

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 cert 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

AI/ML Tools & Platforms: spaCy, OpenAI APIs, Replit, LangChain, Hugging Face, PineCone

Cloud & DevOps: AWS, GCP, Docker, Kubernetes, Jenkins, CI/CD, Terraform, Ansible

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*

- Implemented scalable backend services for 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

- Built 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.