


Skills

- **Languages:** Python, C/C++, HTML/CSS/JS, Node.JS & TS, Java, Kotlin
- **Tools/Frameworks:** Django, Git, Flask, Express, Docker, Nginx
- **Platforms:** Windows, Linux, GCP

Education

- **University of Waterloo** Waterloo, ON
Candidate For Honours Bachelor of Computer Science; Major Average: 97.8% Sep 2021 – Present
 - **Coursework:** Linear Algebra I (Adv) (95%), Calculus II (Adv) (97%), Elementary Algorithm Design and Data Abstraction (Adv) (100%)
 - **Scholarships:** \$8,000 Faculty of Mathematics scholarship, \$2,000 President's Scholarship of Distinction




Experience

- **AMD: Software Engineering Intern** Remote
Worked on debugging tool for AMD kernel-mode drivers using C++ and Python May 2022 – Aug 2022
 - Added feature allowing driver developers to inspect hardware scheduling queues
 - Implemented complete overhaul of output formatting library
 - Proposed and implemented improvements to test infrastructure
- **Programming Contest Organizer & Author** Remote
Organized contests, created algorithms problems and prepared tests and graders Sep 2019 – Present
 - **Codeforces LATOKEN Round 1:** Algorithms contest with 18,000+ participants sponsored by LATOKEN. Contest preparation done with C++
 - **DMOJ Contests:** Organized contests with hundreds of participants 
- **WePlate  – Backend Engineer** Remote
Designed, developed, and deployed (Python + Django) backend system for nutritional insights Jan 2022 – June 2022
 - Created an algorithm using Simulated Annealing to generate optimized portion sizes
 - Processed and served mass amounts of cafeteria scheduling and nutritional data (10,000+ items)
 - Managed deployment of service using Google Cloud

Awards/Competitions

- **Google Code Jam** Remote
Major algorithms competition with 90,000+ participants in 2021 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)
- **Canadian Computing Olympiad** Waterloo, ON
Canada's most prestigious high school programming/algorithms contest Feb 2021 – May 2021
 - 2021 Canadian Computing Olympiad (CCO) **Silver Medalist**, an invite-only (top ~40 CCC participants in 2021) team selection test for the Canadian IOI team
 - 2021 Canadian Computing Competition (CCC) – Placed **1st** out of **2,900+** participants with a perfect score

Projects

- **Competitive Programming Tools  **
Python module for Competitive Programming
 - Tools that greatly speed up implementation and debugging during programming contests, including automated local testing, stress testing tools, and browser integration
 - Also available as a VSCode extension with a convenient UI (TS + React)
- **Personal Webserver **
Web services managed with Docker and Nginx
 - **Rating Badges:** Dynamic SVG badges displaying user rating (TS + Express)
 - **DMOJ solution searcher:** Searchable solution database of 1,400+ problems using Django