Ryan Ritchie

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EDUCATION

Honours BSc in Bachelor of Computer Science **September 2018 – April 2023**
Carleton University, Ottawa ON

- CGPA 9.74/12, Major GPA 10.24/12
- Dean's List 2020, 2021, George Fierheller Award (2018-2023)
- Relevant Coursework: Data Types and Algorithms, Computer Vision, Database Design, Fundamentals of Web Applications

TECHNICAL SKILLS

Languages: C/C++, HTML/CSS, Java, JavaScript/TypeScript, PostgreSQL, Python, ArcGIS

Technologies: Docker, Express JS, Git, JIRA, Kubernetes, Linux/Unix, MongoDB, Node.js, Spring Boot, Visual Studio

Test Tools: Boost.Test, CppTest, Cucumber, JUnit

WORK EXPERIENCE

Software Development Coop **May 2022 – August 2022**
Ross Video, Ottawa, Ontario

- Actively collaborated in an Agile Scrum environment to solve problems and push new features to improve legacy code built in C and C++.
- Implemented a Test-Driven Development system to create new solutions for features by designing Gherkin statements and creating test cases to modernize the team's development strategy.
- Assisted on the construction of a new product in development, utilizing a hexagonal architecture selected during the design process to construct embedded systems.

DevOps Developer Coop **January 2022 – April 2022**
Kinaxis, Ottawa, Ontario

- Contributed to the design cycle with colleagues, taking ownership of tasks and bugs, assisting in peer reviewing and code reviews.
- Designed new upgrades to company software, allowing for integration to cloud services and simplicity of data flow.
- Built up-to-date Ansible scripts for installation and setup of company software for development and testing purposes.

Software Development Coop **May 2021-August 2021**
Ingram Micro Cloud, Toronto, Ontario

- Initiated the creation of a business systems PostgreSQL database and BI dashboard, accepting data from multiple services and presenting it in an interactive display utilizing metrics represented by graphing models.
- Engineered Python Scripts to operate on a daily basis, managing Ingram Micro databases to add and update information based on specific queries.

APPLIED PROJECTS

Sign Language Detection Software **March 2023**

- Designed a neural network for sign language identification using Keras for training and testing of a database of images of sign language.
- Crafted a Python project which makes use of OpenCV to allow users to input sign language, and by running it through the trained neural network, output a translation.

Piraten Karapen Game **October 2022**

- Built using a Test-Driven Development cycle, building test cases in JUnit and Cucumber gradually constructed the required functions needed to make the test suite pass.
- Utilized Object-Oriented Programming practices and Java Sockets and Spring Boot in the development cycle to provide a functional way for the game to by playable by up to 4 players.