Khush Makadia

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EDUCATION

University of Illinois at Urbana-Champaign   **Graduation Date: May 2025**

B.S. in Computer Science   *GPA: 3.93/4.00*

Coursework: Algorithms, Data Structures, Database Systems, System Programming, Discrete Structures, Numerical Methods, Linear Algebra, Software Design Lab, Computer Architecture, Intro to Computer Science I & II.

PROFESSIONAL EXPERIENCE

Rovier   **Champaign, IL**

Founding Engineer   *Jun 2023 – Present*

- Slashed operation costs by 30% for foodservice industry buyers and suppliers by harnessing Graph Theory optimization algorithms to streamline supply chain processes.
- 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.
- Employed a combination of AWS, NextJS, PostgreSQL, NestJS, and other technologies to develop 4 client dashboards.

The American Marketing Association   **Chicago, IL**

Software Engineering Intern   *Jan 2023 – Jun 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.

Hack4Impact   **Champaign, IL**

Meraki Foundation, Software Developer   *Jan 2023 – Jun 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.

Brink, Software Developer   *Sep 2022 – Jan 2023*

- Guided disabled U.S. citizens across 50 states through the voting process with the Brink Web App, which renders election and polling data through a user-friendly and highly accessible interface.
- Utilized the Google Civic API to obtain nearby polling locations tailored to each user's location, while implementing pagination, which reduced lag times by 40%.
- Combined Chakra-UI's accessible UI components with Contentful CMS and Google Civic API to populate site text and data.

PROJECTS

CCSTutoring   *Next | Node | React | Firebase | NextAuth*

- Replaced in-person tutoring for the high school CS tutoring system that encompassed 500+ students using a NextJS and Firebase full-stack forum, which hosted 150+ tutoring sessions.
- Optimized load speeds by 60% and trimmed the build size by 40% by applying Next server-side functions and components

Trucycle   *Java | Android Studio | Firebase | Google Auth*

- 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.

SKILLS

Programming Languages and Libraries: Javascript, Typescript, Java, C++, Python, SQL, React, Numpy, Auth0, Express, Apollo.

Tools and Frameworks: React, Next, NestJS, Node, T3, Docker, AWS, Git, Firebase, MongoDB, PostgreSQL, JetBrains, Vite, VSCode, Vercel.