

Maxwell Cruickshanks

Waterloo, ON, Canada

 maxcruickshanks ·  maxcruickshanks ·  maxcruickshanks.site

 me@maxcruickshanks.site ·  +1 (289) 648-5583

Skills

Java, C++, Python, SQL, JavaScript, HTML, CSS, \LaTeX , Git, Unix

Education

University of Waterloo

Sep 2022 – Apr 2027 (expected)

Bachelor of Computer Science, Honours – AI Specialization

Waterloo, ON

- Cumulative GPA: 95.70% / 4.0 GPA
- Recipient of President's Scholarship of Distinction
 - Scholarship for an admission average of 95% or higher

Canadian Securities Institute

Jun 2022 – Aug 2022

Canadian Securities Course

Toronto, ON

- Learned about the financial industry, including equities, bonds, and derivatives

Work Experience

Untether AI

May 2023 – Aug 2023

Compute Kernel Software Engineering Intern

Toronto, ON

- Shrunk the local database by **97.5%** and improved data organization to ease development
- Developed programs for a custom spatial architecture while using the RISC-V instruction set
- Deployed and integrated PostgreSQL database with REST API in TeamCity CI/CD to store statistics about network performance and regressions, added debugging information to failed CI tests
- Optimized and tested compute kernels for common machine learning layers (like convolution, up-sample, NMS)
- Developed Python developer tools for creating compute kernels more efficiently
- **Technologies used:** Python, C++, SQL, Git, Unix

Centre for Education in Mathematics and Computer Science

Dec 2022 – Present

Canadian Computing Competition Committee Member

- Developed and proofread problems for the Canadian IOI selection contests (CCC/CCO)
- **Technologies used:** \LaTeX

DMOJ: Modern Online Judge

May 2021 – Present

Site Moderator

- Added 1000+ problems, ensured consistency across the problem set
- Organized and set 10+ contests, each with 100+ contestants
- Continually updated test data to prevent unintended solutions from passing
- Responded to contest tickets, ran integrity checks on contests
- **Technologies used:** Python, C++, \LaTeX

Contests and Awards

LeetCode - maxcruickshanks

- Peak rating of 2800+, 200 out of 420 000 users (top 0.05%)

Canadian Computing Olympiad 2021 - Bronze Medalist

- Placed in the top 40 out of 2920 contestants in the Canadian Computing Competition to qualify

Personal Projects

Course Scheduler

 maxcruickshanks/Course-Scheduler

- Course scheduler using C++ for minimizing workload in any term with a heuristic

Discord Bot (Using aytexgen)

 maxcruickshanks/Discord-Bot-aitextgen

- Discord bot using Java that can generate text from trained messages with Python and aytexgen

Dynamic File Storage

 maxcruickshanks/Dynamic-File-Storage

- Java peer-to-peer encrypted file transfer on LAN

Paint++

 maxcruickshanks/Paint

- Drawing tool using Java similar to Windows Paint with an infinite grid and navigated with WASD