



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




Experience

- **AMD – Software Engineering Intern** Remote
Worked on debugging tool for 200+ KMD developers across the development cycle (C++, Python) May 2022 – Aug 2022
 - Added feature to inspect hardware scheduled queues, enabling debugging of critical launch-gating issues
 - Proposed and implemented improvements used across unit (GTest, GMock) and CI test infrastructure
 - Implemented overhaul of extension UI library, removing the need to manually format output
- **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

- **ICPC ECNA Regionals 2021:** Placed 4th at the 2021 ECNA contest as part of top team Waterloo Black
- **Google Code Jam 2021**
 - Major algorithms competition with 90,000+ participants
 - Placed 3rd of Canadian participants in Round 3 (165th overall)
- **2021 Canadian Computing Olympiad:** Silver medalist, the CCO is an invite-only (top ~40 CCC participants in 2021) team selection test for the Canadian IOI team
- **2021 Canadian Computing Competition:** Placed 1st out of 2,900+ participants at Canada's most prestigious high school programming contest

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

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