

James Su

amagicalsoup@gmail.com
github.com/magicalsoup
dmoj.ca/user/sushi
dmoj.ca/user/magicalsoup
Richmond Hill Ontario #647-636-6585

Education

IB Diploma & OSSD Diploma student **Grade 12**, class of **June 2022**

Bayview Secondary School

- **100%** in Grade 12 Physics and Mathematics
- **97.83%** Top 6 Grade 12 (4U) Average
- **97%** in Grade 12 Computer science (ICS4U)

AP Calculus BC Level 5

AP Computer Science A Level 5

Skills

Languages

Python • HTML/CSS/JS • Java • C++
Markdown

Tools/Frameworks

Django • jQuery • react • nextJS • YAML •
chartJs • tailwind • Git

Achievements & Awards

Canadian Computing Competition

- **Honor roll • Top 9%** (2020)
- Distinction award (2019, 2021)

DMOJ CS Contest • **Top 8%**

- Achieved master rating over 13 contests (2019-2022, rank 382/4430)

Lexington Informatics Tournament • **Top 7%** •

- Collaborated in a team of 3 teams to achieve a rank of **25/360** (2021)

Fermat Mathematics Contest • **Top 2%**

- Achieved the **Distinction** award (2021)

Metrohacks 2021 • **First place**

- Won **\$1200** in prize money out of 50+ teams for making [an app](#) to track bubble tea spending

Grade 10 Piano RCM • **Honors** (2020)

Hackathons

Nyan Cats Only Go Up (Hack The North 2021) • [link](#)

Developed with colleagues a **decentralized** stock trading app where the value of a stock is tied to the user value of an internet meme.

Teach Assist Assist (YRHacks) • [link](#)

Developed with colleagues a **plugin** and an anonymous system of gathering marks to better guide students in course selection.

Interests

Skiing • Biking • Competitive programming

Programming Experience & Extra Curricular activities



DMOJ: Modern Online Judge
Full stack web developer

Sept 2021 - Present

Developed and **designed** with a friend a community requested voting feature on problem difficulty within the DMOJ problem archive. Contributions were made to both **front-end** and **back-end**, integrating DMOJ's existing **Django** framework, codebase and **UI**.

Submitted a large pull request for this feature (~700 lines of code, **300+** commits) to DMOJ's **open-source** repository, which has received **250+** comments to date.



DMOJ: Modern Online Judge
Moderator & Contest Organizer

Sept 2018 - Present

Uploaded over **50+** problems. Used **LaTeX** to create visual aids for problems and **MOSS** to detect plagiarism for online contests. Fixed problem checkers and tested data generators written in **Python**, **C++** and **JSON** on the DMOJ platform.

Organized with two peers and a DMOJ staff colleague to prepare, test and host an international programming contest of **5 problems**. **160+** participants with skills varying from amateur to grandmaster attempted the contest. Problems were upheld to DMOJ's high standards for quality and difficulty.



Bayview SS Computer Club
Club Vice President (2021-2022), Competitive programming lead

Sept 2018 - Present

executive (2020-2021), Club member (2018-2020)

Assisted in leading a team of over 8 executives to organize activities relating to **computer software, hardware, web development, game development**, and **competitive programming**. Meetings were hosted on a weekly basis, for Bayview's largest club with over **300+ members** and **100+** regular attendees.

Developed and instructed a **20+** hour competitive programming course, topics were focused on **data structures, graph algorithms**, and **dynamic programming**. Prepared our ECOO programming teams and achieved **top 10%** in 2020.

Worked with presidents to apply and ultimately received a **\$1500 federal government grant**, which was used for a PC server build session.



STEM FellowShip
Municipal Head of Affairs

Oct 2021 - Present

Created promotional STEM content and organized for events such as the **Big Data Challenge**. Reached out to Universities representatives from **York University, Carleton University** and **University of Toronto** to plan and schedule events.



Bayview Model United Nations
Web developer

Sept 2021 - Dec 2021

Built the club's website to promote the club and encourage sign ups with a web developer colleague. **NextJS** was used for the framework and **tailwind** for **frontend**. **Google's API** was used to keep track of sign ups and used **Instagram's API** to display promotional content from instagram posts.