SURABHI

Los Angeles, CA (Open to Relocation)| (213) 574-8545 | s279497@usc.edu | LinkedIn | GitHub | Portfolio

Software Engineer with 3 years of experience in scalable application development, cloud technologies, improving performance by up to 50%, enhancing API security, and streamlining workflows using Java, Python, React, AWS, Docker, and Kubernetes

EDUCATION

Master of Science in Computer Engineering, University of Southern California (USC) (GPA: 3.4/4) **August 2023-May 2025**
Courses : Computer Networks, Wireless Network, Artificial Intelligence, Machine Learning, Computer Architecture, Data Structures in C++

Bachelor of Engineering in Computer Science, NMAM Institute Of Technology (GPA: 3.7/4) **August 2016-May 2020**

TECHNICAL SKILLS

Programming Languages	C, Java, C++ Python, JavaScript, Golang, Rust, Objective-C
Web Technologies	HTML, CSS, ReactJS, Node.js, Express.js, jQuery, Redux, AJAX
Frameworks & Libraries	Spring, Hibernate, Apache Kafka, Java Messaging Service, Pandas
Database Technologies	MySQL, Oracle DB, Redis, DB2, MongoDB, DynamoDB
Cloud	Amazon Web Services, Kubernetes, Docker, Elasticsearch
Other Technologies	Linux, Jenkins, CI/CD, Grafana, Visual VM, Agile methods, JBoss, Distributed Systems

EXPERIENCE

SOFTWARE INTERN | MEDIBLES, Los Angeles, CA **May 2024-August 2024**

- Enhanced API security by migrating Adobe API services from **JWT** to **OAuth**, reducing token-related issues by 30%
- Engineered an **AWS SQS queue** handling 10,000+ daily messages for efficient data management and processing
- Converted **WordPress** assessments to an interactive **React** app using **TypeScript**, streamlining collaboration with design teams
- Developed a responsive **AWS Lambda** function for seamless PDF/Doc API service interactions, cutting response times by 20%
- Leveraged **Tableau** for patient data management optimization, reducing data retrieval time by 40% and enhancing clinical workflows

SOFTWARE ENGINEER | **INFORMATICA**, Bangalore, India **April 2022-July 2023**

- Drove **Agile** Scrum collaboration with a 10+ member team, improving project delivery speed by 20% through **code reviews** and optimized **Jenkins** pipelines
- Spearheaded **Jgroups** upgrades, **resolving critical blockers for 70%** of customers, and boosting system performance by 35%
- Revamped Informatica's B2B Data Exchange dashboard using **Java**, **React**, and LogiXML, improving real-time reporting by 30% and eliminating the need for additional licensing
- Optimized B2B Data Exchange using **Java, JavaScript**, and **MS-SQL**, configuring **job queues** for MFT Remote **Endpoint**-Receive and Send, **reducing file transfer time by up to 50%** through **batch** processing of large files

ASSOCIATE SOFTWARE ENGINEER | **INFORMATICA**, Bangalore, India **October 2020-March 2022**

- Streamlined Architected a **distributed**, multithreaded system with **Apache Kafka** for asynchronous processing, reducing daily I/O by 80GB and scaling platform performance tenfold
- Validated seamless O365 mailbox integration with SMTP servers, enhancing reliability in email operations
- Enhanced backend **microservices** and **RESTful APIs** with Java **Spring Boot** and Apache Kafka, improving performance and scalability
- Created a **hackathon**-winning JIRA chatbot with **Node.js**, **JIRA** API, and Dialogflow, reducing JIRA query time by 60% for customers

PROJECTS

Reddit Trend Prediction Model *| Link*

- Analyzed **10,000+ Reddit posts** using **PRAW**, **Python**, and **NLP** for sentiment analysis, applying **Random Forest** and **Logistic Regression** models to improve trend prediction accuracy, and building scalable data pipelines for efficient large dataset processing

Reddit Trend Prediction Model *| Link*

- Developed a **3D workspace** in **Unity** for remote collaboration with **whiteboards**, **3D models**, and **avatar meetings**, supporting **10+ users** across **VR/AR** and desktops, using **Firebase**, **WebRTC**, **Photon**, and hosted on **Netlify** for scalable performance

Cybersecurity Threat Detection Platform *| Link*

- **Built a platform with Python, TensorFlow, and Wireshark** for real-time threat detection; used machine learning for anomaly detection, increasing accuracy by 25%, and AWS for scalability, reducing response time by 40%

Emotion Detection System *| Link*

- Developed an AI-driven emotion recognition tool using **MobileNet** and FER2013, achieving 85% accuracy, with **LLM**-based real-time feedback for user interaction

Blood Bank Management System *| Link*

- Designed a scalable cloud-based system with **AWS**, **Cassandra**, and **Java**, integrating **Google Maps API** and **Firebase** for efficient donor matching, **boosting search efficiency by 40%**

Socket programming project *(EE 450 Computer Networks) | Link*

- Implemented a **TCP/UDP** client-server architecture optimizing response times by 40%, ensuring 95% inventory tracking accuracy

Fault Simulation and ATPG Implementation *(EE 658 DFT) | Link*

- Collaboratively achieved **100% fault coverage** in a team setting using **SCOAP**-based D-Algorithm and PODEM in **C++,** creating modular commands for detailed simulation

Google Photos clone using React Native *| Link*

- Built a cross-platform app with **React Native** and **ImageKit**, improving media loading speeds by 40% for enhanced user experience