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EDUCATION

- **Queen's University, Kingston ON** *2026*

  Computer Engineering Innovation Stream (ECEi)

- **Rockridge Secondary School** *2022*

  High School Percentage: 94%

EXPERIENCE

- **ThunderBird Marine** *2022-Current*

  Yard Work Employee West Vancouver, BC
  - Worked with several others operating a 25MT (Metric Ton) Marine Travel Lift to lift, block, and relocate boats
  - Utilized rigging skills and teamwork in order to conduct sea tows on boats up to 45 ft in length
  - Communicated with co-workers to relocate and block boats in long-term storage

- **Trolls Resturaunt** *2019-2021*

  Back House Employee West Vancouver, BC
  - Worked in a fast-paced environment while fulfilling several roles including dishwashing, food prep, and line cook

EXTRACURRICULAR EXPERIENCE

- **Queen's Formula SAE Racing Design Team** *2023-Current*

  Team Co-Lead - Electrical/Firmware Kingston, ON
  - Actively leading all software and hardware designers on the team to create an entirely new electrical package
  - Currently working on designing the first electric racing vehicle to be produced at Queen's University

- **Ten Ton First Robotics** *2022-2023*

  Team Lead - Electrical/Software/Pneumatics West Vancouver, BC
  - Designed and built the 2023 Main Electrical Board
  - Primary architect of 2023 code. Implemented the team's first-ever command-based code base while moving the team from Java to C++ to reduce code overhead and gain performance
  - Worked with a team of 10+ to assemble and wire two competitive robots simultaneously
  - Worked under pressure to ensure the robot would perform at the highest level possible throughout the tournament

TECHNICAL SKILLS AND INTERESTS

Languages: C, C++, Python, VHDL, GIT, Verilog, JavaScript, NodeJS

Hardware: STM32, CAN, VGA, ESP32, PS2

Office Software: Word, Powerpoint, Excel, OneNote and LaTeX

RECENT PROJECTS Project Titles Link to Portfolio Entries

- **STM32 Bare Metal Programming** *2023*

  Working to implement basic functions on an STM32 microcontroller without the use of a HAL (Hardware Abstraction Layer)
  - Tools & technologies used: STM32, C, USART, ARM GDB, BlackMagic Debug Probe, ST-Link
  - Successfully implemented the C "printf" function over UART on the STM32F446 microcontroller

- **FPGA Pong Game** *2023*

  The all classic "Pong" written in VHDL and running on a Cyclone II FPGA.
  - Tools & technologies used: VHDL, ModelSim, Altera Quartus, Cyclone II DE2 Development Board, DAC, VGA
  - A fully functional pong game running off of a Cyclone II FPGA through a VGA output and button input.

- **Personal Portfolio** *2023*

  Built a website to house all of my personal projects
  - Tools & technologies used: CSS, HTML, JavaScript, VSCode, Github Pages, NodeJS
  - This is a static site hosted by Github pages that I use to demonstrate my learning through various personal projects. The website itself is also a personal project and I learned all of the languages and tools needed to build it in under 12 hours.