

Brennan McDonald

<https://brennanmcdonald.ca> • Email: brennan.mcdonald.mail@gmail.com
github.com/brennanmcdonald • [linkedin.com/in/brennan-mcdonald](https://www.linkedin.com/in/brennan-mcdonald)

EDUCATION

UNIVERSITY OF OTTAWA
B.Sc. Major in Computer Science
Minor in Economics

Graduation December 2020

SKILLS

- **Programming Languages:** Javascript, Java, C#, SQL, Python, C/C++
- **Frameworks:** React & NextJS, Vue & NuxtJS, Android, .NET
- **Other Technologies:** Linux/Unix, Docker, Kubernetes, AWS, GIT, Jest, JUnit

EXPERIENCE

AMAZON INC.

Software Development Engineer Intern

Vancouver, Canada
June 2020 - August 2020

- Researched and evaluated different tooling options for my project.
- Parsed complex workflows into a graph and used **React** with **D3** to visualize the parsed workflows.
- Tested code with unit and integration tests using **Jest** and **Mockito**.
- Kept accurate documentation of all steps taken in order to streamline future development.

AMAZON INC.

Software Development Engineer Intern

Vancouver, Canada
June 2019 - August 2019

- Read through internal codebases and libraries to find a the best service for the project.
- Increased my team's services metrics collected by over 100,000 data points.
- Designed and created easy to access dashboards for my team's global services.

SSHRC-CSRH

Software Developer

Ottawa, Canada
March 2018 – June 2019

- Maintained the back-ends of several government websites and services in **C#** and **.NET**.
- Created a **React Native** app for managers and directors to use as reference material at conferences.
- Performed data analysis and created business metrics from several **SQL** databases.

PROJECTS

GUTENBERG

gutenberg.brennanmcdonald.ca

VUEJS & NUXT

- Gutenberg is a web app for quickly editing Github Markdown files.
- Written in **Javascript** using the **Vue Nuxt** framework for server side rendering.
- Uses GitHub's **oAuth** for authentication and GitHub's API to fetch repos, file lists, and file contents.

GARLICOIN

garlcoin.io

C++ & NODEJS

- Garlcoin is a satirical cryptocurrency developed by a community of a handful of Reddit members.
- Reaching a maximum market cap of over \$1.5 Million USD and a 24h volume of over \$50,000 USD .
- Based off of the Litecoin sourcecode with a modified proof of work algorithm called "allium".
- Written to be resistant to ASIC miners and allowing everyone to mine with equal opportunity.

PTPMRR

github.com/BrennanMcDonald/PtPMRR

JAVA & CLOUDSIM

- Price to Performance Modified Round Robin (PtPMRR) is an algorithm to distribute cloud tasks.
- It uses a price and performance ratio to identify the best VM to run a specified task on.
- Written and tested in **Java** using **CloudSim** for the simulation models and tests..

EXTRACURRICULAR

- **Computer Science Student Association** is uOttawa's Computer Science student body responsible for representing students to the faculty and throwing community-building events. I served as the VP Finance for the CSSA where I balanced budgets and allocated funds for members requests.
- **uOttHack** is the University of Ottawa's first and only Hackathon, a 24-hour event dedicated to programming something brand new with a team of peers. At uOttahack I was the developer team lead where I wrote and deployed the various services that hackers used for registration, check-in, and day-of coordination.