

P S Sree Harsha

AI Software Development Engineer · Multi-Agent Systems, MLOps & Distributed Platforms

sreeharshapolepalli@gmail.com · +91 9886463984 · Bangalore, India
github.com/Sree-Harsha-PS · linkedin.com/in/sree-harsha-ps

SUMMARY

Software engineer specializing in production AI systems. I turn ambiguous problems into shipped, measurable software: multi-agent orchestration services, natural-language analytics engines, and self-optimizing automation platforms. Equally comfortable owning the distributed backend and the AI infrastructure that runs on top of it.

EXPERIENCE

Emerging Technologies Engineer, Hewlett Packard Enterprise (HPE) Aug 2025 - Present
Bangalore

- Engineering AI-driven automation frameworks and Kubernetes-native microservices within HPE's Emerging Technologies Team to build scalable, intelligent systems.
- Designing MLOps pipelines that streamline model deployment, monitoring, and lifecycle management across hybrid cloud environments.
- Contributing to Agentic & Augmented AI orchestration that integrates adaptive learning and real-time feedback (RLHF) for self-optimizing systems.
- Ramped rapidly on Red Hat OpenShift, OpenStack and HPE Ezmeral to support key enterprise accounts, sustaining platform stability through routine health checks, fast issue resolution, and clear operational SOPs (recognized in HPE's Points Recognition program).
- Collaborating on distributed, cloud-native architectures to enhance system resilience, scalability, and performance through modern DevOps practices.

Cloud Engineering Intern, Hewlett Packard Enterprise (HPE) Feb 2025 - Jul 2025
Bangalore

- Engineered automation scripts and Ansible playbooks to streamline deployment pipelines and enhance infrastructure reliability across multi-cloud environments.
- Designed and tested cloud-native architectures with AWS, Azure, and HPE GreenLake, optimizing resource allocation and supporting scalable, elastic applications.
- Developed microservice packaging strategies with Docker and explored container orchestration using Kubernetes for modular application lifecycles.
- Configured secure Linux environments with RHEL system management, including ACL-based permissions, SELinux tuning, and network segmentation.

- Architected 12+ microservices powering a production B2B SaaS ERP platform used by 500+ healthcare organizations, handling high-volume operational and KPI data pipelines.
- Championed over 750 CI/CD deployments with DevOps practices to maintain dependable product releases with strict deadlines and high-quality service.
- Designed and launched 24+ features achieving 45% faster response times; developed real-time dashboards and sales trackers for data-driven decisions.
- Improved API performance by 60% through query optimization, indexing strategies, and pagination refinement across MongoDB and relational datasets.
- Engineered MERN-stack applications with secure JWT authentication; reduced bug reports by 50% through automated testing cycles.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL, Java, Solidity

Multi-Agent Systems & LLM Orchestration: LangChain, LangGraph, AutoGen, MCP, RAG, Azure OpenAI, Prompt Engineering, Embeddings / Vector Retrieval

Machine Learning: TensorFlow, RLHF, Reinforcement Learning, TF-IDF, Static Analysis

Backend: FastAPI, Node.js, Flask, REST APIs, Microservices, MERN Stack, JWT Auth, Prisma

Frontend: React, Next.js, Tailwind CSS, Redux, Three.js / R3F

Cloud & DevOps: Docker, Kubernetes, OpenShift, OpenStack, HPE Ezmeral, AWS, Azure, HPE GreenLake, Ansible, CI/CD, Linux / RHEL

Data & Stores: MongoDB, PostgreSQL, Vector Databases

Distributed & Research: Distributed Systems, Raft Consensus, Ethereum / Smart Contracts, Mermaid.js

SELECTED PROJECTS

Smart Log Manager

Multi-tenant FastAPI + React/TypeScript platform that orchestrates log ingestion, ML anomaly detection and an agentic RCA pipeline, hardened with row-level security, SSO, secrets management and automated PII anonymization.

2026

Agentic AIOps Blueprint

An infrastructure-mapping platform whose agents read Infrastructure-as-Code and Kubernetes configs, trace CI/CD and data flows, and emit compliant SOPs, Low-Level Designs and Microsoft Word deliverables for ITSM.

2026

RapidDoc AI

An asynchronous multi-agent pipeline with parallel fan-out routing that ingests large monolithic codebases, reverse-engineers architecture into instant HLDs, and generates Developer & User guides in Markdown, wired directly into CI/CD.

2026

 DT&A Digithon 2026 – Runner Up

GTMScale

2023-2025

A microservice-based B2B SaaS ERP (MERN + AWS) powering 500+ healthcare organizations, with 24+ features, real-time dashboards and sales trackers, hardened by JWT auth and automated testing across 750+ CI/CD deployments.

Multi-Modal AI Speech Coach

2024

An AI-driven app that personalises interactive coaching prompts with real-time LLM workflows, pairing TensorFlow speech analysis with a dynamic ReactJS UI. Top 6 at the Nex-Gen AI 24Hr Hackathon.

🏆 Top 6 – Nex-Gen AI 24Hr Hackathon 2024

Distributed Software-Defined Network

2023

A distributed SDN model with an accelerated Raft consensus algorithm that keeps multiple controllers consistent while scaling protocol handling. Top 8 of 200+ teams at the IEEE Kalpana 30Hr Hackathon.

🏆 Top 8/200+ teams – IEEE Kalpana Hackathon 2023

HRBIRS

2025

Principal-Author research on a blockchain-based recruitment system using Ethereum + Solidity (PoS) for secure, immutable data, paired with a hybrid TF-IDF recommendation engine achieving 85% precision. Published at ICT4SD 2025.

Published @ ICT4SD 2025

NetworkNex

2024

A LinkedIn-style app with API integration, a dynamic feed, dark mode and secure Google-based session management, built on Next.js, the MERN stack and Prisma.

EDUCATION

B.Tech in Computer Science & Engineering, PES University

Oct 2021 – Jun 2025

GPA 8.32 · DAC Scholarship (6 consecutive semesters)

CERTIFICATIONS

AWS APAC – Solutions Architecture Job Simulation · AWS / Forage

AWS Educate: Getting Started with Compute · AWS Educate

AWS Educate: Getting Started with Networking · AWS Educate

AWS Educate: Getting Started with Databases · AWS Educate

AWS Educate: Getting Started with Serverless · AWS Educate

Python 5 ⭐ · HackerRank

C Language 4 ⭐ · HackerRank

A Beginner's Guide to Linux Kernel Development (LFD103) · Linux Foundation

Industry-Skills Appreciation · NASSCOM

LEADERSHIP

Technical Lead · Predict This!

Head of Mathematics · Shunya

Head of Event Management · Shunya

Events Lead · HELPR – Humanitarian Club

Core Member · Google DSC PES University