


# Maxwell Cruickshanks

Waterloo, ON, Canada

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

## Skills

Java, C++, Python, SQL, JavaScript, HTML, CSS,  $\text{\LaTeX}$ , 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

## Work Experience

Untether AI

May 2023 – Aug 2023 (expected)

Compute Kernel Software Engineering Intern

Toronto, ON

- Added debugging information to failed CI tests that checked for patterns in failed outputs
- 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
- Deployed and integrated PostgreSQL database with REST API in TeamCity CI/CD to store statistics about network performance and track regressions
- Shrunk the local database by **97.5%** and improved data organization to ease development
- **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:**  $\text{\LaTeX}$

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
- Proofread contest problems for inconsistencies, grammatical errors
- Continually updated test data to prevent unintended solutions from passing
- Responded to contest tickets, ran integrity checks on contests
- **Technologies used:** Python, C++,  $\text{\LaTeX}$

## 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

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

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

Paint++

 maxcruickshanks/Paint

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