Pavan G S

Forward Deployed Engineer · Enterprise AI & Agentic Systems

Bengaluru | +91 97387 06304 | gspavan5011@gmail.com | pavansridhar.online | linkedin.com/in/pavangurusridhar | github.com/IamPavanGS

SUMMARY

Engineer with 9+ years inside enterprise IT who **plans, builds and ships the software organisations run on**. Working embedded with client teams, I took two platforms from the first requirement conversation to production: a **network operations console with an Amazon Bedrock AI analyst** and an **ITIL change, asset and WAN platform running air-gapped on RHEL**. I build with an **AI engineering system I designed** (role agents, a decider agent, and hooks that enforce lint, secret scanning and tests), so delivery is fast and every change is still reviewed, tested and released under control.

KEY ACHIEVEMENTS

- **2 production platforms**: 102 sites and ~3,500 devices on the NOC Console; 3 live ITSM modules, each run by 2 managers and ~50 requesters and engineers.
- **AI in production**: an IT support assistant running at **~7,400 messages a year** (Oct 2026 rate), an AI diagnostics agent, and a Bedrock analyst inside the NOC Console.
- **Measured outcome**: faults raised by monitoring close in a median **11 minutes vs 15.9 hours** when a person raises them.
- **Release discipline**: ~10,000 automated tests across both platforms, signed offline installers, automatic rollback.

PROFESSIONAL EXPERIENCE

SDC Tech Solutions Pvt. Ltd. Apr 2024 – Present
Senior IT Engineer Bengaluru

On site at Alcatel-Lucent Enterprise's IT (2,500-person site); plan, build and release LLM / Generative AI tools and platforms for an SDC client engagement.

NOC Console: network observability with an AI analyst · SDC client engagement · since Sep 2026 · v2.8.0 live

- Gathered requirements with the network team, designed the architecture and shipped a read-only console that brings **7 vendor platforms** (Zabbix, FortiAnalyzer, Juniper Mist, Aruba Central, Cisco Meraki, Zscaler, ServiceNow) into one screen for **102 sites / ~3,500 devices**, **replacing six vendor consoles**. Live demo
- Processes **~234,000 Zabbix problems and ~17 million events a month** and syncs ~750 ServiceNow incidents a month; the monthly SLA report now takes minutes instead of days.
- Built an **Amazon Bedrock analyst** that answers network questions in plain language from the console's own data, read-only by design.
- Shipped v1 to v2.8 with **4,600 automated tests** that replay recorded vendor responses, a signed upgrader, a systemd service and a go-live runbook; the tests caught AI-written code calling a vendor endpoint that does not exist before it reached production.

ITSM Governance Platform: ITIL change, asset and WAN · SDC client engagement · since Feb 2026 · v1.19.0

- Turned the organisation's own change, asset and WAN procedures into a process platform; **all 3 modules are live**, each run by **2 managers and ~50 requesters and engineers**. Live demo
- Change workflow (raise, peer validation, approval, scheduling, implementation, review) with one-time emailed approvals, **per-device conflict detection, freeze windows**, reminders and escalation. WAN: link requests with ISP feasibility timers and shared-mailbox ingestion (IMAP, Microsoft Graph).
- Runs **air-gapped on RHEL**: one-file offline installer, SHA-256-verified updates with backup and **automatic rollback**, AD / LDAP sign-in and an append-only audit trail; **21 releases and 5,400 automated tests in three months**.
- **Pre-sales and scoping**: wrote a Python generator that produced the statements of work for the ITSM, NOC and combined engagements.

Digital Collaboration Command Center · since Oct 2026 · discovery and prototype

- Discovery for one view of meeting-room health, Teams call quality, bookings, Pexip and ServiceNow tickets: tested the **42 proposed KPIs** against **8 systems' documentation** (Graph call records, Teams Rooms Pro, CQD, Exchange, Pexip, ServiceNow, AV); only 3 hold as written, so 5 promises were rewritten before build. Built a clickable prototype.

Enterprise IT and AI, on site

- **IT support assistant** (Python, Amazon Bedrock, RAG with embeddings in a pgvector database over knowledge articles and resolved tickets): resolves what the knowledge base covers, otherwise raises a complete ticket. In Oct 2026: 86 users, 619 messages, 54 tickets, 37 MFA resets (**~7,400 messages a year** at that rate).
- **IT Analyst** (Amazon Bedrock): an AI diagnostics agent with RAG over resolved tickets and structured Windows telemetry, collected through a certificate-secured client-server agent with on-demand log collection. Returns a confidence-scored root cause. Estimated 10–20 engineer-minutes saved per diagnosis.
- **WinForge** (C# / .NET 8, open source): designed and built the Windows 11 image builder whose golden image was deployed to **~2,500 machines** through MDT and ManageEngine OS Deployer; each image build went from **4–6 hours to ~1 hour**. github.com/IamPavanGS/WinForge

- **Change manager and CAB lead**: ~90 changes a month (~780 across 9 monthly reports), including AWS EKS upgrades and DR, EC2 resizing, Log4j remediation and server OS upgrades.
- Patching and deployment for **~2,000 Windows endpoints** (ManageEngine Endpoint Central); cloud agent migration; BitLocker audit of ~2,500 drives (~120 flagged) and EDR / DLP coverage gaps (~180 machines); MDM rollout for BYOD (MDM Plus, Entra certificate-based auth, SCEP).

