

Owen Ritchie

45 Mann Avenue, Ottawa, ON K1N 6Y7

613-876-2066

owenritchie04@gmail.com

Highly creative, well-driven and functionally bilingual second-year student in Honours Computer Science at the University of Ottawa, eager to showcase my excellent analytical, programming and communications skills in a collaborative team environment.

Program-Related Skills

- **Web Development:** Experienced with HTML, CSS, JavaScript, Node.js, Express.js, Flask
- **App Development:** Experienced with Android Studio
- **Programming Languages:** Java, Python, SQL, R, Go, XML, Prolog, Assembly, Scheme
- **Database Management:** PostgreSQL, SQLite, DuckDB, Firebase
- **Data Analysis & Visualization:** Jupyter Notebook, RStudio, QGIS, HOBOWare
- **Software:** Microsoft Office (Word, Excel, PowerPoint), Adobe Suite, Zotero, pgAdmin4

Work Experience

Data Analytics Intern, Poisson Consulting Ltd.

May-September 2023

- Cleaned and manipulated raw datasets in R using various Tidyverse packages to support numerous projects on behalf of private and public sector clients, including BC Hydro
- Entered and organized large data sets across a variety of file formats through R scripts, and databases such as SQLite and DuckDB
- Supported quality control through error detection and correction, and the upkeep of Poisson's R packages, including replacing deprecated R functions with newer solutions
- Mapped spatial fish data obtained from drone surveys using QGIS to monitor changes in species population and growth

Teaching Assistant, Columbia Mountains Institute of Applied Ecology

July 2023

- Assisted with the preparation and delivery of *Intro to R*, a course demonstrating the capabilities of R, its various packages, and its applications in biology / ecology

Education

University of Ottawa, Honours BSc Computer Science (Graduating 2026)

2022-Present

Projects

- Created an interactive **Flask** application that predicts the seafood consumption of various regions in Oceania based on historic data using a polynomial regression analysis and a variety of Python libraries including **Pandas**, **Scikit-learn**, **NumPy** and **Matplotlib**
- Designed and tested a mobile Android app for cyclists with multiple functionalities using **Java**, **XML**, **Android Studio** and **Firebase**
- Created a functioning hotel booking website with **HTML**, **CSS**, **JavaScript**, **Node.js**, **Express.js** and a **PostgreSQL** database
- Using **Java**, **Scheme** and **Go**, developed a similarities image search program to manipulate digital images, compute their histograms and compare images to a data set