

Nic Ung

Year 4, 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, OpenGL, JavaScript, TypeScript, HTML, CSS

Strategies: Object Oriented Programming, 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, OpenGL

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 and ability to offer greater terms of Service Level Agreement
- Coordinated with IT and operations teams to test, plan and begin deployment of mitigation systems.
- Collaborated with Software Engineers to build, abstract and test internal tools to be used during a crisis.

Projects

Please refer to my website for more details

Google Calendar Discord Bot

03/2025

- A discord bot that synchronizes events in a Google Calendar with the events planned in a Discord server
 - Authenticates and communicates with a personal Google Cloud Project
 - Hosted locally using Docker on my home server
- Skills: Python, REST API, Hosting, Virtualization, Docker Compose

ESP32S3 Oil Pressure Gauge

01/2025 – 02/2025

- Designed a full product including chassis, mounts, circuitry based on an ESP32S3 Development board.
 - Developed a flexible code base with intent for easy configuration and repurposing for different sensor types
 - Documented my development process to help show challenges I had faced and corresponding solutions.
- Skills: C++, PlatformIO, Arduino, Low Level programming

Just Parry

09/2024 – 12/2024

- Designed a fighting game prototype with a responsive and consistent input for players independently and with a team.
 - Developed proficiency utilizing GLM, SDL, and CMake tools for matrix operations, audio/input handling, and cross-platform compatibility respectively.
 - Created a custom game engine in order to have greater control over input processing
 - Applied Agile methodologies for efficient development and project management.
 - Utilized leadership and communication abilities to hold weekly scrum meetings, ensuring team alignment and progression.
- Skills: C++, OpenGL, Git, CMake

Volunteer Experience

UBC Esports Association

08/2020 – Current

Developer

Vancouver, BC



- Helped develop and deploy a custom lounge management web app for our PC Cafe
- Maintained website domain and hosting
- Actively engaged with code reviews and pair programming sessions

President

- Provided leadership and oversight to a large university club, including coordinating efforts from a team over 100 people.
- Liaised between club executives and university personnel to organize room bookings, event logistics, and administrative duties.
- Organized events with a large team handling various critical aspects, throughout the entire process of creation to facilitation of events with 300+ attendees.

Richmond Food Bank

10/2019 – 03/2020

Volunteer

Richmond, BC

- Sorted and packed food donations, stocked shelves, and distributed food to individuals and families in need.
- Worked collaboratively with other volunteers to manage the flow of food donations efficiently.
- Utilized conflict de-escalation techniques to manage and resolve conflicts.

Work Experience

Code Ninjas

06/2024 – Present

IT Advisor/Code Sensei

Richmond, BC

- Architected and deployed a robust, expandable and maintainable multifunctional server
- Provided live instruction of microcontrollers, AI Training, and Lua
- Assisted with children's education of the fundamentals of computer science

Richmond Christian School

06/2022 – 08/2022

Administrative Assistant

Richmond, BC

- Assisted in ensuring that all financial records were accurately maintained and up to date.
- Handled sensitive private financial and personal information.
- Managed small-scale logistics and aided with IT systems.

Board's Boards

05/2020 – 03/2023

Founder

Richmond, BC

- Founded and operated a small business selling controller modifications using 3D printed parts and varied microcontrollers
- Designed and manufactured items using CAD software and 3D printing.
- Self-managed finances and marketing to specific niches. Skills: Python, Open Source, Virtualization, Security

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

Languages: Basic Mandarin, Basic French, Basic German

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

Interests: Emulation, Data/Media Preservation, 3D Printing, Car Tuning, Fitness, Weightlifting, Computer Building, Mechanical Keyboards, Ergonomics, Sim Racing, Martial Arts,

