# William Wu

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# **TECHNICAL SKILLS**

- Languages: Python, Java, C++, HTML, Javascript, Typescript, CSS, R and SQL
- Technologies: Flask, FastAPI, React, NextJS, PostgreSQL, Git, AWS, Pandas, Matplotlib and OpenAI

### **EDUCATION**

# **University of Waterloo**

September 2024 - Present

Bachelor of Computer Science, Honors

Waterloo, ON

- Cumulative GPA: 94.0% (4.0 GPA)
- Recipient of the Mathematics National Scholarship
  - One of 10 awarded in the Faculty of Math for excellence in academics and extracurriculars

#### **EXTRACURRICULARS**

# **DMOJ Modern Online Judge**

May 2021 - Present

- Moderated the site as staff in training, performing integrity checks on user contest submissions
- Authored 12 programming problems with a combined total of 13000+ solve attempts by users
- Curated 9 contests with a combined total of 1500+ live participants
- Tested data strength for monthly programming contests to prevent unintended solutions

# 8 Globemaster Royal Canadian Air Cadet Squadron

September 2018 - June 2024

- Led the entire squadron of 200+ Cadets during the 2024 annual parade
- Organized the 2023 fall fundraiser, tagging, which involved 100+ Cadets over four days
- Oversaw the fifth-year senior Cadets and worked with adult staff to conduct evaluations
- Reached the second highest rank, Warrant Officer Second Class

# **PERSONAL PROJECTS**

#### **VR Exercising Game Companion App**

January 2025

- Developed a health-based VR exercising game and web app for DeltaHacks XI
- Created a real-time health dashboard with Streamlit, Cohere's LLM and Firebase Realtime Database
- Won second place overall out of 600+ competitors and 130+ submitted projects

## Admission Statistic Web App, admissed.com

December 2024

- Built a full-stack web app for admission statistics analysis, featuring a React and CSS frontend
- Utilized Python's FastAPI web framework to build the backend server, alongside Pandas and Matplotlib for data analysis and visualization
- Employed AWS technologies such as S3, CloudFront, Route 53, ECR and Lambda to deploy it

**Pantry Monitor** August 2024

- Constructed a user-time-efficient pantry app for Ignition Hacks 2024
- Implemented grocery photo scanning using OpenAI's GPT-4 vision capabilities on a Flask backend
- Leveraged DALL-E and LLM text generation to create recipes

**Attendance Tracker** March 2023

- Engineered a web app to take class attendance using facial recognition for YrHacks 2023
- Worked on the backend Flask application, which utilized the Python face recognition library
- Won second place overall and the best web app category out of 350 competitors

# **ACHIEVEMENTS**

# Canadian Computing Competition, Senior Division, Honor Roll Group 2

February 2022

Placed at rank 75 over 3262 senior competitors