## RAHMA GILLAN

**SKILLS** 

Languages Frameworks/Libraries Data Storage Tools JavaScript, C/C++, SQL, Python, Kotlin, Java, HTML/CSS, Go, Scheme

React, Next.js, Kafka, REST, gRPC, Protobuf, Node.js, Express, Bootstrap, Material UI

PostgreSQL, MySQL, Firestore, MongoDB, Dgraph, DynamoDB, S3

Git, AWS, GCP, Docker, VSCode, Postman, Jira, Figma, Slack, GSuite, Notion

**EXPERIENCE** 

Apr. 2021 − Aug. 2021

Software Engineering Intern

Toronto, ON (Remote)

- Reduced drone communication latency by 700% by replacing REST endpoints with gRPC in C++ and JavaScript.
- Implemented a Kafka producer to load balance data streaming 2 times more telemetry from live drones.
- Interfaced with drone **messaging protocol** to scale concurrent initialisation requests with a **blocking queue**.
- Refactored monolith to microservice architecture removing 5000 lines of C++ and SQL redundancies.

Clove &

Founding Engineer

Mar. 2021 - Present

San Diego, CA (Remote)

• Research-based product sustainability startup seeking venture capital funding and serving 10 online businesses.

- Developed merchant-facing **Next.js Shopify App** which automatically embeds **unique iframe labels** into stores.
- Designed back-end architecture to render custom forms from NoSQL database and store multiple responses.
- Integrated Firebase Auth, Google SSO, and stored Shopify OAuth tokens to enforce read and write permissions.

Accenture

Jun. 2020 – Aug. 20

Software Engineering Analyst

Jun. 2020 – Aug. 2020 Toronto, ON (Remote)

• Developed a proof of concept solution for the storage and transfer of health data built with **React** and **Python**.

- Utilized Hyperledger Aries and Indy to store health credentials within a user-centric blockchain network.
- Optimized **REST API** endpoints to improve **response times by 33%** to fetch COVID-19 vaccine and test information.

**PROJECTS** 

**Fantasy E-Sports** 

Jun. 2021 – Aug. 2021

- League of Legends inspired app allowing users to compete in fantasy sports built with Next.js, Express, and SQL.
- Created a Python script to parse 12000 rows of data into MySQL relations adhering to an ER diagram.
- Built searchable player, team, and match pages with pagination utilizing modular React components.

Shipmates & May 2021

- Mobile application allowing individuals to group online orders to reduce their carbon footprint and save money.
- Built the Express server with Node.js which utilized REST endpoints create, read, and write from NoSQL tables.
- Developed endpoint to send custom phone notifications using Twilio x Courier integration.

**Sorcery** Nov. 2020 – Dec. 2020

- Two-player card game with text-based interface built in C++ inspired by Magic the Gathering and Yu-Gi-Oh.
- Implemented MVC to support multiple interfaces and decorator design pattern for scalability and custom cards.
- Enforced RAII by using smart pointers and dynamically loaded the cards from customizable .txt files.

**LEADERSHIP** 

Hack the North & Logistics Team Lead

Jan. 2021 - Sep. 2021

Led the logistics team (15 hours per week) in planning Canada's biggest hackathon with 3000+ participants.

- Founded new career-based initiatives resulting in 100+ hours of coffee chats and 400+ resumes critiqued.
- Spearheaded new custom team formation tool with 1000+ users overseeing features, timelines, and development.

**EDUCATION** 

**University of Waterloo** 

Sep. 2019 - Aug. 2024 (expected)

Business Administration and Computer Science Double Degree

Waterloo, ON

Waterloo, ON