

# Saideep Samineni

+1 (857) 230 1516 ✉ Email [in LinkedIn](#) [Portfolio](#) [Github](#)

## EDUCATION

**Northeastern University** | Master of Science in Computer Science | GPA : 3.7 Jan 2023 - May 2025  
Courses - Algorithms, Web Development, Program Design Paradigm, Artificial Intelligence, Machine Learning.

## EXPERIENCE

**Khoury College of Computer Science** | Graduate Teaching Assistant - Software Engineering Jan 2024 - Present  
*React, TypeScript, Next.js, Jest, Styker* Boston, MA

- Development and maintenance of Covey.Town, a virtual platform facilitating interaction and collaborative development of engaging projects and games by digital players. Engineered using Next.js, Node.js and Jest unit tested

**SHIASH** | Backend Engineer Intern Oct 2021 - Mar 2022  
*Spring Boot, AWS, PostgreSQL, Docker, WebSocket, Elastic Search, Kibana* Chennai, India

- Contributed to the design of a scalable e-commerce platform, enhancing performance with **microservices**, **PostgreSQL optimization**, **Redis caching**, and high-throughput **API** development for improved deployment efficiency and transactional robustness.
- Implemented a **CI/CD** pipeline, utilizing **Docker** for containerization and **Jenkins** for automation, which cut deployment times by **84%** and significantly increased the frequency of new releases.
- Improved search and analytics by integrating **Kafka** and **Logstash**, enabling real-time data analysis with **Kibana**, enhancing **search accuracy** and **system insights**.
- Implemented and maintained comprehensive **JUnit test** suites across microservices to ensure code **quality** and **stability**. This resulted in a **93%** success rate in first-time deployments and minimized post-deployment issues.

**Sri Sigma Technologies** | Full Stack Engineer Jan 2021 - Aug 2021  
*Python, Flask, Python, ELK, PostgreSQL, RabbitMQ, AWS* Toronto, Canada

- Contributed significantly to the EdTech website architecture and designed RESTful APIs that improved data exchange efficiency by **40%** and bolstered system performance and reliability.
- Developed **client-side** interfaces using **React**, creating an interactive and responsive user experience. Combined with **TypeScript** for static typing, this approach ensured code maintainability and reduced errors by **25%**.
- Implemented event-driven backend services in **Node.js** and rigorously tested using **Jest** to maintain code quality, functionality and deployed on **AWS**, capitalizing on the cloud's scalable and resilient infrastructure.
- Enhanced **API endpoint** performance by employing optimization techniques, reducing latency and improving data handling efficiency. This effort significantly improved page loading times, cutting them by **54%**, thereby enriching the user experience across various web browsers.

## TECHNICAL SKILLS

Languages	JavaScript, Python, TypeScript, Java, Ruby On Rails, C, .NET, HTML, CSS
Frameworks	React, React Native, Redux, RESTful, Angular, Node.js, Elastic Search, Kibana, Spring.
Development & Database	PostgreSQL, MongoDB, SQL, MySQL, DynamoDB
Cloud & DevOps	Git, AWS (EC2, CloudWatch, S3), EKS(Docker, Kubernetes), Terraform, Jenkins, RabbitMQ
Tools	Tomcat, Swagger, Styker, Postman, Maven, Selenium, TestNG, SoapUI, Jira, Bitbucket, Mocha

## PROJECTS

**Secure Real-Time Financial Analytics Platform** | *DynamoDB, Terraform, ElastiCache Redis, Lambda, VPC*  

- Implemented a real-time analytics update mechanism by triggering Lambda functions with **DynamoDB Streams** to refresh **ElastiCache** for **Redis**, enhancing dashboard responsiveness.
- Rolled out a secure, scalable platform on AWS using **Terraform**, **EKS** and Lambda, cutting deployment times by 50%.
- Utilized **AWS Lambda** for efficient, event-driven processing of real-time financial data from the **Alpha Vantage API**, boosting analytics dashboard insights.
- Ensured high availability and security within **AWS VPC** by deploying Auto Scaling Groups, Load Balancers, and a Bastion Host, along with a secure API Gateway for robust API management.

**Caption Craft** | *MERN, GraphQL, Machine Learning (GANs), Jest, TypeScript, WebRTC, Socket.io* | [Github](#)  

- Engineered "Caption Craft" with the **MERN** stack, blending AI-powered art generation (**GANs**) with user interaction, achieving a seamless **full-stack** experience.
- Leveraged **Redux** for state management and **Socket.io** for real-time communication, enhancing user experience and reducing server load by 38% through the integration of **Hugging Face APIs**.
- Integrated **social networking** features, including friend connections, by employing **GraphQL** for efficient data queries and developing algorithms for **friend recommendations** and an **advanced search** function for posts, significantly enhancing user engagement and interaction on the platform.
- Enhanced code reliability with **Jest** and **TypeScript**, integrating **asynchronous** testing to streamline development and reduce bugs.

## CERTIFICATIONS

- AWS Certified Solutions Architect – Associate, 2024