NEHA SAWANT

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SUMMARY _____

Software Engineer with 3 years of experience in full-stack development, cloud computing, and automation. Currently pursuing a Master's in Computer Science and seeking full-time SDE roles.

EXPERIENCE _____

Software Engineer Intern, F5 Inc, CA   *July 2024 - Sept 2024*

- Built an AI-powered chatbot for F5's Central Manager using a custom RAG architecture with Azure OpenAI and Postgres vector store, enabling AI Ops, automated workflows, document validation, and developer assistance.
- Designed and built the chatbot frontend with React, Typescript, and integrated with backend services using FastAPIs.
- Implemented JA4+ TLS fingerprinting in F5's BIG-IP SSLO forward proxy by fixing TCL iRules in outbound gateway.
- Set up BIG-IP SSL Orchestrator on AWS and conducted manual and automated tests using GitLab, REST client, Kubernetes, and Wireshark.

Software Engineer, Siemens, India   *Mar 2023 - July 2023*

- Architected Perl automation scripts based on Functional Test Specification Documents to test wayside and onboard equipment of the Communications Based Train Control (CBTC) System.
- Executed and debugged tests within the SPA simulator on Unix. Reported critical bugs in the simulator through detailed log analysis and troubleshooting.
- Performed code reviews on Collaborator and conducted code coverage analysis on Ada source code using GNAT.

Senior Software Engineer, Persistent Systems, India   *Nov 2020 - Jan 2023*

- Engineered Python scripts for automated testing of Rovius Cloud Platform powered by Apache CloudStack.
- Automated the IaaS server installation and configuration using Shell scripts, reducing manual effort by 95%.
- Enhanced Jenkins-based automation framework and resolved issues in component/integration test pipelines, reducing framework-related test failures to under 2%.
- Developed performance test suites for bulk operations and conducted performance tests across platform versions benchmarking API response times and database throughput.
- Collaborated with the DevOps team to configure CI/CD infrastructure on new servers and fix pipeline issues.
- Designed and executed comprehensive test strategies for cloud infrastructure features - virtual machines, networks, storage, hypervisors (VMware, KVM, XenServer), load balancers, and Kubernetes clusters.

PROJECTS _____

Human AI Game | Demo | React, NodeJS, MongoDB, Gen AI

- Developed this website as a Research Assistant at SCU Imaginarium, featuring five personality-driven AI chatbots, a real-time Prisoner's Dilemma game, and survey flows to study trust and decision-making in Human-AI interactions.

Bilingual Math App | Demo | Flutter, Dart

- Steered the end-to-end development of a bilingual math app for children, featuring games, quizzes, flashcards, and translation to support interactive learning and language accessibility.

Data Structures Visualizer | Demo | Java, JavaFX, FXML, Maven, MongoDB

- Engineered with MVC architecture and OOP principles, featuring user authentication, real-time data structure visualizations, tutorials, LeetCode integration, and progress tracking.

EDUCATION _____

Master of Science in Computer Science, Santa Clara University, CA *(GPA 3.82)*   *Sept 2023 - June 2025*

Bachelor of Engineering in Information Technology, Pune University, India *(GPA 3.66)*   *Aug 2016 - May 2020*

SKILLS _____

- **Languages:** Java, Python, C++, JavaScript, HTML, CSS, Shell, Perl, SQL
- **Frameworks:** React, Node, Flutter, Flask, Maven
- **Cloud & DevOps:** AWS, CloudStack, Docker, Kubernetes, Jenkins