Joey Yu

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

EDUCATION

McGill University   **Sept. 2022 – Apr. 2025**
BA, Software Engineering and Statistics   *Montreal, QC*
- Courses: Algorithms, Data Structures, Software Design, Computer Systems.
- Activities: International Buddy Program – Help onboarding international students.

Dawson College   **Aug. 2020 – May. 2022**
DEC - Enriched Pure and Applied Science   *Montreal, QC*
- Activities: SPACE initiative, DawsonAI initiative, Volunteer Math Tutoring.

WORK EXPERIENCE

Ciena   **May. 2022 – Present**
Software Developer Intern – Research and Development Team   *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   **Jan. 2022 – May. 2022**
Research Intern – Graph Theory   *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   **Jun. 2021 – Jan. 2022**
Software Developer Intern – Research and Development Team   *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   **Jan. 2021 – May. 2022**
Mathematics Tutor   *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 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.