

# Khalil Jouaneh

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## Education

### Queen's University

September 2019 – April 2023

*Bachelors of Computing (Honours) in Software Design*

Kingston, ON

- **Relevant Coursework:** Data Structures, Algorithms, Operating Systems, System Level Programming, Web Development, Database Management Systems, Human Computer Interaction
- **Awards:** Received Principal's scholarship, Dean's Honour List

## Experience

### Infograph

May 2022 - Aug 2022

*Site Reliability Engineer Intern*

Remote

- Improved monorepo by transitioning to Yarn V2 with local caching, speeding up CI/CD workflows by **16 minutes**
- Revamped TypeScript + Node.js image API by splitting into microservices, significantly reducing response time for improved user experience
- Slashed Docker build size by over **90%** with multistage builds and parent images, leading to substantial storage cost savings
- Automated Google Cloud deployments and MongoDB cluster creation using Terraform, accelerating development timelines

### QMIND

Sept 2021 - April 2022

*Blockchain Design Team*

Kingston, ON

- Presented a Solidity project for managing medical record access among healthcare providers at the 2021 CUCAI conference
- Researched and built a prototype using Python's scikit-learn library to implement AI smart diagnosis predictions and data visualizations

### Infograph

May 2021 - August 2021

*Frontend Engineer Intern*

Remote

- Engineered intuitive front-end components using functional React, Redux, and CSS for an ArcGIS enterprise application, achieving seamless UI as per Figma design
- Implemented a secure password reset flow with reset tokens, IP address and Browser validation, and confirmation emails using Sendgrid's Email API
- Reduced API load of Next.js + GraphQL backend by **66%** by optimizing MS SQL queries

## Projects

### Alphaline - Blockchain Credit Score Protocol | Typescript, React, Next.js, Node.js, Rust, Vercel, Prisma, PostgreSQL

- Integrated our credit score API with lending protocols and aggregators managing over **200\$ million dollars** in total volume.
- Developed a user-friendly, gamified explorer, allowing borrowers to effortlessly access their on-chain credit scores.
- Programmed node.js scripts to scrape and parse **100k+** transactions, storing the data in a PostgreSQL database.
- Optimized API execution time from **30 seconds** to **5 seconds** by utilizing Vercel edge runtime, thereby enhancing the overall user experience.

### Exchange Slotting | Next.js, React, Typescript, Firebase, Bootstrap, CSS

- Constructed an exchange slotting web application for the international programs office at Queen's University using Typescript and Next.js.
- Streamlined the slotting process for over **500 students** at partner exchange institutions with a CSV parser, Firebase authentication, CRUD functionality, and a ranking system
- Wrote **60+** unit tests that cover student allocation, process functionality, data processing and conversion

## Technical Skills

**Languages:** Typescript, Javascript, Move, Rust, Solidity, Python, HTML/CSS, Java, PHP, SQL

**Frameworks:** Express.js, React, Angular, Vue, Next.js, Anchor-lang, Svelte kit, jQuery, Flask, Bootstrap, TailwindCSS

**Technologies:** Node.js, SWR, GraphQL, REST APIs, MsSQL, Prisma, MongoDB, PostgreSQL, Zustand, Redux, Mob x, Kafka,, Arweave, Git, Bash

**DevOps:** Docker, Github Actions, Google Cloud, Amazon Web Services (AWS), Vercel, Fly, CI/CD, Terraform