Khush Makadia

kmakcareer@gmail.com | khushmakadia.com | +1 (435)-251-0691 | in/khush-makadia | github/KhushMakadia4

EDUCATION

University of Illinois at Urbana-Champaign

Master of Science in Computer Science

August 2022 - May 2026

GPA: 3.92/4.00

Relevant Coursework: Algorithms, Data Structures, Distributed Systems, Artificial Intelligence, Database Systems, System & Network Programming, Programming Languages & Compilers, Probability & Statistics, Linear Algebra

Experience

Costco Chicago, IL

Software Engineer Intern

June 2024 - Present

- Replacing a manual release tracking spreadsheet with 500+ feature entries by automating numerous build and deployment tasks for the WMS team with Azure Pipelines.
- Optimizing Costco's WMS feature deployment for 20+ large distribution centers by planning and restructuring the team's development flow.
- Migrating an internal tool to Azure by creating support API microservices with C# and the .NET framework.

Rovier Champaign, IL

Founding Engineer

June 2023 - Present

- Reducing operation costs by 30% for foodservice industry buyers and suppliers by harnessing Graph Theory optimization algorithms to streamline supply chain processes.
- Employing a combination of AWS, NextJS, PostgreSQL, NestJS, and other technologies to develop 4 dashboards.
- Analyzed user research from 60+ clients across 3 states to develop and design Rovier's multifaceted infrastructure from the ground up with cross-functional teams.

The American Marketing Association

Chicago, IL

 $Software\ Development\ Intern$

January 2023 - June 2023

- Provided real-time insights into company operations for 300+ AMA employees by developing an internal full-stack platform utilizing AWS and GraphQL.
- Increased data fetching speeds by 50% by migrating the codebase from Apollo to URQL and integrating in-built caching and offline loading capabilities.
- Enhanced compile times by 30x in comparison to React by creating a front-end that exploited Vite's Hot Module Reloading.

Projects

Parivartan | Next, SQL, tRPC, Typescript, Prisma, ChakraUI

January 2023 - July 2023

- Displayed comprehensive facility and amenity information for over 20,000 Indian pre-schools by creating Parivartan, a NextJS and PostgreSQL data visualization tool.
- Reduced fatal error rates by 40% and enforced type-safe data retrieval by writing SQL queries that gathered aggregated pre-school data with Prisma.
- Led a successful handoff process that allowed our client, Meraki Foundation, to launch the portal across the Uttarakhand state in India.

CCSTutoring | Next, Node, Typescript, Firebase, NextAuth, MaterialUI

December 2021 - November 2022

- Replaced in-person tutoring for the high school CS tutoring system that encompassed 500+ students using a NextJS and Firebase full-stack forum.
- \bullet Optimized load speeds by 60% and trimmed the build size by 40% by applying Next server-side functions and components.

Trucycle | Java, Firebase, Google Maps API, Android Studio

June 2021 - November 2021

- Addressed improper recycling for a community of over 50,000 residents by educating users on recyclability ratings of products and corresponding recycling locations.
- Leveraged Google Maps and a series of APIs that take a product's barcode and return recycling information and locations.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, Typescript, HTML/CSS, C#, Cypher, Ocaml Developer Tools: Git, Docker, AWS, Azure, Google Cloud Platform, Firebase, MongoDB, PostgreSQL, Vercel Libraries & Frameworks: React, Node.js, Express, Flask, Next, tRPC, GraphQL, T3, .NET, Vite, Numpy, Matplotlib, Pandas, ChakraUI, MaterialUI