

Joey Yu

joey@itsjoeoui.com ❖ Montreal, QC ❖ itsjoeoui.com

Currently seeking Fall 2022 Part-time opportunities as a Software Developer :))

EDUCATION

McGill University

BA, Computer Science and Statistics

Sept. 2022 – Apr. 2025

Montreal, QC

- Courses: Algorithms, Data Structures, Software Design, Computer Systems.
- Activities: International Buddy Program – Help onboarding international students.

Dawson College

DEC - Enriched Pure and Applied Science

Aug. 2020 – May. 2022

Montreal, QC

- Activities: SPACE initiative, DawsonAI initiative, Volunteer Math Tutoring.

WORK EXPERIENCE

Ciena

Software Developer Intern – Research and Development Team

May. 2022 – Present

Ottawa, ON

- Participated in the ENCQOR 5G project, working on Canada's next-generation network infrastructure.
- Designed and implemented a distributed graph algorithm in Golang that replaces the old, centralized approach.
- Made the system scalable by reducing the amounts of RPC calls and database queries exponentially.

Dawson College

Research Intern – Graph Theory

Jan. 2022 – May. 2022

Montreal, QC

- Supported by FRQNT-MITACS College-level Research Internship Award.
- Worked on network searching and surveillance problems in dynamic networks.
- Mentored by Professor Benjamin Seamone in Dawson's Department of Mathematics.

Ciena

Software Developer Intern – Research and Development Team

Jun. 2021 – Jan. 2022

Montreal, QC

- Supported by MITACS Accelerate Internship Award.
- Built integration tools that facilitate the evaluation process of ML models in the production environment.
- Built ML performance metrics and testing tools in Python to help ML engineers in my team.

VOLUNTEER EXPERIENCE

Dawson College

Mathematics Tutor

Jan. 2021 – May. 2022

Montreal, QC

- Volunteered 2 hours every week in mathematic tutoring sessions organized by Professor Varuzhan Ohanyan.
- Tutored students in Calculus 1, Calculus 2 and Linear Algebra.

PixelExperience

Open Source Project Administrator

Aug. 2019 – Apr. 2021

- PixelExperience is a 3rd party Android firmware that brings the Google Pixel experience to non-Pixel devices.
- Developed firmware for the OnePlus 5/5T (10k+ downloads) and organized a community of over 20k people.

PERSONAL PROJECTS

Travelling Salesman Problem Visualization

May. 2022

- Built a Python visualization that compares various algorithms for the travelling salesman problem.
- Wrote a paper in a team of 4 students that goes over and explains all the algorithms in detail.

Teach a Computer to Do Math

Apr. 2022

- Trained an LSTM network with the seq2seq model to perform simple arithmetic operations such as additions.
- Built with Python using Tensorflow's Keras API.
- Winner of the best talk at Dawson's annual ScienceFest.

Astro: Star Formation

Nov. 2021

- Built a simulation that visualizes the formation of a star from small particles in space using basic physics.
- Winner of the Astro Challenge at McGill Physics Hackathon 2021.

TreeHugger

Mar. 2021 – Sep. 2021

- Led a team of 3 students to work on a social app prototype using React Native and Firebase.
- Winner of the best project at Dawson's annual ScienceFest.

Heat Mapping and Dynamic Heat Distribution

Nov. 2020

- Built a simulation that visualizes the heat transfer in a 2-dimensional space.
- Winner of the P4labs Heat Rover Challenge at McGill Physics Hackathon 2020.

HONORS & AWARDS

FRQNT-MITACS College Research Internship Award

Jan. 2022

McGill Physics Hackathon 2021 Astro Challenge - Winner

Nov. 2021

MITACS Accelerate Internship Award

Jun. 2021

McGill Physics Hackathon 2020 P4labs Heat Rover Challenge - Winner

Nov. 2021

SKILLS & INTERESTS

- **Languages:** Python, Golang, Javascript, Typescript, Java, Latex.
- **Technologies:** Numpy, Pandas, Networkx, Matplotlib, Plotly, Scikit-learn, Tensorflow, gRPC, REST API, React.js, Git, Linux, GCP, Firebase.
- **Interests:** Algorithms, Data Structures, I like designing systems that are efficient and scalable.

LANGUAGES

- **Chinese:** Native Proficiency.
- **English:** Bilingual Proficiency.
- **French:** Elementary Proficiency.