Josef Rainer

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SUMMARY

Senior Site Reliability Engineer with 11+ years building scalable, high-availability cloud platforms for EV and global commerce systems. Deep expertise in Kubernetes, distributed systems, CI/CD automation, and high-volume telemetry pipelines. Proven leader in production reliability, incident response, and multi-region resilience.

EXPERIENCE

Senior Site Reliability Engineer, GM Energy

General Motors **March 2024 - Present, Atlanta Georgia**

- Owned end-to-end architecture, delivery, and production operations of GM Energy's production OCPP 1.6 charging server on Azure AKS, scaling to 2,500 + EV chargers with > 99.9 % uptime.
- Participated in 24/7 on-call rotation; led SEV incident response and postmortem reviews across 20+ services.
- Implemented autoscaling, Redis-based state tracking, and Event Hub fanout for real-time charger communications.
- Built and validated US Central Business Continuity region with 30-min RTO / 15-min RPO.
- Designed reusable GitHub Actions pipelines with sequential promotions and dynamic image tagging, reducing deployment failures by ≈ 30 %.
- Rolled out Datadog and Streamlit dashboards covering test coverage, latency, and workflow health; implemented 100 + monitors across 20 + microservices.
- Optimized Kafka/Event Hub → Blob → Snowflake pipeline handling ~700M records/day, reducing Snowflake compute cost by ~20–30% through batching and backpressure controls.
- Led dependency upgrades and CI/CD hardening; served as primary Change Administrator ensuring zero-downtime rollouts.

DevOps Lead Engineer, GM Energy

General Motors **July 2023 - April 2024, Atlanta, GA**

- Innovation Owner for the GM Energy Cloud, overseeing 20 + microservices and scheduled jobs on Azure AKS, supporting 24 / 7 production workloads with high availability.
- Designed and maintained data pipelines enabling secure vehicle-to-cloud ingestion and telemetry processing via Event Hub, Snowpipe, and Azure Stream Jobs, processing ~700 million messages per day with > 99.9 % delivery reliability.
- Implemented Helm-based deployment automation using Azure DevOps, reducing manual effort and improving deployment consistency across environments.
- Standardized observability and security practices across all microservices, expanding monitoring coverage by 3× and ensuring 100 % compliance with Fortify, Sonar, and dependency-scan requirements.

Full Stack Software Development Engineer, DevIT

General Motors **August 2021 - July 2023, Atlanta, GA**

- Innovation Owner for projects supporting global payment systems, vehicle incentives, and direct-to-consumer sales across China and Europe, impacting thousands of EV transactions monthly.
- Designed and developed 20+ microservices using Quarkus, Spring Boot, and Python Flask, delivering highly scalable REST APIs that reduced average response times from ~2s to 200–500 ms, significantly improving system integration performance across dependent platforms.
- Deployed containerized applications with Docker, Kubernetes, Helm, and Azure DevOps YAML pipelines, improving release frequency from quarterly to biweekly with minimal downtime.
- Modeled and optimized PostgreSQL schemas with Hibernate, reducing query response times by ~30% and supporting multi-region transactional consistency.
- Developed React and Angular front-end components for internal dashboards, enhancing operational visibility and reducing manual data validation time.

Software Engineer, Global Digital EV Commerce

General Motors **October 2020 - August 2021, Atlanta, GA**

- Operations Owner for GM's global EV billing & payment platform across North America, Europe, and China, maintaining ≥ 99.9% uptime and meeting regional compliance requirements.
- Developed microservices in Quarkus and Spring Boot backed with PostgreSQL, powering the full vehicle order-to-delivery lifecycle for direct-to-consumer sales.
- Containerized and deployed services with Docker, Kubernetes, Helm, and Argo, cutting deployment time from hours to minutes and improving release consistency.
- Led security compliance by integrating Fortify, BlackDuck, Aqua, and SonarQube; maintained a 100% pass rate on release readiness checks.
- Led backend integration efforts supporting React-based payment interfaces, enabling reliable real-time payment processing for thousands of concurrent transactions during launch periods.

Software Developer, Shared Development Center / Product Systems

General Motors **January 2018 - October 2020, Atlanta, GA**

- Developed enterprise Java applications with Spring Boot (v1.5 – v2.2) and Pivotal Cloud Foundry.
- Implemented TensorFlow model to detect vehicle safety incidents, improving classification accuracy ≈ 15 %.

· Built ETL pipelines with IBM Datastage (v7.5 – v11.7); automated testing with Selenium WebDriver.
· Integrated Oracle, DB2, and SQL Server databases; early experience with PostgreSQL and MongoDB.
· Managed CI/CD through Jenkins and Broadcom Cara; supported multiple engineering business systems.

Software Developer, Product Development Business Systems

General Motors **June 2014 - December 2017, Atlanta, GA**

· Provided Level 3 support for GM applications, diagnosing and resolving complex Java and database issues impacting multiple business units.
· Developed SharePoint front-end solutions that improved document management efficiency and reduced manual tracking, enhancing team collaboration across engineering groups.
· Collaborated with business stakeholders to translate requirements into actionable user stories, ensuring clear alignment between development and QA teams.
· Executed and maintained QA processes using Microsoft TFS and HP ALM, improving defect traceability and test coverage visibility across multiple project releases.

SKILLS

Technical Skills
Cloud & Infra: Azure (AKS, Functions, Traffic Manager, Blob Storage) · Kubernetes · Helm · Docker · Terraform · Oracle Cloud (self-managed Kubernetes & Terraform infrastructure projects)
Languages: Python · Java · YAML · SQL · JavaScript (React)
Data & Messaging: Event Hub / Kafka · Redis · Snowflake · PostgreSQL
CI/CD & Ops: GitHub Actions · Azure DevOps · Argo CD
Monitoring & Security: GitHub Advanced Security · FOSSA · Wiz · Sonar · Datadog · Grafana · Prometheus

EDUCATION

Master of Science in Computer Science
Georgia Institute of Technology • Atlanta, GA • 2022

Bachelor of Science in Information Technology
Minor in Computer Science • Florida State University • Tallahassee, FL • 2014

INVOLVEMENT

Club President
Rotary Club of Atlanta Metro / Rotaract Atlanta • January 2015 - Present
· Twice elected President; led community initiatives and cross-functional volunteer teams.
· Organized service projects and professional networking events across Atlanta.