

Nicholas Ficara

nficara@uwaterloo.ca - [LinkedIn](#) - [GitHub](#) - [Portfolio](#)

Software Engineer with 13 months of professional experience and 8 years of experience in projects and open source.

SKILLS

- 13 months of professional experience in JavaScript, React, Python, Go, AWS, MySQL, and Git
- 8 years of project and open source experience in full stack development
- Proficiency in low level languages including C, C++, Rust, Asm
- 5 years of experience in Linux and associated tools

PROFESSIONAL EXPERIENCE

Aveda Health

California, USA

Software Engineering Intern

13 months

- Optimized industry specific 3D mesh algorithm in JS, resulting in a 10x speed increase
- Enhanced 3D human-computer interaction experience using three.js and WebGL, improving user experience, usability, and performance
- Created two new Go/AWS API endpoints complete with detailed logging and monitoring dashboards
- Parallelized CI/CD pipeline resulting in a 50% speedup and wrote end to end verification tests for newly introduced workflows in Python
- Hardened cybersecurity by debugging and closing 35+ bugs and working on compliance with patient data security standards (HIPAA)

SOFTWARE PROJECTS

Projects

- SchoolMHC: mental health chat platform for students, by students. Deployed with over 1k users. Built with Svelte as a frontend and serverless Firebase NoSQL database backend.
- Nitro Narwhal: messaging bot for managing giveaways. Scaled to over 150k users with no slowdowns or scaling issues. Built with a Node.js and SQL backend.
- DocsCMS: content management system that integrates with Google Docs rather than a proprietary editor. Generated a productivity increase in article output of 250% in three school newspapers.

Open source & Hackathons

- Contributed to three.js, Nvidia drivers, and other small open source projects.
- Competed in 12 hackathons including HackTheNorth, uOttaHack, MariHacks, and more. See [devpost](#) for more hackathon experiences.

Industry leadership

- Hosted workshops with 1k+ attendees on various topics such as APIs, React and Git.
- Maintained a blog detailing my experiences: blog.nicholasficara.dev

EDUCATION

University of Waterloo

Waterloo, CA

Bachelor of Software Engineering, Honors (BSE)

Expected 2027

- Entrance with President's Scholarship of Distinction (95%+ average)
- Software Engineering Scholarship (for outstanding extracurricular achievement)