Moses Xu

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 mosesxu.ca

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SKILLS

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

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 (∼40 were invited in 2021)
  - 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)

EXPERIENCE

- **Codeforces LATOKEN Round 1 Contest Profile** Online
  *Organized algorithms competition with **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 Profile** Online
  Organized and tested programming competitions with 100+ participants *Sept 2019 – Present*
  - **Mock CCC**: Problemsetter for two Mock Canadian Computing Competition contests in 2020 and 2021
  - **CPC**: Organizer and problemsetter for CPC contest in 2019 and 2021

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+ DS&A 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 – Apr 2026*
  - **Coursework**: Algebra (Advanced) (98%), Calculus (Advanced) (99%), Designing Functional Programs (Advanced) (98%)