

EDER MAZARIEGOS-MCCOY

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<https://www.edermazariegos.com>

SITE RELIABILITY ENGINEER | PLATFORM ARCHITECT

Enterprise Cloud Architecture | GitOps & Automation | Scalable System Design

Accomplished Site Reliability Engineer and Full-Stack Developer with extensive expertise in designing, implementing, and maintaining large-scale cloud-native systems. Proven track record of building enterprise-grade platforms with 99.999% uptime requirements, leading cross-functional teams of senior engineers, and architecting solutions focused on Distributed Systems for complex business challenges. Specializes in Kubernetes orchestration, GitOps automation, multi-agent AI systems, and high-performance computing environments. Expert in delivering innovative cloud solutions that seamlessly integrate infrastructure automation, application development, and intelligent monitoring systems while maintaining strict security and compliance standards.

SELECTED HIGHLIGHTS

- ❖ Designed globally distributed backend orchestration systems
- ❖ Implemented comprehensive CI/CD pipelines and infrastructure-as-code solutions using ArgoCD, Terraform, Crossplane, and custom automation tooling
- ❖ Developed and deployed production-ready platforms serving thousands of users with automated AWS resource provisioning and real-time monitoring
- ❖ Maintains TS/SCI clearance with demonstrated expertise in secure, compliant system design adhering to NIST RMF standards

CORE COMPETENCIES

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|--------------------------------|-------------------------------|----------------------------|
| ▪ Automation & Orchestration | ▪ GitOps & CI/CD | ▪ Multi-Cloud Platforms |
| ▪ Cloud Migration & Deployment | ▪ Container Technologies | ▪ AI Platform Architecture |
| ▪ Application Containerization | ▪ Agile Methodology | |
| ▪ Full-Stack Development | ▪ Database Design/Development | |

PROFESSIONAL EXPERIENCE

BOOZ ALLEN HAMILTON | BOSTON, MA | 2024 TO PRESENT

Lead Site Reliability Engineer

Lead enterprise-scale platform engineering initiatives for the Chief Digital and Artificial Intelligence Office (CDAO) and Intelligence Community (IC), directing API gateway modernization across multiple secured cloud environments on AWS EKS while focusing on GitOps automation, Kubernetes orchestration, security compliance, and high-availability system design.

- Designed robust automation frameworks using Terraform, HELM, ArgoCD, Tekton, and custom Python/Bash tooling, streamlining deployment processes across multiple EKS clusters.
- Architected and deployed Crossplane across multiple environments (AWS EKS and GCP GKE), creating custom compositions for automated AWS resource provisioning and management.
- Established repository standards, branching strategies, and CI/CD optimization, significantly reducing deployment errors and improving code quality.
- Developed and enforced comprehensive Kyverno policies, securing namespaces and implementing deployment governance across production environments.
- SLI/SLO/SLA Framework: Defined and implemented service reliability metrics ensuring high availability and performance standards for critical systems.
- Deployed and maintained comprehensive monitoring solutions with custom dashboards, alerting systems, and performance analytics.
- Implemented Litmus Chaos testing frameworks ensuring system resilience under adverse conditions
- Conducted extensive load testing using Locust and created comprehensive test plans and performance optimization strategies.

- Led an enterprise API gateway modernization, migrating users, APIs, and RBAC architecture from a legacy gateway to a modern API management platform across multiple secured AWS EKS environments.
- Drove container image vulnerability remediation using Anchore and Trivy scan findings, maintaining a compliance tracker and coordinating Change Requests through the security review board to whitelist vulnerabilities and promote hardened images across environments via the enterprise CI/CD pipeline.
- Deployed an AI/ML data-activation platform and stood up a unified, OpenAI-compatible LLM gateway (LiteLLM) serving models from AWS Bedrock, OpenAI, Anthropic Claude, and internal endpoints, with Databricks integration for expanded model and data access.

BLANK CUT INC. | BOSTON, MA | 2024 TO PRESENT**Founder**

Founded and lead a platform engineering company building a multi-tenant application-hosting platform and AI-driven developer tooling for a portfolio of clients.

- **Managed Hosting Platform:** Architected a multi-tenant PaaS that takes a client's Git repo from onboarding to a live, production URL. This process automates the build, database and secrets provisioning, and Kubernetes deployment process. Built on AWS EKS with an ArgoCD GitOps pipeline, Helm, External Secrets Operator, and a Fastify orchestration service that dispatches ephemeral Kubernetes worker jobs. **Multi-Agent System Research:** Implementing hierarchical multi-agent systems for complex task orchestration, integrating LLM capabilities with distributed computing environments
- **Agentic AI Automation:** Designed and shipped Claude-powered agents for the platform's deploy gate. An autonomous deploy reviewer that inspects GitOps merge requests and approves or flags risks, and an agentic fix-loop that diagnoses failing builds and proposes fixes as pull requests, both running on Anthropic's Managed Agents runtime with human-in-the-loop merge control.
- **Open-Source Tooling:** Authored and open-sourced a Kubernetes-native Model Context Protocol (MCP) server (Go) that integrates Claude with ArgoCD, GitLab, and Vault for AI-powered GitOps analysis.
- **Platform Operations:** Implemented the full production stack that includes CI/CD image builds, secrets management (SSM + KMS), Stripe-based usage billing with a compute-quota model, and observability via a first-party metrics/logging pipeline.

