Mithilesh Charan Perugu

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EXPERIENCE

Software Engineer - Backend Development July 2024 – Present
Ford Motor Company *Chennai, India*

- Developed Central Shutdown Automation(CSA) using Java, Spring-boot, PostgreSQL and AWS, automatically managing VM lifecycle during weekends and holidays, reducing cloud costs by 25%+ with user-configurable scheduling.
- Created SSL/TLS Certificate renewal Automation(CERTMAN) using Java, Spring-boot, Python, Secret Manager, monitoring 1000+ .ford.com domain certificates and automating CSR generation, CA approval workflows, time-bound email, text notifications.
- Built Public Cloud AI Support(PCAS) chatbot using GPT-4.0, integrating Elasticsearch for document indexing and DialogFlow, spaCy for NLP, serving 500+ support queries daily.

Software Engineer Intern Jan 2024 – June 2024
Ford Motor Company *Chennai, India*

- Engineered a high-throughput Flask based REST API. Deployed on AWS, efficiently processing 10K+ JSON requests/hour with versioned rollouts, monitoring, and autoscaling.
- Led a Full-stack tooling initiative to automate service health checks and integrated robust test suites (JUnit, PyTest) with Swagger, Apigee, saving 100+ debugging hours and boosting incident response reliability.

EDUCATION

National Institute of Technology, Raipur Raipur, India
B. Tech in Computer Science and Engineering (CSE) – 8.5 CGPA *Dec 2020 – June 2024*

TECHNICAL SKILLS

Languages: C++, Java, Python, SQL, Shell Scripting
Backend & Frameworks: Spring Boot, Flask, REST APIs, FastAPI, Node.js, Express.js
Databases: PostgreSQL, MySQL, MongoDB, Redis, ElasticSearch
Cloud & DevOps: AWS, GCP, Docker, Kubernetes, Jenkins, CI/CD, Terraform, Ansible
AI/ML Tools & Platforms: spaCy, OpenAI APIs, Replit, LangChain, Hugging Face, PineCone

PROJECTS

Webhook Replay & Debugging System | *Spring Boot, PostgreSQL, REST APIs, Docker, AWS*

- Tailored a backend tool to capture, log, and replay webhook payloads, enabling 80% better visibility into external service callbacks for easier debugging.
- Enabled replay of 900+ simulated webhook events with custom headers, delays & payloads to mimic real-world integrations and test failure scenarios.

Privileged Access Manager - PAM | *Python, PostgreSQL, REST APIs, Kubernetes, Terraform, GCP*

- Implemented scalable backend services with PAM, enabling fine-grained access control across 800+ user roles with modular policy enforcement.
- Integrated Just-In-Time (JIT) access workflows to auto-provision time-bound privileges, reducing standing access exposure by 85% and improving overall system security posture.

ACHIEVEMENTS & CERTIFICATIONS

Ford Ideathon Winner – Pull Request Review, Scan Automation April 2025
Ford Motor Company

- Emerged as Winner for building an automated PR code review system using Python, GitHub Actions, GPT-4, integrating static analysis, security scans, and custom linting by reducing manual review time by 60% while ensuring adherence to code quality standards.

GCP Associate Cloud Engineer Certification Credly - c7f3e5ea-819f
Google Cloud

- Configured VMs, Clusters, Applications, IAM roles, and pipelines in GCP using Console, CLI & Terraform.