

# MAHAK JAIN

jainmahak1310@gmail.com | (857) 693-9621 | LinkedIn | Github | Charlotte, NC - 28277

## EDUCATION

### Masters of Science in Computer Software Engineering

Northeastern University, Boston, MA

CGPA: 3.9/4.0

**Course Work:** DSA, Computer Architecture and Distributed Systems, UI / UX Design and Testing, Object Oriented Programming

### Bachelor of Technology in Computer Science

SGSITS, Indore, India

**Course Work:** Advanced Data Structures & Algorithms, Relational Database Management, Software Methodologies, Operating Systems

## TECHNICAL SKILLS

**Languages:** JavaScript (ES5/ES6), Python, Typescript, C, C++, HTML, PHP, CSS(SASS/SCSS), Java, .NET, XAML, JSON

**Frameworks:** Node.js, Express.js, Vue.js, Next.js, React.js, Drupal, Flutter, AngularJS, Flask, Django, Require.js, WebUI, Spring Boot

**Tools & Technologies:** GraphQL, Elasticsearch, Jira, Jenkins, Kubernetes, Kafka, Git, Jest, Postman, Kibana, Fluentd, Logstash(ELK)

**Database:** RDBMS (SQL, MySQL, PostgreSQL, Oracle), NoSQL (MongoDB, DynamoDB, Redis, Firebase)

**Cloud & Containerization :** AWS, Azure, Google Cloud Platform, Terraform, Docker, Kubernetes, Jenkins

**Skills:** Frontend Development, Backend Development, Full Stack Development, Agile Methodologies, Microservices, Service-Oriented Architecture (SOA), Cloud Infrastructure, REST API Development

## EXPERIENCE

### Software Developer Intern | Radical AI, Boston

Feb 2024 - July 2024

*Tech Stack: Python, Next JS, React, Tailwind CSS, Vite, Streamlit, AWS, Vertex AI*

- Leveraged **Django** to dynamically generate quizzes from user-uploaded documents. Utilized **NLP** libraries to extract key concepts. Designed and implemented a **RESTful API** using Django REST Framework to manage quiz data, handle user sessions
- Developed a scalable Django backend deployed on AWS, using **Elastic Beanstalk** for automatic scaling and **RDS** for database
- Developed a scalable Django backend deployed on **GCP**, using **Google App Engine** for automatic scaling and **Google Cloud SQL**
- Implemented **Redis**, decreasing database load by **15%** and improving response times. Used **Celery** for efficient asynchronous task processing to handle high traffic and large data volumes
- Created interactive quiz features with React and **Tailwind CSS**, using **Next.js** for dynamic routing and server-side rendering to enhance navigation, real-time feedback, and overall platform performance

### Software Developer | Persistent Systems, India

Jun 2021 - Jul 2022

*Tech Stack: JavaScript, React, Redux, jQuery, Node, PostgreSQL, Docker, Jenkins, Jest*

- Boosted application performance by implementing advanced React techniques, integrating **Thunk middleware**, and utilizing **Axios** for efficient handling of multiple **HTTP** requests
- Optimized real-time data fetching and state management in a DNA sequencing application, reducing execution times by **40%** through the use of **React Hooks**, custom hooks for streamlined state updates, and effective API interactions
- Developed a **NodeJS API** for healthcare management with **PostgreSQL**, enhancing data flow and backend efficiency
- Built a DNA microservice using **Docker** containerization and **CI/CD** via **GitHub Actions**, reducing deployment times by **15%**

### Software Engineer | Quest Global Technologies, India

May 2020 - Jun 2021

*Tech Stack: Java, Spring Boot, ReactJS, AWS*

- Revamped the user interface with React JS and Redux, leading to a decreased reduction in development time using **DynamoDB**
- Streamlined **RESTful API** with **Spring Boot** and utilised **Amazon EC2** for web hosting and **Amazon S3** for assets storage

## PROJECTS

### Insurance Maintenance App | Redis, RabbitMQ, Elastic Search, Kibana | [Link](#)

- Developed a scalable backend in Node.js, integrating Redis for data storage, RabbitMQ for task processing, and Elasticsearch with Kibana for advanced querying and visualization, optimizing data management and system performance.

### Netflix GPT | React, Tailwind CSS, React Router, Firebase, GraphQL, OpenAI GPT, Docker, GitHub Actions | [Link](#)

- Developed an intelligent movie recommendation platform that utilizes GPT for AI-driven insights and GraphQL for efficient data querying, providing personalized browsing experiences.

### Web Monitoring Tool | Kubernetes, AWS ECR, EFK Stack, CI/CD

- Built a high-availability monitoring system with Kubernetes and AWS ECR, automating CI/CD pipelines to reduce downtime by 60%, and implemented real-time logging with the EFK stack for improved reliability.

### Job Application Autofill Extension | Swift, WebKit, UserDefaults, JavaScript

- Developed a Swift-based extension with a popup to save and autofill job application forms using stored data.