RED HAT | RALEIGH, NC | 2022 TO 2024**Site Reliability Engineer**

Contributed to Red Hat's enterprise open-source technical stack, developing SRE practices and tooling while architecting large-scale infrastructure solutions for global enterprise clients.

- Contributed to design and implementation of globally distributed replacement system for United Parcel Service, built on OpenShift, Ansible Automation Platform, ArgoCD, and Python microservices, achieving 99.999% uptime across multiple data centers with a team of 20 senior SREs.
- Showcased GitOps implementations using Ansible, ArgoCD, GitLab CI, and Kubernetes operators for automated infrastructure and application management.
- Built and managed public and private cloud environments, architecting highly available applications with auto-scaling, load balancing, and comprehensive monitoring.
- Designed automated solutions for containerization and development processes using Bash, Python, and Ansible, ensuring environments operated according to established SLI/SLO standards.

BOOZ ALLEN HAMILTON | WASHINGTON, DC | 2019 TO 2022**DevOps Engineer (Senior Consultant)**

Utilized advanced technical and analytical skills to deliver enterprise solutions for defense and intelligence clients, focusing on cloud modernization, containerization, and secure application development within strict compliance frameworks.

- Architected and developed cost-efficient containerized applications using Docker, Kubernetes (k3s and k8s), Rancher, Konvoy, HELM, and Swarm technologies.
- Led cloud infrastructure modernization initiatives implementing advanced automation, CI/CD pipelines, and development process enhancements.
- Supported Shared Security Services (SSS), an Air Force cloud-based environment providing advanced security capabilities while minimizing application development lifecycle and operational risk.
- Led Kubernetes migration for a unified enterprise data environment, containerizing applications in HA clusters and designing the AWS-hosted architecture, including a medallion-architecture ETL pipeline (Bronze/Silver/Gold zones) on an S3 data lake that transforms unstructured data into structured, query-ready data via Apache Airflow.
- Supported an enterprise knowledge management application enabling efficient search and retrieval across large-volume data repositories (terabyte-scale document processing).

Kubernetes Claude MCP Server (Open Source)

Authored and published an open-source Model Context Protocol (MCP) server, written in Go, that integrates Claude AI with Kubernetes, ArgoCD, GitLab, and Vault to enable AI-powered analysis and troubleshooting of GitOps workflows. Exposes a REST API for resource analysis, troubleshooting, and commit-level correlation across systems, and is distributed as a versioned Docker image with a Helm chart for in-cluster deployment under an MIT license.

Epsilon – AI-Powered Multi-Cloud IaC Assistant

Built a full-stack, AI-powered infrastructure-as-code platform that automates multi-cloud provisioning and failover across AWS and GCP through natural language. Uses Claude to analyze and manipulate Terraform and Crossplane manifests, opening pull requests behind a human-in-the-loop approval gate with GitOps-based deployment. Built on Node.js/Fastify, PostgreSQL, and a React frontend, with cross-cloud workload migration, private-repo GitOps integration, and real-time monitoring.

UPS Global Backend Orchestration System

Collaborated in architectural design and implementation of a critical replacement system for UPS's global backend orchestration platform, requiring 99.999% uptime across worldwide data centers. Built on multi-cluster EKS deployment with ArgoCD-based GitOps automation, Ansible Automation Platform for orchestration, and Python-based microservices architecture with event-driven communication, ensuring 24/7 global availability with comprehensive disaster recovery capabilities.

Delta Airlines Containerization Initiative

Developed automation tooling for containerizing hundreds of legacy microservices with standardized Tekton-based CI/CD pipelines in strictly controlled enterprise environments. Successfully containerized 300+ microservices with minimal downtime while implementing least-privileged security models and standardizing deployment processes across diverse application portfolios in high-security enterprise settings.

EDUCATION

University of Central Florida, Orlando, FL: Fall 2018
Bachelor of Science – Information Technology | Minor in Computer Science

Certifications:

AWS Certified Developer – Associate
AWS Certified Solutions Architect – Associate
Certified Kubernetes Administrator
Security Clearance: TS/SCI

ADDITIONAL CREDENTIALS

TECHNICAL SKILLS	AWS, GCP, Kubernetes (EKS, GKE, OpenShift), Docker, Helm, Crossplane, Rancher, ArgoCD, Tekton, GitLab CI, Jenkins, Terraform, Ansible, Go, Python, JavaScript/TypeScript, Bash, Node.js, React, PostgreSQL, Redis, Kafka, Apache Airflow, RabbitMQ, Grafana, Prometheus, ELK Stack, Kyverno, HashiCorp Vault/Consul, RBAC, NIST RMF, MLflow, KServe, TensorFlow, PyTorch, Model Context Protocol, Claude Agent SDK, Claude Code, Augment Code, Sourcegraph, multi-agent system design.
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