KHUSH PATEL

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Education

University of Waterloo

Sep. 2021 - May 2026

Bachelor of Applied Science in Computer Engineering - GPA: 3.9/4

Waterloo, Canada

Experience

TradeRev Jan 2023 - Current

Software Engineer

Toronto, Canada

Working on the backend team utilizing technologies including Node, Kotlin, Swift, Go, AWS, and Kubernetes.

May 2022 - Aug 2022 Foodi

Software Engineer

Waterloo, Canada

- Worked on a mobile app using React Native & Redux for frontend. AWS Amplify, DynamoDB, & GraphQL for backend
- Implemented notifications from scratch and hosted the push notification service on AWS using Lambda functions, resulting in a 50% increase in user interaction.
- Implemented pagination on GraphQL queries leading to reduced load times by 20% and minimizing excess query costs.
- Initiated the process of designing unit tests in Jest to have 40%+ coverage, decreasing testing times by 30%.
- Created Redux actions and reducers to add new entries to DynamoDB relationship tables when users follow each other.
- Improved error catching by integrating Sentry, which accurately logs 95%+ of unexpected errors and warnings to help developers fix bugs more effectively.

CodeStake May 2022 - Current

Co-Founder

Toronto, Canada

- Co-founder of a free online platform that allows users to earn cryptocurrency through competitive programming.
- Added user security through the use of Google OAuth whilst storing user information in a Firestore database.
- Allowed users to connect to MetaMask cryptocurrency wallet through Web3 API to allow for smooth transactions.
- Integrated responsive front-end ReactJs components via third-party libraries such as MaterialsUI.
- Acquired 50+ beta testers willing to foresee future development and features.

SiteScope

May 2021 - August 2021

Software Developer

Niagara Falls, Canada

- Led the development of designing and developing the company's website with ReactJs and Figma, hosted on Netlify.
- Worked closely with company to establish project guidelines and create project specifications via an agile methodology.
- Assisted the startup in accumulating 100+ users to gain feedback and insight on the service.

Projects

Vegetarian Element | PostgreSQL, NodeJs, ExpressJs, NextJs

August 2022

- Created a universal recipe app using a P.E.R.N tech stack where users can add recipes for everyone to try.
- Administered REST APIs to communicate between the NodeJs and ExpressJs backend to the NextJs frontend where users can create, delete and edit recipes previously stored by the community.

Binary Riddle $\mid C$ December 2021

- Developed firmware for a breadboard-based riddle game that challenged users to input binary solutions using buttons.
- Authored in C using Classes, 2D Arrays, Dynamic Memory Allocation, and the LiquidCrystal Library.
- Hardware components consisted of STM32 Nucleo-64 Board, LCD display, Buttons, LEDs, Potentiometers, etc.

Mo Money $\mid C++$ November 2021

- Financial program used to calculate adjusted cost base (ACB) for ETFs given a text file of transactions.
- Utilized a linked list to help iterate through the transactions of the text file, treating every single transaction as a node.
- Sorted each "node" by transaction date using a bubble sort algorithm and dynamic memory allocation.

Technical Skills

Languages: Python, C++, C, HTML/CSS, JavaScript, TypeScript, VHDL, Assembly, MATLAB

Technologies/Frameworks: AWS, NextJs, ReactJs, GraphQL, React-Native, DynamoDB, Redux, Jest, Vercel, Figma,

Amplify, IOS, Android, GitHub, Jira, ExpressJs, NodeJs, PostgresSQL, Postman, REST APIS

Relevant Coursework: Data Structures & Algorithms, Digital Computers, Digital Circuits and Systems, Project Studio