Maxwell Cruickshanks

Waterloo, ON, Canada

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Skills

Java, C++, Python, SQL, JavaScript, HTML, CSS, LATEX, Git, Unix, Agile, Scrum, Object-Oriented Design

Education

University of Waterloo

Sep 2022 - Apr 2027 (expected)

Bachelor of Computer Science, Honours – Al Specialization

Waterloo, ON

- Cumulative GPA: 95.06% / 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

Toronto, ON

Canadian Securities Course

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

Work Experience

Untether Al

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, upsample, 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 aitextgen)

maxcruickshanks/Discord-Bot-aitextgen

• Discord bot using Java that can generate text from trained messages with Python and aitextgen 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