021 | Supervisor: Karen Reid

Course: *Software Tools and Systems Programming*

SKILLS

Specialized

Python • C • Unix/Linux • \LaTeX • Git
 JavaScript • ReactJS • HTML & CSS

Familiar

R • C++ • MatLab • SQL • Java (Android)

Machine Learning Libraries

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

WORK EXPERIENCE

Microsoft | APPLIED AND DATA SCIENTIST INTERN

June 2022 - September 2022 | Mountain View, CA

- Developed deep learning pipelines to generate negative training examples for large language retrieval models.
- Designed new evaluation metrics for the results.
- Technologies: Python, PyTorch, Pandas, SQL

Ernst & Young | TECHNICAL CONSULTANT INTERN (SOFTWARE)

June 2021 - August 2021 | Shanghai, China

- Developed a software pipeline to help an aviation authority automate extracting parameter values from graphic interfaces, which takes real-time video stream as input and outputs formatted data.
- Utilized AI technologies for optical character recognition
- Communicated closely with clients, wrote detailed documentations and proposal for the project workflow.
- Technologies: Python, OpenCV2, Pandas, Docker

Vector Institute | MACHINE LEARNING INTERN

April 2020 - Jan 2021 | Supervisor: Roger Grosse

- Designed and implemented hypernetwork algorithms to auto-tune hyperparameters of artificial neural networks during a single run.
- Wrote extensive unittests.
- Reading the literature and proving the related mathematical theories.
- Technologies: Python, NumPy, PyTorch, Autograd, Slurm

University Health Network | MACHINE LEARNING INTERN

May 2019 - Dec 2019 | Supervisor: Bo Wang

- Worked with clinicians to design a data processing pipeline for electronic health records time-series.
- Engineered modular code for sequential artificial neural networks and tree-based machine learning models.
- The final models accurately predicts one-year and two-year outlook cause of death for post-organ-transplant patients.
- Technologies: R, Pandas, Python, NumPy, PyTorch, Scikit-learn

PROJECTS

Smart and Secure Exchange | May 2022 - Present

A mobile APP that allow users to post their needs for currency exchange. Contributed to front-end and back-end development using the MERN stack.

Project X Research Competition | Sep 2020 - Nov 2020

- Led the UofT team to develop a new neural ordinary differential equation architecture, which learns the dynamics of time series with multiple predictors and beats the baseline models in performance.
 - Applied the model on semi-synthetic plant disease datasets and achieved remarkable results in both extrapolation and interpolation.
 - Awarded a \$20,000 prize as a winner for the competition.
- [[ICML 2021 workshop page](#)]

Mars Game Platform | Jan 2019 - March 2019

An open-source game platform containing three well-designed games and user identities. Implemented games Sliding Tiles and Sudoku in Java. Designed and implemented the UI and UX. Created comprehensive unittests and detailed documentations.