

Moses Xu

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🔗 plasmatic1

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Skills

- **Languages:** Python, C/C++, HTML/CSS/JS, Java, Kotlin
- **Tools/Frameworks:** Django, React, Git, Flask, Vue, Jekyll, \LaTeX
- **Platforms:** Windows, Linux

Awards/Competitions

- **Canadian Computing Olympiad** Waterloo, ON
Canada's most prestigious high school programming/algorithms contest Feb 2018 – Feb 2021
 - 2021 Canadian Computing Olympiad (CCO) Silver Medalist, an invite-only (top ~40 CCC participants this year) team selection test for the Canadian IOI team
 - 2021 Canadian Computing Competition (CCC) – Placed **1st** out of **2,900+** participants with a perfect score
- **Google Code Jam** Apr 2019 – Present
Major algorithms competition that gathered 90,000+ participants last year
 - Placed **3rd** of Canadian participants in Round 3 2021 (165th overall)
 - Round 3 Qualifier in 2020 and 2021 (top 1,000 participants)

Experience

- **Programming Contest Organizer (Codeforces and DMOJ)** Online
Organized contests, created and prepared algorithms problems Sep 2019 – Present
 - **Codeforces LATOKEN Round 1:** Algorithms contest with **18,000+** participants sponsored by LATOKEN. Statements were written with Latex and problems were prepared in C++ using Codeforces' Polygon System 🔗
 - **Mock CCC:** Contests in 2020 and 2021 with 200+ participants 🔗 🔗
 - **CPC:** Contests in 2019 and 2021 with 100+ participants 🔗 🔗
- **Focal Healthcare** Toronto, ON
Test/Documentation Engineering Aug 2019
 - Wrote scripts that formatted and validated product specifications and manual tests
 - Used Python with python-docx and xlswriter packages to parse documentation

Projects

- **Competitive Programming Tools** 🔗 🔗
Python module for Competitive Programming
 - 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 React.JS and the VSCode API with similar functionality
- **Algorithms & Data Structures Library** 🔗
60+ Data Structures & Algorithms templates (in C++) 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** 🔗
Online head-to-head typing-based strategy game made for Hack the North 2021
 - Built using React.JS (UI), Flask (backend), and Socket.IO (communication between client and server)

Education

- **University of Waterloo** Ontario, ON
Candidate For Honours Bachelor of Computer Science; GPA: 3.98 Sep 2021 – Present
 - **Coursework:** Algebra (Advanced) (98%), Calculus (Advanced) (99%), Designing Functional Programs (Advanced) (98%)
 - **Scholarships:** \$8,000 Faculty of Mathematics scholarship, \$2,000 President's Scholarship of Distinction