Jay **Bhagat**

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SKILLS

Languages: JavaScript, TypeScript, Python, C++, C, C#, Java, Bash

Front-end: React Native/React, Redux, Jest, ¡Query, HTML/CSS

Back-end: Node.js, .NET Core, Firebase Functions/Firestore/Authentication, MongoDB, SQL

Tools: Git, Heroku, Docker, JIRA, Maven/Gradle, VIM, Linux

EDUCATION & AWARDS

University of Waterloo | Bachelor's in Computer Science, Honours (AVG 90.1%)

(2019 - 2024)

NSERC Undergraduate Student Research Award, President's Scholarship

EXPERIENCE

Full-Stack Developing Intern | Questrade Inc.

Toronto, ON (Sept. 2021 - Dec. 2021)

- Implemented multiple reusable and animated React Native components and user flows to increase code **modularity** in the Questmobile application with **100,000+** users.
- Utilized **Redux to integrate HTTP requests and state management**, storing them in slices of the store to allow for a more **efficient** mobile application **by 212%**.
- Created different API routes in a .NET Core backend for new requests, along with forming queries to MongoDB, and modifying the corresponding Events Handler using GCP's PubSub.
- Migrated the backend to use the **CQRS pattern for microservice architecture** with **MediatR** to improve flexibility and readability of the code.
- Took initiative and independently built a **feature** that allows users to delete accounts, **end-to-end**.

Open-Source Software Developer | BlackBerry Ltd.

Waterloo, ON (Jan. 2021 - Apr. 2021)

- Developed Python scripts to automate team tasks and maximize scalability (HTTP Requests, Pandas).
- Created Gradle/Maven plugins in Java that **doubled efficiency by transferring build information** to analysts.
- Modified the existing CI/CD strategy for different BlackBerry products to integrate automated OSS analysis transfer to analysts.
- Improved the team's REST APIs to an Apache Tomcat server by implementing asynchronous programming and multi-threading to increase response speed when querying data.

Software Developer | Cynorix Inc.

Waterloo, ON (May 2020 - Aug. 2020)

- Independently created a secure user password storage server and **implemented API routes** using Node.js on MongoDB, and making changes to a Windows client to store passwords, coded in C#.
- Built a Google Drive extension to allow encrypted file sharing, complete with a secure back-end using Node.is, Firebase, and Google Drive APIs, and jQuery for the front-end.
- Utilized the Emscripten library to compile C++ code to WebAssembly to run on Javascript 394% faster.

PROJECTS

- Catch (Around-the-Globe): Created the entire back-end (server and REST API) on Firebase for an AR mobile game for users to play catch with one another. (EchoAR Challenge Winner HackThe6ix 2020)
- Rentr API: Implemented a REST API and server with authentication to scrape the web for rental prices in neighbourhoods using an SQL database (Postgres), and deployed on Heroku. **Debugged with Postman**.
- **Sorcery:** Built a C++ version of the game *Magic: The Gathering*, applying **OOP principles** and **algorithms**.