# Matthew MacRae-Bovell

Computer Science Student

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#### WORK EXPERIENCE

# Student, IT Systems Developer

Bank of Canada

Ottawa, ON 05/2019 - Present

ES5/ES6+ React JavaScript **JQuery** 

- Developed an internal tool using functional React components and the React context hook to manage state
- Implemented and redesigned the relational data models of an existing web application to optimize data retrieval from RESTful endpoints
- Used an agile workflow to create optimized web interfaces based on the requests of specific internal clients
- Worked with JavaScript and techniques such as asynchronous programming to improve client-side performance and maintain legacy applications

# Junior Web Developer

Explorator Technology

Ottawa, ON 04/2019 - Present

Ruby on Rails GraphQL React Apollo

- Implemented user authentication with JSON web tokens between a React client and Ruby on Rails API using GraphQL and Apollo client hooks
- Utilized GraphQL to optimize client bandwidth usage and create a more secure and less exposed backend architecture
- Developed responsive user interfaces using functional React components, React hooks, and SASS web styling

# Full Stack Developer Intern

QuantConnects

Ottawa, ON 12/2018 - 04/2019

ASP.NET Angular 2 Stripe SQL

- Developed and maintained an in-development cloud storage web application built on an Angular and ASP.NET web stack
- Implemented the Azure Search service to enrich the results of user input search queries by accounting for semantic errors and optical character recognition
- Integrated the Stripe payment API to add payment options and monthly payment plan functionality

# Python Developer Co-op

Digitera Interactive

Ottawa, ON 07/2017 - 08/2017

Python Selenium

 Utilized Python, Beautiful Soup, and Selenium to develop automated web application tests and web scrapers

#### **EDUCATION**

# B.C.S. in Computer Science (Honours)

Carleton University

Ottawa. ON

09/2018 - 04/2022 (Expected)

 Presently learning the fundamentals of systems programming, algorithm time complexity, abstract data types, software engineering, and web development

#### **TECHNOLOGIES**

Languages: **JavaScript Python** Java Frontend: React Webpack HTML/CSS Backend: Ruby on Rails Node.JS Flask Other: GraphQL **TypeScript** 

### RECENT PROJECT

#### Stack Search

CuHacking 2019

Ottawa, ON 02/2019 Flask Python Bootstrap Selenium Heroku

 Stack Search is web application that crawls the web and indexes jobs based on technical skillset to simplify job searching for software developers

 The project was built collaboratively at CuHacking 2019 using a Flask backend, and Selenium for data retrieval

## EXTRA CURRICULARS

#### Vice President

Carleton Computer Science Society

Ottawa, ON

10/2018 - Present

 Elected representative acting as a liaison between students and the Department of Computer Science regarding academic issues, policies, and events, representing over 1000 undergraduate students

# Hackathon Organizer

CuHacking 2020

Ottawa, ON

04/2019 - Present

• Presently working with the CuHacking organizer team to coordinate workshops, social events, and activities to take place during the hackathon and the fall 2019 semester