

M Lalith Kumar

+91 74839 05851 | dev@lalith.live | linkedin.lalith.live | lalith.live | github.lalith.live | Bengaluru, KA, India

EDUCATION

Nitte Meenakshi Institute of Technology (NMIT) Bengaluru, KA
Bachelor of Engineering in Computer Science & Engineering, 2nd Year CGPA: 8.2 / 10.0 Sept. 2024 – Aug. 2028

St. Joseph's Pre-University College Bengaluru, KA
Science (PCMC) Percentage: 95.6% June 2022 – March 2024

TECHNICAL SKILLS

Languages: C, C++, Java, Python, JavaScript (ES6+), Bash, YAML

Backend & Cloud: Node.js, Express.js, MongoDB, MySQL, REST APIs, JWT, Docker, Docker Compose, Azure, AWS

DevOps & Tools: n8n, GitHub Actions, GitLab CI/CD, Doppler, SSH, Git, Tailscale, WireGuard, AdGuard Home

Platforms: Linux (Arch, Ubuntu, Debian/ARM64), Raspberry Pi 5 (Self-Hosting), Passport.js, React 18, VS Code

PROJECTS

Global Ad-Blocking & Private DNS System | *Raspberry Pi 5, Tailscale, AdGuard Home*

- Engineered a private DNS infrastructure on Raspberry Pi 5 with AdGuard Home, processing **2,100+ DNS queries/day** and blocking **3.43%** of requests — ads, trackers, and malicious domains — across **3 networked devices** globally.
- Configured Tailscale WireGuard-encrypted mesh network with MagicDNS global DNS override, maintaining secure filtered connectivity across **4+ network types** (home WiFi, college, 5G, hotspots) without manual reconfiguration.
- Stacked **4 blocklists** (AdGuard, OISD, AdAway, Unified Hosts) for DNS-level ad/tracker filtering, reducing lookup latency via local caching and eliminating ISP-level DNS tracking and telemetry.

AI-Powered Infrastructure Monitoring Agent | *n8n, OpenAI API, Docker, Discord Webhooks*

- Developed an event-driven monitoring workflow using n8n that automates **100% of server health checks**, reducing manual server inspection time by approximately **10 hours/month**.
- Integrated an OpenAI-powered AI agent to perform real-time reasoning on server failures, executing remote SSH commands to fetch Docker container uptime and disk usage metrics across **2+ containers**.
- Built a stateful alerting logic that reduced notification noise by **60%** by maintaining memory of previous alerts, sending structured, actionable summaries to Discord only when necessary.

Production-Grade Authentication System | *Node.js, MongoDB, Passport.js, Doppler, Docker*

- Architected a secure backend supporting **3 OAuth 2.0 providers** (GitHub, Google, Microsoft) and local session-based authentication, achieving a **0% secret leakage rate** by centralizing environment variables with Doppler.
- Containerized the entire application stack using Docker Compose, reducing local deployment and environment setup time **from hours to under 2 minutes**.
- Implemented industry-standard security headers (Helmet.js), CSRF protection, and bcrypt hashing (**10 salt rounds**) to ensure robust protection against common OWASP vulnerabilities.

CERTIFICATIONS

MongoDB Certified Associate Atlas Administrator | *Issued by MongoDB* 2026

- Validated expertise in managing Atlas deployments, configuring cloud security, backup/restore clusters, logging & monitoring, AI & Vector Search, user management, and database upgrades.

ACHIEVEMENTS

- Internal Round Winner, **Smart India Hackathon (SIH) 2025**: Ranked **#7 / 500 nationwide** for *AdhyayanMarg (Smart Student Hub)*, an intelligent academic performance tracking platform built with React 18, Node.js, Flutter, Azure Cosmos DB, and JWT.
- Active Open Source Contributor with focus on Cloud, DevOps tooling, and Linux environment optimization.