

Rohan Vanjani

(630) 453-4452 | rohanvanj21@gmail.com | <https://rohanvanjani.com> | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of Illinois at Urbana-Champaign

August 2021 - December 2024

Bachelor's of Science in Computer Science & Mathematics

GPA: 3.91/4.0

- Relevant Coursework: Algorithms, Distributed Systems, Artificial Intelligence, Computer Security, Database Systems, Computer Architecture, Compilers, Internet of Things, Data Structures, Numerical Analysis, Combinatorics, Real Analysis
- Activities/Awards: Course Assistant for Data Structures (CS 225), Undergraduate Research Assistant, Illini Bhangra

EXPERIENCE

Chicago Venture Partners

May 2024 – August 2024

Full-Stack Developer Intern

Chicago, IL

- Spearheaded the development and testing of a custom analytics application for monitoring the performance of 6+ internal Django, Node.js, and React.js applications, utilizing tracking software like Google Analytics, Prometheus, and Grafana.
- Engineered an end-to-end data flow from a React.js MUI calendar component to a Node.js middleware, Django backend, and PostgreSQL DB, reducing server load through WebSocket communication and middleware caching via NodeCache.
- Architected a Node.js middleware endpoint to execute an SOQL query and verify Salesforce information upon the creation of new employee accounts internally, ensuring data consistency for 150+ employees across internal CRM platforms.

Zebra Technologies

June 2023 – August 2023

Software Engineering Intern II - Cloud Infrastructure

Lincolnshire, IL

- Enhanced a Java Spring Boot application, monitoring 30+ internal programs, to upload release data to a GCP Storage Bucket, which is then scraped by a Teams RSS feed reader, notifying developers in real-time about application rollouts.
- Orchestrated a Docker Compose configuration to run instances of Prometheus, Grafana, PostgreSQL, and a Java Spring Boot application, handling CI/CD via Jenkins, deploying new instances onto an existing GCP Kubernetes cluster.
- Designed a Grafana GUI to monitor the RAM & CPU usage of 20+ active GCP nodes, identifying possible cost reductions

Hack4Impact UIUC

September 2022 - December 2023

Software Developer

Champaign, IL

- Collaboratively built and deployed a Next.js & TypeScript web/mobile application to visualize real time solar forecasting data for 1000+ solar panel users in the UK, handling authentication and styling via OAuth, Tailwind CSS, and ReCharts.
- Constructed a React.js web page to display a user's local election data and nearby polling locations retrieved from the Google Civic API, leveraging Figma for prototyping and ChakraUI components with D3 visualizations for styling.
- Engineered 5+ Node endpoints using Express and Mongoose to retrieve political preferences from a MongoDB database.

Zebra Technologies

May 2022 - August 2022

Software Engineer Intern - Mobile Development

Lincolnshire, IL

- Assisted in integrating a Bluetooth Low Energy sensor device into a mobile Flutter application in Android Studio.
- Wrote BigQuery scripts to determine the average setup time of the ZSB Series printer using 2+ million customers logs.

PROJECTS

Custom Language Interpreter | C++, Flask, Next.js, Typescript, Tailwind CSS

May 2024 – July 2024

- Built a C++ interpreter from scratch for a custom Python-like language that evaluates up to 20 lines of code; this includes a DFA-based lexer for tokenization, a recursive descent parser, and an evaluator using Big Step Operational semantics.
- Implemented a Next.js frontend with a customized code editor and D3 integrations for visualizing the Parse Tree (AST).
- Architected a Flask backend server to retrieve the user's code from the frontend and evaluate it using the C++ interpreter.

Amazon Price Discrimination Detection | Python, Selenium, MongoDB, NLTK

Jan 2023 - May 2023

- Worked with a team under Dr. Hari Sundaram to audit Amazon.com and confirm the possibility of price discrimination in the book & kindle industries, utilizing 9 different preconfigured buyer profiles and 25+ book genres.
- Generated 1+ million price data points by developing a Python program utilizing Selenium and BeautifulSoup to execute 20+ Amazon queries on a daily basis and upload price information into a MongoDB database for statistical analysis.
- Determined a list of popular book genres by integrating NLP-driven sentiment analysis using the NLTK library.

SKILLS

Programming Languages: C/C++, Python, Java, SQL, JavaScript, TypeScript, HTML, CSS, OCAML, MIPS, GraphQL

Tools & Technologies: React.js, Flask, Next.js, Django, Node.js, Git, Docker, PostgreSQL, Google Cloud Platform, Firebase, Android Studio, Linux, MySQL, Spring Boot, MongoDB, Amazon Web Services, Jenkins, Prometheus, Grafana, Gatsby, Selenium, Express.js, Flutter/Dart, Angular.js, Figma, Postman, NLTK, BeautifulSoup, Pandas, WireShark, Raspberry PI