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

Utilnet May 2021 - August 2021

Fullstack Engineer Intern

Remote

- Engineered an external order fulfillment system that has fulfilled over \$1,200,000 in processing volume.
- 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.is + GraphQL backend by 66% by optimizing MS SQL queries
- Added features to React dashboard such as filters, exporting orders as a CSV, and product verification pipeline

Projects

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

- Built a web app with **5,000+ users** and over **100,000+ page views**, enabling DeFi users to see their credit score and gain insight into their historical lending/borrowing history.
- Engineered an on-chain data analytics API using Redis and PostgreSQL with backend hosted as a Vercel edge function.
- Programmed node.js scripts to parse 500k+ transactions, automated via Vercel cron jobs for peak efficiency.

Exchange Slotting | Next.js, React, Typescript, Firebase, TailwindCSS

- Streamlined the slotting process for over **500 students** at partner exchange institutions with a CSV parser, Firebase authentication, CRUD functionality, and a ranking system
- Programmed 60+ unit tests that cover student allocation, process functionality, data processing and conversion

MedRec | Solidity, Hardhat, Python, Jupyter Notebook, NumPy, pandas, scikit-learn, matplotlib

- Programmed Solidity smart contracts for managing medical record access among healthcare providers.
- Researched and built a prototype using Python's scikit-learn library to implement AI smart diagnosis predictions and data visualizations

Technical Skills

Languages: Typescript, Javascript, Rust, Solidity, Python, HTML/CSS, Java, PHP, SQL, Go, R

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, Redis, Zustand, Redux, Mob x, Kafka, Arweave, Git

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