

Praveen Sadanandan

Software Engineer Senior Staff - Backend | Microservice |
DevSecOps (CI/CD) | Database | AI/ML | Networking

✉ praveen.sadanandan@gmail.com ☎ +91-9880992270

📍 H-105, Bren Trillium, Doddanagamangala Main Road, Naganathapura, Bengaluru - 560100.

🌐 LinkedIn 🗣 WhatsApp 📠 Telegram 🔗 Website

Seasoned software engineer with over 20 years of extensive experience in backend development, microservices architecture, database management, CI/CD pipelines, AI/ML and automation. Proficient in designing and deploying scalable, high performance software solutions. Adept at leveraging cutting-edge technologies to drive innovation and enhance system efficiency.

🧠 Skills

Languages: Python | Javascript

Microservices: Kubernetes | Docker

Databases: MongoDB | PostgreSQL | Cassandra | Elasticsearch | Neo4j | Redis | Snowflake

Version Control: Git | Gitlab with CI/CD

Distributed systems: System design | Apache Airflow | Apache Kafka | Apache Spark | Celery

Networking: Juniper routers/switches | IXIA | Spirent

Machine Learning: Scikit Learn | Hugging Face | Spark ML

Web: Node | React | HTML | CSS | Apache | Nginx | SimpleSAML | REST

📁 Professional Experience

Juniper Networks [🔗](#)

Mar 2010 – present
Bengaluru, India

Software Engineer Senior Staff

- Architected and implemented microservices based systems enhancing scalability and reliability.
- Led backend applications development capable of processing terabyte data and serving analytics.
- Designed and deployed CI/CD pipelines with **Gitlab CI**, optimizing release cycles.
- Implemented containerization with **Docker** and orchestrated deployments with **Kubernetes** including setting up stateful and stateless applications, services, ingress controllers, including sharded **MongoDB** replica sets, **Apache Kafka** broker cluster, **Redis** as in-memory cache, **Apache Airflow** orchestrator, **Nginx** web servers and **Apache Spark**.
- Experience in developing **REST** APIs and backend services using Python to provide business insights.

- Developed and deployed **machine learning models** with **big data**, fine tuning **large language models (LLM)** like **BERT**, building pipelines for clustering and classification tasks with **natural language processing (NLP)** that helped boost productivity of engineers.
- Built applications to provide engineering, product management and support teams with insights / analytics into products, platforms, releases, features used by customers by leveraging big data in silos with **ETL data pipelines** to provide customer centric view to the teams.
- Enhanced regression framework to make it capable of running multiple workloads in parallel through horizontal scaling thereby reducing backlog of daily regression workloads.
- Built automated scaling and performance testing framework for network devices that builds the required topology dynamically from testbeds, configures the devices and runs traffic at scale using traffic generators like IXIA and Spirent.
- Experience in leading teams and interacting with other cross functional and cross-geo projects.
- Received multiple recognitions from organization for my contributions.

IXIA Technologies

Feb 2006 – Mar 2010

Bengaluru, India

Lead Engineer

- Experience in interacting with multiple customers across geo as part of providing professional services.
- Built customized solutions based on customer requirements that works seamlessly in customers' environment/infrastructure.
- Handled customer demos, evaluation support & training on product automation to win sales. Provided solutions to number of post-sales code support queries and professional services requests from different customers both onsite and offsite.
- Experience in networking protocols, IXIA network traffic generator applications, and automation.
- Automation experience with **TCL**, **Expect**, **Perl** and IXIA network traffic generator APIs.
- Gained multiple customer appreciation for my contributions.

Wipro Technologies

Mar 2004 – Feb 2006

Hyderabad, India

Project Engineer

- Experience in networking protocols and feature test automation.
- Automated multiple security feature tests for firewall products.
- Built libraries to help with crafting packets with anomalies and infected payload to test **firewall**.
- Automated application traffic generation like **SMTP**, **HTTP**, **TELNET**, **FTP**, etc between endpoints to test firewall features.
- Automation experience with **TCL**, **Expect**.
- Received recognition for my contributions.

HCL Technologies

Jul 2003 – Feb 2004

Chennai, India

Professional Practice

- Involved in telecom customer's application testing where number of bugs were identified and reported by me.
- Fixed minor application issues in **C++** and **Java** code base.

Awards

Juniper Networks

- Juniper Networks Business Amp Award
- Juniper Networks CEO Team Excellence Award
- Juniper Networks Test Engineering Award
- Juniper Networks Department Spotlight Award - In My Group - 3 times
- Juniper Networks Department Spotlight Award - Outside My Group - 3 times

Wipro Technologies

- Wipro Technologies Feather In My Cap Award

Education

Sep 1999 – Apr 2003

Chennai, India

Bachelor of Engineering in Computer Science,

Sathyabama Engineering College (University of Madras)