QualiTest Group Jan 2021 – Apr 2024
Cloud and Infrastructure Engineer Bengaluru

- **Windows 11 upgrade of ~1,150 machines** in 23 daily waves across 6+ sites (2023); **Endpoint Central rollout** to 5 remote offices (2022; packages, GPO, PXE imaging).
- Found **223 unhealthy endpoint agents** (Mar 2024) and built a self-service repair tool with central logging.
- Designed and wrote the PowerShell GUI tools a global IT team ran its day on: **ADWiz** (AD provisioning with Microsoft 365 integration across 14 locations), **QReset** (L1 password resets without domain-admin escalation) and **QPass** (offline password generation).
- Self-service App Store on SharePoint (**40% fewer tickets**); Power Automate onboarding and offboarding (**30% faster, ~20 hours a week saved**); Terraform and Ansible VM builds (**50% faster** server deployment).
- **ZenQ acquisition**: integrated 150+ VMs and 30+ VDIs and isolated a compromised environment. **IT Super Star Award, Q3 2022.**

Samsung R&D Institute India May 2017 – Jan 2021
IT Engineer Bengaluru

- 24x7 SLA support for RBS / SVPN services; Windows and Linux (Ubuntu, RHEL, CentOS) troubleshooting and OS deployment. **COVID Warrior Award.**

TECHNICAL APPROACH: AI ENGINEERING

- **Multi-agent SDLC orchestration**: a Project Manager agent breaks the work into tasks and delegates to Architecture, Implementation, Code Review, QA and Security Scanner agents, from architecture through validation.
- **Decider pattern**: alongside architect, implementer, reviewer, domain-expert and QA agents, a decider agent makes product calls on the owner's behalf and logs every decision so it can be overturned.
- **Hooks as gates**: a prompt-refinement hook turns vague requests into a clarification step before agents start; lint after every edit, a secret scan before every commit, a session log; releases gated on the full test suite.
- **Per-role model choice** (stronger reasoning models for architecture and review, faster ones for build and QA), a reusable **agent-team skill** and a researched **network-architecture skill**.
- **MCP**: built a Python MCP server (10 tools, Playwright) for a human-in-the-loop job-application assistant; Playwright MCP for end-to-end checks.

PROJECTS

- **MoneyMate**: household finance app (Next.js 16, Supabase, deployed on Vercel; 363 commits, 634 tests) with one LLM layer switching between DeepSeek, OpenRouter, a local model and Anthropic, and personal data stripped before any call; ran a **54-agent security audit** and a red-team exercise and shipped the fixes. In daily use.
- **Password Vault**: zero-knowledge password manager (Rust, TypeScript, PostgreSQL, Docker; 562 commits), self-hosted; CI on GitHub Actions and 944 Playwright end-to-end tests.
- **Clausage Bar** (Claude usage monitor, tested, with installer) · **Night Stand** (reading recommender on OpenRouter / DeepSeek) · **n8n + Ollama** Gmail triage that classifies, labels and files mail and sends urgent items to Telegram.

SKILLS

AI: Generative AI, LLMs, AI agents, Amazon Bedrock, RAG, embeddings and vector database (pgvector), prompt engineering, tool calling / function calling, MCP, Claude Code (subagents, hooks, skills), multi-provider LLM routing (OpenRouter, DeepSeek, Anthropic, Ollama), n8n

Software: TypeScript, JavaScript, Node.js, Next.js, React, Python, C# / .NET 8, Rust, PowerShell, SQL (SQLite, PostgreSQL), Git, Drizzle, Vitest, Playwright, Docker

Integration: REST APIs (7 network and security vendors), ServiceNow, ServiceDesk Plus, AD / LDAP, Microsoft Graph, IMAP / SMTP

Delivery: CI/CD (GitHub Actions, Vercel), RHEL / Linux, air-gapped installers, signed updates with rollback, AWS (Bedrock, EC2), ITIL change and CAB, ManageEngine, MDT

EDUCATION

B.Com (Commerce), Suresh Gyan Vihar University, 2025

CERTIFICATIONS

- **MCSA**, **CCNA**, **A+ / N+**, Rooman Technologies, 2017 · **Automating Administration with Windows PowerShell**, Apponix, 2021