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 LanguagesC, Java, C++ Python, JavaScript, Golang, Rust, Objective-CWeb TechnologiesHTML, CSS, ReactJS, Node.js, Express.js, jQuery, Redux, AJAXFrameworks & LibrariesSpring, 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 Collaborative Virtual Workspace with Mixed Reality | 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) / <u>Link</u>
- 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