

JULIAN ZHANG

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EDUCATION

University of Waterloo

(Sept 2024 - Apr 2029)

Bachelor of Computing and Financial Management (CFM)

University of Toronto Schools

(Sept 2018 - June 2024)

Ontario Secondary Schools Diploma | Cumulative GPA: 4.0

EXPERIENCE

Oakville Centre For Vision - Software Engineer

(May 2024 - Sept 2024)

- Created a web platform for eye-tracking goggles designed for analyzing vision patterns in pro athletes under the supervision of optometrist Dr. Ronald Gall
- Focused on data analysis of gaze vectors from tests aimed at identifying saccades and fixations
- Collaborated with team to rewrite legacy codebases with more than 6000 lines

University of Toronto Clean Energy Lab - Research Assistant

(June 2022 - Sept 2023)

- Used Crystal Graph Convolutional Neural Network (CGCNN) to examine trends in chemical properties
- Analyzed results and utilized them for material discovery aimed at producing cleaner energy to mitigate the effects of climate change
- Presented findings to Prof. Oleksandr Voznyy and PhD Students

Canadian National Debate Team - Member

(May 2023 - Aug 2024)

- Selected as one of 12 debaters nationwide to represent Canada at the Belgrade World School Debating Championship (WSDC) 2024
- Compiled research in politics, IR, economics, and competed at international tournaments
- Hosted 5+ debate tournaments attracting over 500+ participants and raising over \$10,000 for charity

Side Projects

- SignWave: An AI text-to-Sign Language translator for the deaf (OpenCV, Flask, MediaPipe, Whisper)
- zhaju.github.io: My personal website, blog, and repository for study resources (HTML, JS, CSS, Quartz)
- MNIST Digit Classifier Neural Network (TensorFlow, PyTorch, Keras)

SKILLS

- Languages:** C/C++/C#, Python, Java, JavaScript, HTML, CSS, LaTeX
- Libraries:** React, NumPy, matplotlib, pandas, PyTorch, TensorFlow
- Developer Tools:** Git, GitHub, Conda, VSCode, PyCharm, CLion
- Courses:** Supervised Machine Learning, Advanced Learning Algorithms, Unsupervised Learning
- Certifications:** Bronze Star Lifeguarding, CPR A and B, RCM Piano

SELECTED AWARDS

- JamHacks VII (Largest Canadian HS hackathon) - **First Prize Overall, Best use of GitHub**
- American Invitational Math Exam (AIME) Qualifier - **Top 8% of Participants Worldwide**
- Canadian National BP Debate Championship - **1st speaker and team**
- Hart House High Schools Tournament - **1st speaker and team (record-breaking performance)**
- Munk Debates ReSolved Global Debate Competition - **Champion, received \$5,000 prize**
- Harvard College World Schools Debate Invitational - **Best Finals Speaker**