

Manikant Thakur

SENIOR ARCHITECT - CLOUD & DEVOPS · DATA/ML/MLOPS PRACTITIONER · INFOSEC

Koramangala, Bengaluru, 560034, Karnataka, India

☎ (+91) 99450 67185 | ✉ manikant@thakur.io | 🏠 thakur.io | 📷 manikantthakur | 📺 manikantthakur

Summary

Dynamic technology leader with 16+ years of experience architecting secure, scalable, and intelligent cloud infrastructures across AWS, Azure, and GCP. Specialized in Generative AI (GenAI), RAG pipelines, and AI-driven automation, bridging architecture, data, and machine learning to deliver measurable impact. Proven record of 20% efficiency gains and 15% cost reduction through innovative DevOps, IaC, and automation practices. Adept at leading cross-functional teams, integrating modern engineering workflows, and driving strategic transformation initiatives aligned with business outcomes.

Skills

Cloud & Infrastructure	AWS, Azure, GCP, Azure Bicep, VNet Integration
DevOps & Automation	Jenkins, GitLab CI/CD, ADO, Docker, K8s, Helm, Istio, ArgoCD, SonarQube, Python & Bash, IaC
AI / GenAI / RAG	LangChain, LangGraph, RAG, VectorDB, Document Extraction & Ingestion Pipelines, Multi-Agent Orchestration
Programming & Scripting	Python, Bash, JS/TS, FastAPI, Django, Node.js, Express, REST Development
Security & Compliance	Nessus, Burp Suite, Clair, kube-bench, CIS Benchmarks, Azure Policy, RBAC, NSG, Checkov
Machine Learning & Data	NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, Matplotlib, Seaborn, MLOps Foundations
Full Stack Development	React, Next.js, FastAPI, PostgreSQL, Redis, RESTful APIs, Microservices Architecture
Leadership & Architecture	Solution Architecture, AI Platform Design, Enterprise RAG Design, System Integration, Cost Optimization

Work Experience

Visionet Systems Inc

Bengaluru, India

SENIOR ARCHITECT - CLOUD & DEVOPS

June. 2024 - Present

- Leading architectural decisions for cloud infrastructure, DevOps, and CI/CD practices
- Transitioned to AI team, specializing in GenAI technologies and RAG applications
- Expert in LangChain, LangGraph, Vector Databases, and document extraction
- Designed and implemented RAG applications for enterprise clients
- Architecting, designing, and developing AgentVerse - enterprise-scale AI agent platform with MCP architecture, ADK, and A2A
- Developing live coding and live reviewing skills through daily use and practice - essential expertise for modern AI-based development
- Expert in Azure Bicep for Infrastructure as Code implementations
- Implementing AI-driven automation and best practices in cloud security
- Mentoring teams and driving technical excellence in AI and cloud domains

Slang Labs

Bengaluru, India

LEAD - DEVOPS, INFRA AND TOOLS

Oct. 2018 - Dec. 2022

- Optimized Docker build process, resulting in a 93% reduction in build time and a 76% reduction in image size, improving overall build efficiency.
- Enhanced CI/CD processes by transitioning from Jenkins to GitLab CI/CD, resulting in a 30% reduction in deployment time and a notable 25% boost in release frequency. This migration facilitated quicker and more frequent deployments, empowering teams to deliver updates and features with greater agility and efficiency.
- Implemented auto-deployment of commits to various tiers, except the production tier, resulting in a 90% reduction in manual intervention.
- Tweaked the CI/CD pipeline to avoid consuming CI/CD build minutes for repetitive commits and other parameters, saving 15% on cloud infrastructure costs.
- Achieved one-click production deployment, reducing release time by 50%-55%, resulting in a 75% faster production release.
- Set up and automated the release pipeline for Android/iOS/Web SDK release, improving release frequency by 25%.
- Established an on-call process, team, and infrastructure required (Prometheus, Grafana, Slack Alerts, System Status page), increasing the visibility of production tier's vital metrics and reducing downtime by 20%.
- Led the on-call team and acted as a subject matter expert on cloud providers, resulting in a 95% reduction in response time to incidents.
- Maintained 99.99% uptime for SlangInfra, improving system reliability by 20%.
- Implemented SAML and SSO on Slang CONVA with Auth0, improving the overall security of the platform by 25%.
- Migrated stateless microservices to Cloud Run, resulting in a 60% reduction in infrastructure costs.
- Conducted memory profiling of microservices for efficient resource allocation, reducing cloud infrastructure cost by 15%.
- Set up multi-Geo clusters for efficient traffic routing, improving overall system performance by 25%.
- Optimized log aggregation config to save cost by filtering out non-critical logs to be sent to Data Destination using Fluent, reducing cloud infrastructure cost by 20%.
- Worked with Terraform and Ansible for Infrastructure as Code (IaC), improving overall infrastructure reliability by 25%.
- Set up a multi-cloud setup between AWS and GCP, improving overall system reliability by 20%.
- Proficient in clean, maintainable, efficient PHP code with extensive OOP and design patterns experience.
- Skilled in designing and optimizing MySQL/MariaDB databases, database migrations, seeders, factories, indexing, and query optimization.
- Experienced in designing, building, and consuming RESTful APIs with authentication and authorization using OAuth and JWT.

