

VISHNU K

DevOps Engineer | Software Development Engineer (Full Stack)

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PROFESSIONAL SUMMARY

Results-driven MCA candidate specializing in Advanced Cloud Technologies with hands-on expertise in containerization, CI/CD automation, microservices architecture, and cloud-native backend development on AWS and GCP. Engineered production-grade distributed systems with Docker, Kubernetes, Jenkins, and GitHub Actions; built and secured REST APIs using JWT, RBAC, OAuth 2.0, and AES-256 encryption. Hackathon winner, published co-author, and active open-source contributor seeking a DevOps Engineer or SDE role to build and operate scalable, high-availability systems.

TECHNICAL SKILLS

DevOps & Cloud: AWS, Docker, Kubernetes, Jenkins, GitHub Actions, CI/CD Pipelines, Serverless, Terraform (Basics)

Backend: Python, Flask, Django, Node.js, RESTful APIs, Microservices Architecture, FastAPI

Auth & Security: JWT, OAuth 2.0, RBAC, TLS, AES-256 Encryption, Keycloak, OWASP Best Practices

Databases: MySQL, Redis, MongoDB, SQLite,

Messaging: RabbitMQ, AMQP, Event-Driven Architecture, Async Queue Design

Frontend: React, Tailwind CSS, Bootstrap, HTML5, CSS3, Flutter

Languages: Python, Java, JavaScript, C++, SQL, Bash, PHP(Basics)

Tools: Git, GitHub, Postman, Streamlit

EDUCATION

Master of Computer Applications (MCA) — Advanced Cloud Technologies & Big Data

LEAD College (Autonomous), Palakkad | University of Calicut | 2025 – 2027 (Expected)

Bachelor of Computer Applications (BCA) — Cloud Computing , Cyber Security & Ethical Hacking | CGPA: 7.09/10

Srinivas University, Mangalore | 2022 – 2025

INTERNSHIP EXPERIENCE

Python Django Intern | Luminar Technolab, Kochi | Jan 2025 – Apr 2025

- Engineered Django REST APIs for user authentication, data routing, and middleware handling, cutting manual backend setup time by approximately 30% through reusable app modules.
- Designed and validated RESTful API contracts (Postman) following MVC patterns, covering request-response cycles, session management, and role-based authentication flows.
- Delivered authentication modules integrating token-based and session-based flows, enforcing granular access control for multi-role web applications.

PROJECTS

Secure Health API — Microservices & Security Platform | *Flask, MySQL, Docker, Jenkins, Keycloak, JWT, AES-256, TLS*

- Architected a production-grade healthcare microservices platform with Docker Compose, isolating API gateway, authentication, database, and monitoring into independently deployable services.
- Implemented zero-trust security: Keycloak RBAC, JWT endpoint auth, TLS in-transit encryption, and AES-256 at-rest encryption for HIPAA-aligned PHI data protection.
- Automated CI/CD deployment pipeline with Jenkins, integrating pytest unit tests and health checks to validate builds before release, reducing manual deployment effort by ~40%.
- Designed versioned REST API contracts with Swagger-style documentation; containerized each service for horizontal scaling via Docker Compose orchestration.

Smart E-Commerce Platform — Event-Driven Microservices | *React, Flask, MySQL, RabbitMQ, Docker, Tailwind CSS*

- Designed and deployed 4 decoupled microservices (Inventory, Cart, Payment, Discount), each with independent REST APIs and isolated data stores, supporting 500+ concurrent product listings.
- Integrated RabbitMQ AMQP messaging for async order processing and inventory synchronization, eliminating service coupling and improving fault tolerance across distributed components.
- Containerized all services with Docker and configured inter-service networking via Docker Compose, enabling single-command environment bootstrap for local and staging deployments.
- Delivered a responsive React + Tailwind CSS frontend consuming microservices APIs for complete purchase flows, from product listing through order confirmation.

FixitNow — Service Marketplace with Payment Gateway | *Django, REST API, MySQL, Razorpay, Bootstrap*

- Built a multi-role service marketplace (Customer, Provider, Admin) with Django, enforcing granular RBAC permissions across booking, listing, and administrative workflows.
- Integrated Razorpay payment gateway with webhook handling for real-time payment status synchronization; designed normalized schema supporting scheduling, service listings, and booking history.

Smart OPD System — Hackathon Winner (1st Place, Getwork 2025) | *Flask, MySQL, Bootstrap, RBAC*

- Engineered a hospital OPD management system with real-time patient queue management and RBAC dashboards for Admin, Doctor, and Receptionist roles; delivered full working demo in under 24 hours.
- Won 1st Place at Getwork Hackathon 2025, demonstrating production-level architecture and rapid full-stack delivery under time constraints.

ACHIEVEMENTS

- Winner — Getwork Hackathon 2025, 1st Place : Hospital OPD system built and demo-ready within 24-hour sprint.
- National Seminar Paper Presentation — University of Calicut, 2026: Presented research on AI-era employability to a national academic audience.
- Rajyapuraskar Scout Award — Bharat Scouts & Guides (National-Level Recognition).
- Platoon Commander — Bharat Scouts & Guides: Led a team of 30+ cadets in national-level events and training programs.

PUBLICATION

From CV to Digital Footprint: Expanding Criteria for Employability in the AI Era (Co-author)

Book Chapter in Redefining Careers and Organizations: Leadership, Employment Practices, and AI in the Evolving Workplace

LEAD College & Zodha Research Solutions, 2025 | DOI: 10.5281/zenodo.17984401

CERTIFICATIONS

- Build Computer Vision App with Azure — Microsoft (2025)
- Foundations: Data, Data, Everywhere — Google (2025)
- Web Development using React JS — Srishti Innovative (2026)
- Android App Development using Flutter — Srishti Innovative (2026)
- Ethical Hacking Starter Program — Offenso Hackers Academy (2026)
- AI Aware Badge — AI For All / CBSE & Intel (2025)
- Website Design & Development — Infosys Springboard (2024)

LANGUAGES

Malayalam (Native) | English (Professional) | Hindi (Intermediate)