

Dorothy Zheng

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EDUCATION

University of Toronto

Toronto, ON

Honours Bachelor of Science in Computer Science

Sept. 2025 – April 2029

- **Arbor & C. David Naylor Scholar (\$24,500)** — Selected as one of 8 University of Toronto National Scholarship finalists. Awarded on the basis of academic merit and demonstrated leadership excellence.
- **Don Walker Scholarship Recipient (\$12,000)** — One of 80 global recipients based on academic performance and contributions to the community. Awarded by Magna International Inc.

PROJECTS

Portfolio Website | *React.js, Three.js, Tailwind CSS, HTML*

Jun 2025 - Sept 2025

- Designed and programmed portfolio website to showcase projects.
- Implemented interactive 3D components and dynamic lighting with Three.js, optimizing animations for performance.
- Deployed using Vercel with custom domain integration and GitHub CI/CD workflow.

sEMG Bionc Arm Control System | *Python, MicroPython, Data Processing*

Sept 2023 - May 2024

- Developed and engineered fully bionic arm processing muscle activity from biceps and triceps to control hand and elbow movement.
- Processed data from surface electromyography (sEMG) signals and created algorithm to filter noise.
- Won Gold, Best Engineering, Sanofi BioGenius, Innovation and \$2000 Scholarship at Windsor Regional Science, Engineering, Technology and Engineering Fair.

Music XML Parser | *Java Swing*

Nov 2023 - Jan 2024

- Built a Java Swing application to parse and render MusicXML files into readable sheet music, combining structured data parsing with real-time UI rendering.
- Integrated an audio playback engine supporting tempo modifications and synchronized score highlighting, enhancing usability for musicians.
- Applied object-oriented design principles and modular architecture for maintainability and extensibility.

EXPERIENCE

MasseyHacks

Windsor, ON

Co-Director

Apr 2024 - Jul 2025

- Directed a 15-member team to host a 48-hour event for over 160 participants.
- Secured and managed \$10,000 in sponsorship funding to support event operations and technology.

Operations Organizer

Jun 2022 - Apr 2024

- Managed hacker activities, and secured partnership with outside organizations.
- Contributed unique perspective as youngest-ever participant, shaping event to better support younger students.

CodeReach

Windsor, ON

Director

Sept 2024 - June 2025

- Led a 10-member team to deliver free weekly coding lessons for over 100 students.
- Partnered with the Greater Essex County District School Board to expand outreach.

Logistics Organizer & Mentor

Oct 2022 - Sept 2024

- Mentored classrooms of 60+ students in web development.

TECHNICAL SKILLS & HONORS

Languages: Python, C++, HTML/CSS, Javascript, Swift Java, R

Technologies: React.js, Tailwind CSS, Three.js, MicroPython, Git, PyGame, Java Swing

Canadian Computing Competition: '24 Sr. Top 5%, '23 Jr. National First Place

NASA International Space Apps: '24 Top 8% of 15000+