

# JOEY YU

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## EDUCATION

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### McGill University

Math and Computer Science.

Montreal, QC

September. 2022 - Future

### Dawson College

Enriched Pure and Applied Science.

Montreal, QC

Aug. 2020 - Present

## WORK EXPERIENCE

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### Ciena

*Software Developer Intern*

Montreal, QC

Jun. 2021 - Present

- Built a converter in Python that converts Request objects in the form of acyclic trees to TOSCA YAML intent requests using DFS.
- Built a service request generator that sends TOSCA YAML intent requests to the network fabric emulator for testing the outcome of ML models.
- Wrote unit tests for all of the above functions.
- Minor bug fixes in a Golang codebase.

### Dawson College

*Peer Tutor*

Montreal, QC

Sep. 2021 - Present

- Mostly tutoring math and physics, but able to do chemistry and biology as well.
- Math: Calculus 1, Calculus 2, Linear Algebra.
- Physics: Mechanics, Waves and Optics, Electricity and Magnetism.

## VOLUNTEER EXPERIENCE

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### Dawson College

*Mathematics Tutor*

Montreal, QC

Jan. 2021 - Present

- SHS (Students-Helping-Students).
- Tutoring Calculus 1, Calculus 2 and Linear Algebra.

### PixelExperience

*Project Maintainer/Administrator*

Montreal, QC

Aug. 2019 - Apr. 2021

- Maintainer for the OnePlus 5/5T (Snapdragon 835 Mobile Platform).
- Merging upstream changes from LineageOS and Linux Kernel Stable v.4.4.x tag.

## PERSONAL PROJECTS

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### Astro: Star Formation

Nov. 2021

- McGill Physics Hackathon 2021 Team Project (Winner of the Astro Challenge).
- It simulates the formation of a star from small particles in space.
- We wrote our own Particle class that simulates the movement of a star, and we built the simulation using PyGame.
- Video presentation: <https://www.youtube.com/watch?v=JG4PJDeQ5Hw>

### TreeHugger - A Social App for Reconnecting With Nature

Mar. 2021 - Sep. 2021

- A social app that focuses on sustainability and mental health.
- The front-end is built with React Native, and the back-end is hosted on Firebase.

### Discord Bot

Oct. 2020 - Present

- It is able to stream music in voice chat, solve math problems using Wolfram Alpha, etc.
- Built with Python.

### COVID-19 Data Visualization

Jan. 2021 - Feb. 2021

- A simple COVID-19 data visualization tool built with Plotly/Dash.
- Preview: [corona.itsjoeoui.com](https://corona.itsjoeoui.com) (Hosted on Heroku).

### Heat Mapping and Dynamic Heat Distribution

Nov. 2020

- Team project for the McGill Physics Hackathon 2020, built with Python and C++.
- Winner of the P4labs Heat Rover mini-coding challenge.

## SKILLS & INTERESTS

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**Proficient:** Python, Git, Gerrit, Linux, Numpy, Pandas, Seaborn, Plotly, Dash, Heroku, AOSP.

**Exposure:** Golang, React, React Native, Java, Javascript, TypeScript, Sklearn, TensorFlow, Pygame, HTML, CSS, Django, Bootstrap, Hugo, Flutter, GCP, AWS, Azure.

**Interests:** Backend, Full stack, Machine learning, Algorithms, Data Structure.

## CERTIFICATIONS

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<b>Go: The Complete Developer's Guide (Golang)</b>	Stephen Grider - Udemy Jul. 2021
<b>Python for Data Science and Machine Learning Bootcamp</b>	Jose Portilla - Udemy Jan. 2021
<b>2020 Complete Python Bootcamp: From Zero to Hero in Python</b>	Jose Portilla - Udemy Jul. 2020
<b>Using Python to Access Web Data</b>	Dr. Charles R. Severance - Coursera Jun. 2020
<b>Python Data Structures</b>	Dr. Charles R. Severance - Coursera Jun. 2020
<b>Programming for Everybody</b>	Dr. Charles R. Severance - Coursera Jun. 2020

## HONORS & AWARDS

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<b>McGill Physics Hackathon 2021 Astro Challenge - Winner</b>	McGill Physics Hackathon Nov. 2021
<b>Enriched Science Outstanding Activity Award</b>	Dawson College Jun. 2021
<b>Winter 2021 - Semestral Honours</b>	Dawson College Jun. 2021
<b>Students-Helping-Students Certificate of Volunteering Free Zoom Sessions</b>	Dawson College May. 2021
<b>Fall 2020 - Semestral Honours</b>	Dawson College Feb. 2021
<b>McGill Physics Hackathon 2020 Mini-coding Challenge - Winner</b>	McGill Physics Hackathon Jan. 2020
<b>Carley Contest - Certificate of Distinction</b>	University of Waterloo Jan. 2019
<b>Pascal Contest - Certificate of Distinction</b>	University of Waterloo Jul. 2018

## LANGUAGES

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**English:** Professional Working Proficiency.

**French:** Elementary Proficiency.

**Chinese:** Native Proficiency.