

Neha Sawant

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Skills

- Java | Python | C++ | C | JavaScript | React | Node | HTML | CSS | Flutter | Dart | Shell | Perl | TCL | MySQL | NoSQL
- OOP | Flask | REST | Postman | Amazon Web Services | Azure | Apache CloudStack | CI/CD | Jenkins | Docker | Kubernetes
- Microservices | Distributed Systems | Frontend | Backend | Full-Stack | Agile | Jira | ClearCase | Git | Linux

Education

Master of Science Santa Clara University Santa Clara, CA, USA 09/2023 - 03/2025

- Major in Computer Science and Engineering | GPA: 3.89
- Coursework: Distributed Systems, Machine Learning, Operating Systems, Computer Architecture, Software Engineering

Bachelor of Engineering Pune University Pune, India 08/2016 - 08/2020

- Major in Information Technology | GPA: 3.66
- Coursework: Cloud Computing, Data Structures, Object Oriented Programming, Computer Networks

Experience

Software Engineer Intern F5, Inc San Jose, CA, USA 07/2024 - Present

- Implemented JA4+ TLS fingerprint calculation in F5's BIG-IP SSLO forward proxy by fixing **TCL** iRules in outbound gateway.
- Setup BIG-IP SSL Orchestrator on **AWS** and conducted manual, automation tests using **GitLab**, **REST client**, **Kubernetes**, and **Wireshark**.
- Designed UI for AI assistant for BIG-IP Next's Central Manager, built frontend with **React**, **Typescript** and backend with **FastAPI**.
- Integrated the chatbot with **RAG** architecture on **Azure** OpenAI and frameworks like RAGMeUp and Databricks AI.

Software Engineer Siemens Pune, India 03/2023 - 07/2023

- Designed and developed automation scripts in **Perl** based on functional test specification documents for testing wayside and onboard equipment of Communications Based Train Control System (CBTC).
- Conducted root cause analysis of issues in the SPA simulator, ensuring prompt resolution and system reliability.
- Performed code reviews on Collaborator and conducted code coverage analysis on Ada source code using GNAT.
- Documented test reports, traceability matrices, and release notes.

Senior Software Engineer Persistent Systems Pune, India 11/2020 - 01/2023

- Engineered **Python** scripts for integration and functional testing of Rovius Cloud Platform powered by **Apache CloudStack**.
- Designed exhaustive test strategies for **virtualization**, **networking**, storage, hypervisors, etc.
- Developed **Shell** scripts for automating the **IaaS** management server installation and configuration, reducing manual efforts by 85%.
- Enhanced automation framework on **Jenkins** and fixed test scripts on **GitLab** decreasing 90% test failures due to framework issues.
- Led regular Build Verification Tests and Regression tests, troubleshooting critical issues, which reduced post-release defects.
- Deployed **Docker** containers on **Linux** VMs and exhaustively tested **Kubernetes cluster** deployment in CloudStack.
- Designed and developed scripts for bulk operations on CloudStack. Executed performance tests discovering 96% faster API response time and improved CPU and memory usage.
- Assisted **DevOps** team in migration of **CI/CD** infrastructure to new servers, including network reconfiguration and script enhancements.
- Mentored Junior Engineers on cloud infrastructure concepts, automation, KVM virtualization, and Kubernetes.

Projects

- **ATS**: Developed a generative AI Applicant Tracking System for resume analysis and rating, by fine-tuning LLM from Hugging Face, and prompt engineering. (Python, Streamlit, LLM) **(05/2024)**
- **Traffic Sign Recognition**: Built CNN models using Sequential and VGG19 architectures, achieving 98% accuracy in classifying traffic signs using both approaches. (TensorFlow, Keras, OpenCV) **(03/2024)**
- **Blogging App**: A responsive full-stack blogging platform with Google OAuth integration for secure login, CRUD operations, rich text-editor. Integrated a generative AI powered blog generator using Meta's Llama2. (React, Next, MongoDB) **(12/2023)**
- **PPE Detection System**: Developed a scalable and reusable web application for real-time detection of Personal Protective Equipment. (Core Java, Spring Boot, RESTful API, AWS EC2, S3, DynamoDB, Rekognition) **(10/2020)**

Leadership and Awards

- **Graduate Teaching Assistant**: Santa Clara University, USA
- **Top Talent 2022**: Awarded for exceptional performance and impactful contribution to Rovius Cloud Platform. Promoted to Senior Software Engineer at Persistent Systems.