

Nathan Wong

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Education

B.Sc Specialization in Computing Science - Minor in Business | University of Alberta

- **Relevant Coursework:** Software Engineering, Databases, Web Applications and Computer Architecture, Operating Systems, Human Computer Interaction, Data Visualization, Operation Management, Data Science.

Skills

Languages: Typescript, Javascript, HTML, CSS, Python, C, Java, R, SQL.

Web Development: React, Redux, Vite, Express, Electron, Mantine-UI, MongoDB, NodeJS, REST APIs.

Automation & CI/CD: Playwright, TestComplete, Powershell, TeamCity, GitHub Actions.

Tools: GitHub & Git, Conan, gRPC, Figma, Jira, Tableau.

Professional Experience

Software Developer Intern (05/2025 - 12-2025) | PulseMedica

- Independently developed a desktop application using React + Electron, which serves as the primary entry point for end users.
 - Included features such as advanced developer settings, live monitoring feedback, and a live interactive terminal.
- Developed software for an ophthalmology device application using C++, React + Redux, TypeScript, and gRPC.
- Designed the automation of critical application data collection tasks, transforming a 1-hour manual data collection process into a **near-instant task**.
- Developed and integrated a microcontroller-based embedded system in C to provide hardware diagnostic insights.

Software Quality Assurance Intern (09/2024 - 05/2025) | PulseMedica

- Developed automated UI testing for critical ophthalmology applications, **achieving a 4x increase in testing throughput**.
- Integrated automated UI testing into CI/CD pipelines resulting in early detection of defects & reduced manual testing effort.
 - Leveraged technologies such as TeamCity, Slack APIs, PowerShell, Bash, and Python scripting.
- Performed wide ranges of software testing including integration, system, regression, and sanity tests.
- Supported Software QA efforts through designing test cases, creating bug tickets, and generating testing reports.
- Demonstrated leadership and initiative by taking ownership of authoring onboarding documentation which previously did not exist, as well as training new QA team members.

Coding Instructor (07/2023 - 05/2024) | Code Ninjas

- Facilitated engaging coding classes for students between the ages 7 - 14, cultivating their programming skills through hands-on projects on platforms such as Scratch, Javascript, Python, and Unity.
- Collaborated with colleagues to set up the organization's Github repository and Notion workspace, which led to improved workflow and an increased student enrollment rate of 13% over the course of 6 months.
- Provided IT support such as peripheral + hardware setup and software maintenance.

Projects

Web Development (11/2024 - 02/2025) | Poke-Gear

- Developed a full-stack web note-taking application using React, NodeJS, and Express.
- Designed and managed a MongoDB database to store user notes and credentials, enabling fast and scalable data retrieval.
- Deployed the application to a SaaS platform, enabling public access and real-world usability.

Android Application (01/2023 - 04/2023) | QR-Hunter

- A QR-Code geocaching mobile app in Java, with multi-user and Google Maps API integration.
- Lead UX designer and UI developer. Created mockups and storyboard sequences in Figma.