

# Joey Yu

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

## EDUCATION

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### McGill University

*B.A, Software Engineering 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.

## SKILLS & INTERESTS

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

## WORK EXPERIENCE

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### 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 that made the network much more scalable.
- Improved system performance 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 assist ML engineers in my team.

## VOLUNTEER EXPERIENCE

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### 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

Aug. 2019 – Apr. 2021

*Open Source Project Administrator*

- PixelExperience is a 3<sup>rd</sup> 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

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### 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

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### 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

## LANGUAGES

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