Kyle Mackenzie

portfolio | 1mackenziekyle@gmail.com | github.com/1mackenziekyle | linkedin.com/in/kyle-mackenzie-url

Technical Skills

Languages: Java, JavaScript, C++, Python, HTML/CSS, SQL
Frameworks / Packages: Docker, React, MongoDB, Blue Prism, Node.js, JUnit, NumPy & Pandas, TensorFlow
Tools/Environments: Git, SVN, VS Code, IntelliJ, STM32, Google Colab & Jupyter Notebooks, PLC, HMI, LabView

Education

University of British Columbia — Vancouver, BC
Engineering Physics - Bachelor of Applied Science — *Sep. 2020 - May 2025 (expected)*
Coursework: Software Design, Linear Circuits, Experimental Techniques, Multi-variable and Vector Calculus.

Relevant Experience

Full-Stack Developer Co-op — Jan. 2022 – Present
ICBC — *Vancouver, BC*
- Reduced time spent on Insurance Broker processes by 30% using automation tools in Python including Robot Framework, Robocorp, and deployed using Docker
- Developed and deployed a React app for a demo of a potential new website for ICBC
- Developed Blue Prism automation program to periodically deliver email of a user's most listened-to songs from Spotify.

Propulsion Testing Member — Sep. 2021 – Present
UBC Rocket Student Design Team — *Vancouver, BC*
- Operated test stand during cryogenic dress-rehearsal of engine hot-fire.
- Modified existing PLC and HMI software on engine test stand to implement new features for ignition testing, accelerating launch date by 2 weeks.

Front-End Developer — May 2021 – Sep. 2021
Charlene's Web Services — *Remote*
- Developed a slideshow application using JS, express.js, HTML/CSS for deployment on WordPress marketplace.

Embedded Systems Developer — Jan. 2021 – Sep. 2021
UBC Solar Student Design Team — *Vancouver, BC*
- Developed multi-threaded communication firmware for micro-controllers to communicate through serial, radio, and cellular for real-time data acquisition during solar car races.
- Wrote documentation for embedded software algorithm to ensure complete understanding for future employees.

Technical Projects

Social Network Analysis Project | *3 person project - Java, Git, JUnit* — Oct. 2021
- Developed a Graph data structure to represent relationships between co-workers from a company's email records.
- Implemented methods for depth-first and breadth-first search, as well as finding the shortest path between 2 users.
- Used test-driven development and to achieve 90% branch coverage.

Online To-Do List | *JavaScript, Node.js, Heroku, Express.js, MongoDB, HTML/CSS* — Aug. 2021
- Developed a database-powered web application in Node.js front to back.
- Implemented a MongoDB database to store users' lists locally for revisiting.

Image Classifier | *Python, TensorFlow, Google Colab Notebooks* — Sep. 2020 – Oct. 2020
- Employed and trained a neural network to identify clothing items with over 90% accuracy.

Interests

Hiking • Robotics • Music Production • Web Design