

SURABHI

Los Angeles, CA | (213) 574-8545 | s279497@usc.edu | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

EDUCATION

University of Southern California (USC)

Master of Science in Computer Engineering | GPA: 3.4/4.0

Course Work: Data Structures and Algorithms, Database Systems, Artificial Intelligence, Machine Learning

Los Angeles, CA

August 2023-May 2025

NMAM Institute of Technology

Bachelor of Engineering in Computer Science | GPA: 3.7/4.0

Karnataka, India

August 2016-May 2020

SKILLS

Languages: Python, Java, C, HTML/CSS, JavaScript, Node.js

Back-end Tech: Spring Boot, Hibernate, Spring, JDBC, Microservices

Tools & Databases: Git, GitHub, Perforce (Version Control) | SQL, MySQL, MongoDB (NoSQL)

Systems/OS: Ubuntu, Linux (Bash/Shell Scripting), Windows

Cloud: Amazon Web Services (AWS), Docker, Kubernetes, Terraform

Miscellaneous: Multithreading, Design Patterns, Low Level Design, High Level Design, Microservices, Agile, Kafka

EXPERIENCE

Medibles (HealthCare StartUp)

Los Angeles, CA

Software Intern – Python, AWS

May 2024-August 2024

- Upgraded Adobe API authentication from **JWT** to **OAuth 2.0**, preemptively addressing security deprecation while maintaining HIPAA-compliant data flows
- Architected async PDF processing via **AWS SQS/Lambda**, **decoupling** services to boost throughput 4x and achieve 95% API success rate
- Optimized **Python microservices** via **async processing** and **predictive caching**, boosting healthcare data processing efficiency by 30%

Informatica

Karnataka, India

Software Engineer – Java, SQL, JavaScript, RestAPI

April 2021-July 2023

- Built 12 features (file automation + partner dashboards) using **Java/SQL**, enabling secure processing of 10k+ weekly transactions across 150+ customers
- Improved large file processing** by setting a time interval for files over 1GB to ensure they are fully uploaded before processing, reducing data corruption and boosting ingestion accuracy by 25%
- Redesigned and integrated a **real-time dashboard** for Informatica B2B DX, improving data accessibility by ensuring reports display real-time data instead of relying on the running ETL map, reducing setup time by 40%
- Streamlined event utility actions (reprocess, resend, discard) via **REST APIs** and **CLI**, improving operational response times by 30%
- Participated in **regular code reviews** and mentored junior developers, improving team code quality metrics by 25% and reducing technical debt
- Resolved 30+ **critical bugs** and implemented 20+ **unit tests** through Agile sprints, reducing production incidents by 85% and boosting test coverage to 95%

Associate Software Engineer – Java, SQL, Junit, Node.js

January 2020-March 2021

- Orchestrated end-to-end testing** for SFTP protocols, AES-256 encryption, and Okta integrations, eliminating critical defects across 3 major releases
- Reduced customer query time by 60%** with a JIRA chatbot, enabling faster issue resolution and improving user experience
- Optimized the **CI/CD pipeline** for B2B MFT using Jenkins, reducing deployment time by 5+ hours per week
- Authored comprehensive testing documentation and **collaborated with the QA team** to write test cases using JUnit

PROJECTS

Distributed Library Management System | [Link](#)

EE-450 (Computer Networks)

- Built 4-node distributed system with **C sockets**, managing 3 backend servers over **UDP** (port 8000-8003) and **TCP** client auth at 256-bit encryption
- Optimized packet routing across Science/Literature/History servers with 100ms latency, handling **multiple concurrent** book requests
- Programmed real-time inventory system using non-blocking I/O, custom packet headers, and **3-way handshake** for zero data loss

Low-Level Design (LLD) for Digital Circuit Simulation & Fault Detection | [Link](#)

- Worked in a team of 3** to build a C++ based digital logic simulator using OOP, enabling efficient multi-input gate evaluation
- Implemented **fault simulation** (DFS, PFS) and **ATPG** (D-Algorithm, PODEM), **achieving 100% fault coverage** and improving test pattern efficiency
- Automated build** using CMake and supported netlist formats, improving simulation speed and usability with a menu-driven CLI

CERTIFICATIONS

- Certified Kubernetes Application Developer (CKAD) (Udemy) (2025)
- Won **1st place in a hackathon** at Informatica for developing an NLP-based JIRA chatbot (2022)