

# OWEN WALDRON

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## TECHNICAL SKILLS

**Proficient Technical Skills:** C++, Python, TypeScript, SQL, HTML, MLIR, Swift, CSS, Bash, Kubernetes, Excel

**Mobile Development:** iOS (Swift: SwiftUI & MVVM, Storyboards), Android (Java: Android Studio)

**Web Development:** Backend (FastAPI, Node.js, Django), Frontend (React.js, Svelte, Tailwind), Databases (MongoDB, SQL)

## EDUCATION

**University of Waterloo, Faculty of Mathematics** | May 2027

**Cumulative GPA:** 93.87%

*Bachelor of Computer Science, Minor in Physics. (Candidate)*

- **Honors & Awards:** President's Scholarship of Distinction
- **Relevant Courses:** Object Oriented Software Dev, Algorithms & Algorithm Design, Applied Cryptography

**Toronto French School** | May 2022

**IB Points:** 44/45

*Ontario Highschool Diploma, International Baccalaureate Advanced Bilingual Diploma, The Brevet National Diploma*

- **Honors & Awards:** Tory Award, Highest Awards in Computer Science, Higher-Level Math, and Higher-Level Physics

## WORK EXPERIENCE

**Junior Compiler Engineer**

**May 2025 – Aug 2025**

*Huawei – Toronto, ON*

- Designed compiler passes in C++ to optimize AI model execution on proprietary hardware accelerators
- Collaborated with hardware and AI teams to co-design software abstractions that maximized throughput in wireless inference scenarios
- Contributed to a custom MLIR dialect for hardware-specific transformations and operator fusion

**Junior Developer**

**Sep 2024 – Dec 2024**

*Marques Consulting Group – Toronto, ON*

- Created reusable GitHub actions and template repositories to pioneer continuous deployment pipeline to Kubernetes.
- Developed company website in Svelte and video conference speaker analysis tools using FastAPI and ReactJS
- Established frameworks for the analysis of model accuracy and program efficiency to improve existing applications.

**Software Developer**

**Dec 2023 – May 2024**

*Marsh McLennan Companies – Toronto, ON*

- Developed internal workflow automation software as part of an Agile software development team (MERN stack).
- Collaborated with UX team to engineer a reusable React component library for internal use.
- Experimented in creating proof-of-concept applications to improve targeted workflows

## SAMPLE PROJECTS (PORTFOLIO)

**WaveAI**

**July 2023 – Dec 2023**

*Swift & SwiftUI, Xcode, OpenAI API*

- Collaborated to envision an app to aid language learning by providing a FaceTime-like interface for talking to an AI.
- Constructed a framework for fluid speech-to-text and text-to-speech conversations using the AVFoundation library in combination with OpenAI's API
- Realized a colleague's Figma design using SwiftUI, and implemented the MVVM architecture for the app

**Data-Pool.ca**

**June 2021 – August 2023**

*Django, React.js, HTML (Jinja 2), CSS, Javascript*

- Implemented a Django backend that allows the querying of an SQL database of millions of individual swims through a RESTful API.
- Designed a dynamic React.js frontend which interacts with the backend through GET and POST requests.
- Configured DNS to point domains and subdomains to the React.js frontend and AWS backend, respectively.

## OTHER SKILLS

**Skills:** Proficiency in French, advanced problem solving, team management and cooperation, analytical and critical thinking

**Other employment:** Competitive swim coach & instructor, MATH 135 (Algebra) Course Marker

**Interests:** Physics and mathematics, rock climbing, underwater hockey, cats, video games