

Joshua Esteban Ruiz Nowell

Candidate MEng Computer Engineer | University of Waterloo

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EDUCATION

UNIVERSITY OF WATERLOO

Candidate MEng. in Computer Engineering - **GPA: 4.0**

Expected: Dec 2027

UNIVERSITY OF VICTORIA

B.A.Sc. in Computer Engineering

Completed: 2025

Specializations: Computer Intelligence • Networks Security and Privacy

SKILLS

PROGRAMMING

Python • JavaScript • C++ •
MatLab • Java • SQL • Swift

TECHNOLOGIES

Git • Linux • PyTorch • VScode •
IntelliJ • Cursor • Next.js •
PyCharm • Xcode • React

LINKS

GITHUB/PORTFOLIO:

<https://github.com/joshruiz1414>

<https://joshruiz1414.github.io/>

LINKEDIN:

<https://www.linkedin.com/in/joshua-ruiz-software/>

INTERESTS

Basketball • Piano • Climbing

VOLUNTEER

Community Sports Coach •
Salvation Army Team

AWARDS

Level 7 Practical RCM Piano •
Advanced Rudiments Theory

LANGUAGES

English (Native)
Spanish (Advanced)

EXPERIENCE

Kuran Games | SOFTWARE ENGINEER INTERN

July '25 - Sept '25

- › Created 5 H5 games with increasing level difficulty use spec-drive AI development
- › Delivered collision detection engine and hit boxes in platform production game
- › Fixed memory leaks with developer tools improving load times 20% with flame graph
- › Led effort to increase artifact integ test coverage 10% enabling our first CI/CD deploy

Natural Resources Canada | DATA ANALYST INTERN

Sept '24 - Apr '25

- › Automated pipeline to deliver 5x fire-spotting ML datasets using data augmentation
- › Leveraged ArcPy to automate transforming fire spread data into annotated UI output
- › Optimized fire spread algorithm path performance over 15% using level-focused BFS
- › Cleaned up 200k+ wildfire shape datasets for ML processing with python/SQL scripts

Noratek Solutions | SOFTWARE ENGINEER INTERN

May '24 - Aug '24

- › Debugged a pivot table in Java to correctly display 100s of clients' data aesthetically
- › Increased app test coverage to 90%+ uncovering hidden edge cases prior to release
- › Paired with senior engineers to design isolated modules fitting into larger app system
- › Wrote SQL queries that combine data from PostgreSQL database for web dashboard

Voronoi Health | SOFTWARE DEV INTERN Jan '22 - Apr '22 & Sep '22 - Dec '22

- › Developed automatic program start-up Cpp script with OS-aware dynamic bootstrap
- › Completed named-pipe IPC project unblocking front-end development teams
- › Used Cpp to replace company-wide bash script making it generalizable for every OS
- › Developed Cpp program that generated mock user-data for main app test cases

RELEVANT PROJECTS

Smart-Recipe-Extractor

Aug '26 - Present

- › Built Next.js/TypeScript app to extract, recipes using Cheerio/Gemini AI API fallbacks
- › Integrated Google OAuth and Supabase PostgreSQL via Prisma ORM for recipe saving
- › Implemented speech recognition engine to enable voice controlled step navigation
- › Designed props and state types for clean recipe payload, UI handler, and API routes
- › Enforced codebase quality with integration tests on 10+ contributed pull requests

Machine Learning Thermal Rescue Drone

May '24 - Aug '24

- › Trained a YOLOV8 object detection model with 85%+ accuracy to detect humans
- › Using RL to train model across 150 epochs, achieving >60% precision on eval dataset
- › Used keypoints, Gauss filters, max-pool CNN methods to segment forest images
- › Deployed final model on a drone, enabling real-time detection of segments at 15 fps
- › Implanted TensorBoard to track training, analyzing confusion matrices and PR curves