

Nic Ung

BSc. Computer Science Major

Driven and passionate developer based in Richmond BC with interests in embedded programming, self-hosting, and product development. I have built and shipped multiple products related Human Interface Devices. I am in my 4th year studying Computer Science at the University of British Columbia and am looking to diversify my skillset in other technical fields and team environments!

Technical Skills

Programming Languages: Java, C/C++, Python, Dart, OpenGL, JavaScript, TypeScript, HTML, CSS

Strategies: Object Oriented Programming, Test Driven Design, CI/CD, Data Structures, Algorithms, REST APIs, Relational Database, AGILE

Tools/Environment: GitHub, Bash, SQL, Docker, QEMU, VSCode, IntelliJ, Arduino IDE, Unraid, TrueNAS Scale, Wireguard, TailScale, OpnSense, CMake, Flutter, Next.js, OpenGL, PlatformIO, Pillow

Testing: GDB, JUnit, Valgrind

Web: Cloudflare DNS, Azure, AWS, Vercel

Technical Work Experience

Bastion Payment Systems Corporation

06/2023 – 09/2023

FinTech Developer Intern

Philippines, Makati

- Worked closely with senior management to develop and implement a business continuity plan in the event of a catastrophic event, improving availability up to 6 9s
- Coordinated with IT and operations teams to test, plan and begin deployment of mitigation systems with complete functionality in place under 2 months of initial rollout

Projects

Google Calendar Discord Bot

03/2025

- Engineered a Discord bot to synchronize Google Calendar events with server events, enhancing community coordination and increasing turnout.
- Integrated secure communication and API authentication with a personal Google Cloud Project
- Deployed via Docker on a self-hosted server, demonstration proficiency with containerization

ESP23S3 Oil Pressure Gauge

01/2025 – 02/2025

- Designed a complete hardware solution including chassis, mounts, circuitry based on an ESP32S3 Development board.
- Developed a modular and multifunctional firmware that enables easy adaptation for multiple sensor interfaces
- Authored comprehensive documentation and outlined my development process to help show challenges I had faced and corresponding solutions. This allows for further development and transparency.

Just Parry

09/2024 – 12/2024

- Led the prototyping of a responsive, precision-based fighting game amongst a team of 6
- Developed proficiency utilizing GLM for matrix operations, SDL for audio and input handling, and CMake for cross platform compatibility
- Built a custom game engine in C++ to have greater control over input processing increasing input consistency by 33%
- Applied Agile methodologies for efficient development and project management amongst all the developers
- Utilized leadership and communication abilities to hold weekly scrum meetings, ensuring team alignment and progression

Extracurricular Activity

UBC Esports Association

08/2020 – 05/2025

Developer

Vancouver, BC

- Helped develop and deploy a custom lounge management web app for our PC Café. Increasing our front desk efficiency by

over 50%

- Actively engaged with code reviews and bi-weekly pair programming sessions that helped improve team understanding of the code base by 20%
- Provided contributions for both the frontend and backend components, upholding our style guidelines, scalable and maintainable code

President

- Led a university club of over 100+ executives, overseeing operations, delegations, and strategic planning
- Liaised between club executives and university personnel to organize room bookings, event logistics, and administrative duties.
- Directed end-to-end planning and execution of events that hosted over 300 attendees, coordinating between internal teams to ensure success and direction.
- Applied conflict resolution and de-escalation techniques to maintain team cohesion and resolve interpersonal issues.

Work Experience

Code Ninjas

06/2024 – Present

IT Consultant/Code Sensei

Richmond, BC

- Designed and deployed a scalable, multi-functional server system, reducing project transfer interruptions and increasing effective instruction time by 30%
- Delivered hands-on instruction in microcontrollers, AI Training, Lua programming while adapting content to students' learning levels.
- Supported students grasp of core computer science concepts with interactive lessons,

Richmond Christian School

06/2022 – 08/2022

Administrative Assistant

Richmond, BC

- Maintained accurate financial records and managed confidential student and staff data with a strong attention to detail of privacy and security
- Provided IT support for internal systems and facilitated day-to-day logistics to ensure smooth administrative operations

Board's Boards

05/2020 – 03/2022

Founder

Richmond, BC

- Built and ran a niche small business creating custom controller modifications using 3d printing, microcontrollers, and custom circuit boards
- Developed and prototyped hardware in CAD software, overseeing the complete production and delivery lifecycle
- Independently managed business finances, marketing, and client relations.

Education

University of British Columbia

09/2020 – Present

B.Sc Major in Computer Science with Co-op

Vancouver, BC

Certifications

Microsoft Certified: Azure Fundamentals

01/2024

AWS Cloud Practitioner Essentials

02/2024

Soft Skills & Interests

Software: Microsoft Office Suite, Google Suite, AutoCAD, KiCad, 3DSMax, Fusion360, Google Sketchup, Davinci Resolve, Notion, Sage50, PrusaSlicer

Languages: Basic Mandarin, Basic French, Basic German

Work Style: Good Under Pressure, Time Sensitive Problem Solving, Troubleshooting, Systematic Approach, Collaborative