xcelerator, HEd Experts

Bengaluru, India

SOFTWARE ENGINEERING LEAD | PRINCIPAL ENGINEER

Jan. 2017 - Sep. 2018

- Leveraged DevOps tools such as Docker, Kubernetes, Server-less Computing, ELK, AWS, and GCP to streamline infrastructure and improve operational efficiency.
- Built applications with ReactS, Phoenix Framework, Elixir, and PostgreSQL, delivering high-performance solutions for end-users.
- Containerized the entire tech stack and migrated to AWS, achieving improved scalability and flexibility while reducing infrastructure costs by 40%.
- Implemented CI/CD on Jenkins, enabling faster and more reliable releases with reduced manual intervention.
- Led two teams and ran parallel sprints to ensure effective planning, task allocation, and timely delivery of business requirements, resulting in a success rate of 80%-90%.
- Set up an authentication system based on Keycloak, an Open Source IAM, enhancing the security of the application.
- Implemented a local full-stack infrastructure, eliminating dependencies and improving developer productivity.

Thingbot Technologies

Bengaluru

May 2015 - Jan 2017

- **VP Software Engineering** (Feb. 2016 - Jan. 2017)
 - Led engineering teams in project planning and managed end-to-end cloud/IoT gateway infrastructure development.
 - Oversaw requirements gathering, design, coding, testing, early field trials, product deployment, and customer feedback to ensure successful project delivery.
- **Senior Software Developer** (May. 2015 - Jan. 2016)
 - Adopted and implemented Contiki OS (C), an event-driven TOS, on TI's cc2538 SoC (Cortex-M3) with expertise in real-time sensors/actuators and networks like 802.15.4, 6LoWPAN, RPL, COAP.
 - Led the architecture, design, and implementation of a distributed Cloud infrastructure hosted on AWS, resulting in a scalable and reliable system.
 - Designed and developed all micro services using Python 2.7, Elasticsearch 1.4, Django 1.9, and REST API.
 - Designed and developed an Ubuntu-based Gateway, serving as an interface to connect hardware and other components with cloud micro services, resulting in improved connectivity and functionality.

Paxterra Solutions Inc

Bengaluru

SOFTWARE ENGINEER (NETWORK PROTOCOL)

Jul. 2012 - Apr. 2015

- Implemented SDN technologies including OpenFlow, OF-Config, and OpenFlow Notifications Framework.
- Conducted protocol mutation and DoS attacks as part of network penetration testing using Perl and Python scripting.

Kochar Tech

Kolkata

Sep. 2009 - Jan. 2012

- **Network Engineer** (Jan. 2011 - Jan. 2012)
 - Configured and managed Cisco networking equipment such as switches, routers, and PIX firewall.
 - Conducted network cable management, performed log analysis, and troubleshooted network issues.
- **System Admin** (Sep. 2009 - Jan. 2011)
 - Expert in System Administration using Windows Command Prompt and Windows Powershell.
 - Achieved 99% success rate in automating OS updates for 500+ HP Mini PCs, completing the process under 3 hours, reducing manual effort significantly.

Kaizen TI Services Pvt. Ltd.,

Kolkata

L1 TECHNICAL SUPPORT ENGINEER

Nov. 2008 - Aug. 2009

- Achieved a resolution time of under 60 minutes for 90% of the tickets raised through effective incident management.
- Proficient in Microsoft Server 2003 and Altiris Deployment Server Administration, Windows Group Policy, and Windows Registry.

GitHub Projects

VersaVox

Ongoing Research and
Development

[HTTPS://GITHUB.COM/MANIKANTTHAKUR/VERSAVOX](https://github.com/ManikantThakur/VersaVox)

- Developed a range of Python-based ML models, both open-source and proprietary, aimed at addressing various challenges in audio and text transcription domains. Notably, designed open-source ML models specifically tailored for audio and text transcription tasks, achieving an accuracy rate of 50% in Indic language classification. These projects involved leveraging Python libraries and frameworks to tackle complex language processing tasks.
- Audio and Text : Transcribe and Indic language classification.

Break

Parental Leave

Jan. 2023 - Jun. 2024

- Acquired practical expertise in machine learning during the break.
- Utilized various open source ML models to transcribe and classify the text and audios to various Indian languages. Open Sourced as VersaVox