EDER MAZARIEGOS-MCCOY

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SITE RELIABILITY ENGINEER | FULL-STACK WEB DEVELOPER | 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

▪ 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

Contributed to the enterprise-scale platform engineering initiatives for the Chief Digital Artificial Intelligence Office (CDAO) and Intelligence Community (IC), focusing on GitOps automation, Kubernetes orchestration, 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

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

Founder & Chief Technology Officer

Leading a digital solutions company focused on AI automation and cloud-native platform development for diverse client portfolios. Spearheading research and development in cutting-edge technologies including hierarchical multi-agent systems, generative AI solutions, and high-performance computing environments.

- Kubernetes AI Agent Platform: Architecting and developing an advanced platform enabling users to deploy, manage, and interact with AI agents within EKS clusters through conversational interfaces
- Multi-Agent System Research: Implementing hierarchical multi-agent systems for complex task orchestration, integrating LLM capabilities with distributed computing environments
- DropASite Platform: Developed scalable static website deployment platform with automated AWS infrastructure provisioning, serving users with S3, CloudFront, and Lambda@Edge integration

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 unified enterprise data environment, containerizing applications in HA clusters and designing AWS-hosted architecture for NC3 Enterprise
- Supported Army-affiliated application enabling efficient search and retrieval across large-volume data repositories (terabyte-scale document processing) for the Knowledge Management System (KMS) platform

PROJECTS

KubeAgent - Kubernetes-Native AI Agent Platform *(In Development)*

Developing an advanced Kubernetes-native platform that deploys ephemeral Claude 4-powered AI agents on EKS clusters for intelligent infrastructure management. The platform features a Go microservice control plane with JWT authentication, Next.js frontend with real-time WebSocket communication, and Python-based FastAPI agents with pre-installed CLI tools (kubectl, helm, aws, git, argocd, flux). Implements multi-tenant security with namespace-based isolation, encrypted credential storage, and RBAC with scoped permissions for secure external infrastructure interaction.

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.

AWS/GCP Multi-Cloud Terraform Provisioner
Built comprehensive microservices platform for automated cloud infrastructure provisioning with cross-cloud failover capabilities across AWS and GCP environments. The platform provides multi-cloud infrastructure automation using Terraform with parameterized templates, workload migration between cloud providers, GitOps integration with private repository support, and real-time monitoring with comprehensive logging and operational insights using Node.js, Fastify, PostgreSQL, and React frontend technologies.

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.

KMS (Knowledge Management System)
Architected and developed enterprise document management system handling terabyte-scale data volumes with intelligent categorization and machine learning-powered search capabilities. The system processes multi-format documents (PDF, images, office documents, logs) with machine learning-powered categorization, metadata extraction, OCR integration, and scalable real-time data ingest pipelines for efficient search and retrieval across large document repositories.

EDUCATION

University of Central Florida, Orlando, FL: Fall 2018
Bachelor of Science – Information Technology

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

ADDITIONAL CREDENTIALS

TECHNICAL SKILLS	AWS (EKS, S3, CloudFront, Lambda, Route53, ACM), GCP (GKE, Artifact Registry), Kubernetes (EKS, GKE, OpenShift), Docker (EE, UCP, Swarm), Helm, Crossplane, Rancher, Konvoy, ArgoCD, Tekton, GitLab CI, Jenkins, Terraform, Ansible Automation Platform, Go, Python, JavaScript/TypeScript, Bash, Node.js, React, Angular, PostgreSQL, Redis, Elasticsearch, MongoDB, Kafka, Apache Airflow, RabbitMQ, Grafana Enterprise, Prometheus, ELK Stack, Jaeger, Custom Dashboards, Kyverno, HashiCorp Vault/Consul, RBAC, Network Policies, NIST RMF, LLM Integration, Model Context Protocol, MLflow, KServe, TensorFlow, PyTorch

DETAILED REFERENCES AVAILABLE ON REQUEST