

Simarpreet Singh

630-286-2892 | xxsimarxx@gmail.com | [LinkedIn](#) | [GitHub](#) | [Website](#)

EDUCATION

University of Michigan

Ann Arbor, MI

BSE in Computer Science

Aug 2020 - Expected December 2023

- **Coursework:** Data Structures & Algorithms - Foundations of Computer Science - Computer Organization
Web Systems - Web Development - Software Engineering - Database Management Systems

EXPERIENCE

Amazon Web Services (AWS)

Seattle, WA

Software Development Engineer Intern

May 2023 - August 2023

- Built A/B Testing Service for **Amazon Connect** that enables clients to view metrics and optimize performance.
- Used **DynamoDB** to store condition-based test configurations that route customer groups to **Flow** candidates.
- Created REST APIs hosted on **AWS Lambda** to allow service functionality during **Flow** Execution.
- Ensured performance using **Amazon API Gateway** for manual testing and **JUnit + Mockito** for unit testing.
- **Integrated** A/B Testing Service via code changes in **Amazon Connect Service** and pushed to **Beta** for testing

JPMorgan Chase & Co.

Chicago, IL

Software Engineer Intern

June 2022 - August 2022

- Added a "Smart" Region on **GemFire** servers resulting in REST API response time dropping from **29 to 5 ms**.
- Implemented **real-time eviction** of stale data utilizing update messages consumed from **Kafka** topic.
- Built a Bulk API to help clients achieve a **High-Frequency** Transaction Per Second goal.
- Migrated from **GemFire** to **Oracle Cloud Database** to be able to implement and support **API Pagination**.
- Carried out performance testing on code deployed to **Kubernetes** platform using **JMeter**.

Dakota Systems

Chicago, IL

Full-Stack Web Development Intern

June 2021 - August 2021

- Worked on **Node.js** Salesforce Extension app to fetch and display Salesforce data on front-end for Sales Team.
- Developed REST APIs and utilized **SOQL** for Salesforce Extension application implementation.
- Revamped **Dakota Systems Website** using **Node.js** and **Tailwind UI**.
- Utilized **eXist-db** to add dynamically generate web page content feature.
- Added **User Authentication** via **OAuth 2.0** and **Passport.js** to website for clients.

The 357 Company

Northlake, IL

Freelance Web Developer

June 2021 - July 2021

- Hired to transition the **357 Company Website** from WordPress to **Node.js**.
- Created REST APIs served by **MongoDB** to create a new **Blog Page**.
- Developed a UI for the 357 News Team to create, edit, and post blog articles.

PROJECTS

Personal Website | *Node.js, JavaScript, Tailwind CSS, AWS, MongoDB*

— **Website** —

- Developed a full-stack web application utilizing **MongoDB** to serve REST APIs.
- Implemented a professional front-end and a **UI/UX** for managing Projects and Articles.
- Deployed **Node.js** application to **AWS EC2** instance and distributed with **Amazon CloudFront**.

Recipe Book | *Angular, TypeScript, Firebase*

— **Website** —

- Developed an application with functionality to create, delete, and edit recipes.
- Added feature for ingredients to be pushed from a the Recipe List to a Grocery list.
- Utilized **Firebase** to manage user authentication feature and user information across application in real-time.
- Acquired experience building and deploying an industry-grade project using **Angular** and **TypeScript**.

TECHNICAL SKILLS

Languages: C/C++ • Java • Python • JavaScript • Java Spring Boot • HTML5/CSS • SQL • SOQL • \LaTeX

Technologies: AWS • Node.js • GemFire • Maven • Angular • Kubernetes • MySQL • Firebase • Docker • Git • Linux
• Dagger • Gradle • React

Databases: Oracle • MongoDB • eXist-db • Apache Geode • DynamoDB