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 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**
  Major algorithms competition that gathered 90,000+ participants last year — *Apr 2019 – Present*
  - Placed 3rd of Canadian participants in Round 3 2021 (165th overall)
  - Round 3 Qualifier in 2020 and 2021 (top 1,000 participants)

Experience

- **Algorithms Contest Organizer (Codeforces and DMOJ)** — Online
  Organized contests, created and prepared problems for programming competitions — *Sept 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**: Problemsetter in 2020 and 2021 with 200+ participants
  - **CPC**: Organizer and problemsetter in 2019 and 2021 with 100+ participants

- **Focal Healthcare** — Toronto, ON
  Test/Documentation Engineering — *August 2019*
  - Wrote scripts that formatted and validated product specifications and manual tests
  - Used Python with python-docx and xlsxwriter packages to parse documentation

Projects

- **Competitive Programming Tools VSCode PY**
  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 React.JS and the VSCode API with similar functionality

- **Algorithms & Data Structures Library Repo**
  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 DevPost**
  Head-to-head online multiplayer game made for Hack the North 2021
  - Typing-based strategy game where players race to opposite to opposite corners of a grid while blocking opponents
  - Built using React (UI), Flask (backend), and Socket.IO

Education

- **University of Waterloo** — Ontario, ON
  Candidate For Honours Bachelor of Computer Science; GPA: 3.98 — *Sept 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 for 95%+ HS average