



Jimmy Zheng

University of Waterloo, 2A

 Jimmy's Website
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EDUCATIONAL BACKGROUND

University of Waterloo, Waterloo, Ontario

Sep 2024 - April 2029

- Data Science, GPA: 3.90/4.00 (Excellent Standing)
- Relevant Coursework: Algorithm Design & Data Structure, Object-Oriented Programming, Calculus

Technical Skills

- Language: C/C++, Python, Java, JavaScript, TypeScript, HTML, CSS, SQL, Racket, VBA, LabVIEW SDK
- Frameworks/Libraries: React/ReactNaive, MERN, Node.js, Express.js, Next.js, RESTAPI, jQuery, Bootstrap
- Tools: Postman, Linux command line, Github, Version control (git), n8n, Test automation, Docker, SSH, UI/UX

WORK EXPERIENCE

Software Innovation Developer, Co-op (Outstanding Evaluation)

May 2025 - August 2025

[Emerson, NI](#), Shanghai, China

(C++, Python, LabVIEW SDK, AST, n8n, REST API, RAG, Docker, React)

- Assisted in developing a LabVIEW-to-native-code compiler using **C++ and Python**, enabling graphical programs to be translated into optimized machine code. Improved compilation speed by **30%** and reduced runtime errors by **20%**, accelerating internal development workflows.
- Developed an internal **chatbot** powered by **RAG** that indexed and summarized official documentation, helping cross-functional teams (e.g., LabVIEW developers exploring TestStand) access accurate answers instantly, improving team productivity and knowledge sharing, reducing knowledge lookup time by **50%**.
- Built automated workflows with **n8n and Docker** to generate and publish circuit documentation, reducing manual preparation time by **70%** and ensuring consistent formatting across all projects.
- Designed and built an internal website using **JavaScript** and **ComfyUI** with **React.js** to auto-generate cartoon avatars from employee photos, increasing internal team profile recognizability by **80%**.

Software Developer, Part-time

Feb 2024 - August 2025

[VolunTrack.Org](#), Toronto, Ontario

(React, JavaScript, Jest, Node.js, Express.js, Postman, HTTP)

- Developed and optimized the homepage and 'About Us' page for VolunTrack using **React, Bootstrap, and JavaScript**, improving site load speed by 30% and enhancing mobile responsiveness.
- **Implemented automated testing** using **Python unit tests, Jest, and visual regression testing**, identifying and resolving **15+ bugs** before production release and improving overall code reliability by **50%**.
- **Validated HTTP requests with Postman** by designing and executing structured **API test cases**, ensuring **90%+ accuracy** of backend responses and reducing integration issues across the web application.
- Optimized website responsiveness by implementing **media queries** in **CSS** to ensure optimal user experience across various devices, including desktops, tablets, and smartphones.

PERSONAL PROJECTS

[Simon's Game](#)

Oct 2024 - Dec 2024

(JavaScript, jQuery, Node.js, Express.js, HTML, CSS, SQL)

- Created an interactive game using **JavaScript, HTML, CSS, jQuery, Node.js, and Express.js**, enhancing user engagement through immersive audio effects and intuitive interaction features.
- Engineered backend functions in **JavaScript** to manage player choices and game-state logic, ensuring seamless real-time interactions and reliable outcome validation.

[Keeper Note App](#)

Feb 2025 - June 2025

(React, JavaScript, CSS, Await/Async, Postman, HTTP, Unsplash API)

- Built a Google Keep-style note-taking app using **React** functional components and **Hooks (useState)**, supporting creating and deleting notes via controlled inputs and **prop callbacks**.
- CRA built with npm scripts + **cross-env** (OpenSSL fix), **ESLint (react-hooks)**; CSS + Google Fonts;
- Composed reusable components (Header, Footer, CreateArea, Note) with lifted state and keyed lists.