

Moses Xu

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EDUCATION

• University of Waterloo

Ontario, ON

Candidate For Honours Bachelor of Computer Science; GPA: ??

Sept 2021 – Apr 2026

- **Coursework:** Algebra (Advanced) (??%), Calculus (Advanced) (99%), Designing Functional Programs (Advanced) (98%)

AWARDS/COMPETITIONS

• Canadian Computing Competition (Senior Division) & Olympiad

Waterloo, ON

National algorithms competition

Feb 2018 – Feb 2021

- Silver Medalist at the 2021 Canadian Computing Olympiad, an invite-only team selection test for the Canadian IOI team made up of top CCC participants
- Placed 1st out of 2,901 participants (with a perfect score) in the 2021 competition

• Google Code Jam

Major algorithms competition that gathered 90,000+ participants last year

Apr 2019 – Present

- Placed 165th in Round 3 2021
- Round 3 Qualifier in 2020 and 2021 (top 1,000 participants)

• USA Computing Olympiad (Platinum Division)

Placed 33rd out of all pre-college participants in the highest division of the USACO Open 2021

Jan 2020 – Present

EXPERIENCE

• Codeforces LATOKEN Round 1

Online

Organized algorithms competition with over 18,000 participants

May 2020 – June 2021

- **Organization:** Worked with other problemsetters and Codeforces Administration to gather testers and ensure smooth delivery of competition
- **Problemsetting:** Generated ideas for problems, prepared problem statements and test data, created programs to validate correctness of data and graders

• DMOJ Problem Setter

Online

Organized and tested programming competitions

Sept 2019 – Present

- **Mock CCC:** Problemsetter for two Mock CCC (Canadian Computing Competition) contests in 2020 and 2021
- **CPC:** Organizer and problemsetter for the 2020 and 2021 competitions
- **Olympiads School:** Created tasks for algorithms quizzes held at the end of each term

PROJECTS

• CP Tools

Python module for Competitive Programming

- Python module that contains a suite of tools for algorithms problems, including automated local testing, stress testing tools, and integration with browser extensions
- Formerly a VSCode extension written in TypeScript with Vue and the VSCode API with similar functionality

• Algorithms & Data Structures Library

60+ DSA templates built to be easily integrated into existing solutions

- Includes a variety of algorithms: graphs, strings, data structures, combinatorics and number theory, etc.
- Automated testing integration using GitHub actions with `online-judge-tools/verification-helper`

• LetterGrid

Head-to-head online multiplayer game made for Hack the North 2021

- Typing-based strategy game where players race to opposite corners of a grid while blocking opponents
- Built using React for the UI and Flask on the backend

PROGRAMMING SKILLS

• **Languages:** Python, C/C++, HTML/CSS/JS, Java

• **Technologies:** Django, React, Flask, LaTeX