

Iain Mcilveen

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EDUCATION

Bachelor of Science Honour's, Computer Science (Co-op), **CGPA: 11.42/12 (A)**

Carleton University, Ottawa, ON

September 2018 - April 2023

- Currently learning about software engineering, programming paradigms, relational and non-relational databases, algorithm time complexity, fundamental data structures and web development

SKILLS

- Proficient in several programming languages including: **Python**, **Java**, **JavaScript**, **C**, **C++**, and **Scheme**
- Experienced in Front-End web development using **HTML**, **CSS**, and **JavaScript** as well as **React** to write interactive web applications
- Wrote the Back-End for web applications using **Node.js** and **Express** to design and implement scalable **REST APIs** and made use of **SQL** database management systems such as **PostgreSQL**, **Oracle** to store information
- Implemented several advanced data structures in **Java** with performance considerations in mind to find more efficient solutions to problems

EXPERIENCE

Application Developer

Statistics Canada, Ottawa, ON

June 2020 – Present

- Created and Improved internal tools used by many different clients within Statistics Canada. This meant I had to be able to work with clients to create the programs to suit their needs
- Made use of **Oracle** to design and create new tables to store data which could then be accessed by the users in UI elements which I made in **VB.net**

Teaching Assistant

Carleton University, Ottawa, ON

September 2019 – December 2019

- Held office hours, answering questions and helping students gain an improved understanding of the core fundamental programming concepts
- Led tutorials, explaining programming concepts in front of a group of students and correcting any problems students encounter
- Worked with a team of other Teaching Assistants to complete marking and give feedback in a timely manner

PROJECTS

Online Book Store

<https://github.com/IainMcilveen/comp3005pg>

- This was my final project for my Relational Databases course and is a full-stack web application which is designed to be the online platform for a bookstore.
- I made use of **PostgreSQL** to store book, user and order information, and **Node.js** and **Express** for the Back-End. For the frontend, I made use of the **Pug** templating engine which used information the database to generate unique pages for the users.

Who's That Pokémon

<https://github.com/IainMcilveen/Whos-That-Pokemon>

- Who's That Pokémon is a web application inspired by the Original Pokémon cartoons which quizzes the user and was written for the CUhacking 2020 hackathon.
- This is a web application written in **React** which is designed to work well on mobile devices. I made use of the **Hooks API** within React to save the quiz state and determine whether the user answered correctly or incorrectly.