Sharan Jamanani

srjamana@ncsu.edu| linkedin.com/sharan-jamanani | sharansrj567.github.io | +1 919-673-2642

SUMMARY

Dynamic full-stack developer with expertise in React, Node.js, and Python. Experienced in streamlining processes and improving efficiency through automation. Interested in expanding knowledge in Java, Kubernetes, and Cloud to build scalable applications. Strong ability to build innovative solutions, leveraging a solid tech foundation to drive significant results and advancements.

EDUCATION

Master of Computer Science - North Carolina State University, Raleigh, NC [GPA: 3.9/4.0]   August 2023 - Expected May 2025

Bachelor of Engineering in Computer Science - Gogte Institute of Technology, India [GPA: 9.08/10]   June 2018 - September 2022

SKILLS

Coursework: Analysis of Algorithms, Automated Learning Data Analysis, Software Engg, Computer Networks Security, LLMs in Security.
Languages: Java, TypeScript, JavaScript, Python, C++, CSS, Bash.
Frameworks/Libraries: React, React Native, Spring Boot, Django, Node.js, AWS, Flutter, Jenkins, Hibernate, JPA.
Tools & Databases: Git, Docker, Kubernetes, PostgreSQL, MySQL, MongoDB, InfluxDB, Redis, Prometheus, Grafana.

EXPERIENCE

North Carolina State University, Raleigh, NC
Stormwater Programming Assistant | Part-time   June 2024 - Present
- Built a monitoring system with **EC2**, **InfluxDB**, **Nodejs**, and **Grafana** achieving real-time alerts and reducing operation errors by **25%**

North Carolina State University, Raleigh, NC
Student Software Developer | Part-time   April 2024 - June 2024
- Developed an in-house **Django-React** cellular segmentation editor, enhancing correction accuracy by 4% and reducing model retraining time by 10% on NC State HPC clusters

Meta16labs Healthcare and Analytics Pvt Ltd
Sr. Software Developer | Full-time   April 2022 - July 2023
- Directed telephony integration with **React** and **Nodejs** for automated caller information display, reducing response times by 60%
- Architected SMS/WhatsApp middleware for 120,000+ users using **Python**, **Nodejs**, **PostgreSQL**, Twilio and MessageBird APIs
- Managed **Spring Boot** microservices for API Gateway, Discovery Server, and other services, enhancing scalability to handle 2x traffic
- Configured on-premise **S3 buckets** to achieve regulatory adherence for countries, while simultaneously reducing latency by 25%
- Implemented load balancing and CI/CD pipeline using **Nginx**, **PM2**, **Docker**, and **GitHub Actions**

Meta16labs Healthcare and Analytics Pvt Ltd
Full Stack Developer | Internship   October 2020 - March 2022
- Engineered a **React Native** app with reused **React** web bundles for online/offline data collection, increasing reach by 4 times
- Leveraged **Expo** and **Async Storage** for auto-sync, optimizing data collection and synchronization of 10,000+ records
- Automated **Node.js** workflows for data import/export, supporting CSVs and reducing processing time by 50%

PROJECTS

Desktop Application - ORCS: Open Resource Control and Surveillance Toolkit | [bit.ly/sj-orcs**]**
Tech Stack: React, Nodejs (Microservices), Express, Rust, Kubernetes, Docker, Tauri, Electron, Socket.IO, MongoDB.
- Developed a multithreaded dashboard for real-time CPU and memory monitoring with **IAM**, FarmHash IP encryption, and **Socket.IO** with **Redis**, and created an auto-startup service to improve toolkit usability.
- Received recognition and funding from the Karnataka State Council for Science and Technology for innovation and utility.

NCSU Hackpack CTF - CodeSanitize WebApp| [bit.ly/sj-ctf**]**
Tech Stack: Python (Flask APIs, Docker), Java (Spring Boot, Spring Security, JPA, Thymeleaf, SQL, Restful API).
- CodeSanitize challenge for the NCSU Hackpack CTF focused on detecting LLM security vulnerabilities and data poisoning.
- Initially implemented using **Python** and **Flask** APIs, encrypted API responses with randomized answers for challenge difficulty.
- Transitioned to **Java Spring Boot** to leverage its robust ecosystem for enterprise-level scalability, enhanced security features.

Serverless Application Backend - Infogram | [bit.ly/sj-aws**]**
Tech Stack: AWS Lambda, CloudFormation, API Gateway, DynamoDB, S3, RS256 JWT Tokens, Zero trust Auth0, Typescript.
- Deployed asymmetrically encrypted **JWT** tokens through **Auth0** to enhance authentication security.
- Architected **AWS Lambda functions**, orchestrated by **CloudFormation**, to adeptly handle variable workloads.

EXTRACURRICULAR

- **Open Source Contributor - OSGeo Grass GIS**: Refined imagery library color and input validations using Cppcheck. [bit.ly/grass-sj]
- **Volunteer - Indian Cancer Society**: Reduced cancer misdiagnosis rates by **25%** through diagnostic workflows for cancer patients.
- **Volunteer - All Things Open:** Assisted with registration, session coordination, and technical support for a smooth event.

CERTIFICATIONS

- **Oracle Cloud Infrastructure 2024 Generative AI Professional** [bit.ly/oci-ai]
- **Using Python to Access Web Data by University of Michigan** [bit.ly/um-py]
- **Udacity Cloud Developer Nanodegree** [bit.ly/cloud]