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PROFESSIONAL SUMMARY

Cloud & DevOps Engineer with 10+ years of IT infrastructure, networking, and security experience, now focused on building AWS-based solutions using Infrastructure as Code, containers, and serverless architectures. Hands-on expertise with Terraform, Amazon EKS, AWS Lambda, API Gateway, Cognito, AWS Backup, and CI/CD pipelines. AWS Certified Developer – Associate with proven ability to design, implement, and operate production-ready cloud environments while improving reliability, security, and automation. Strong track record supporting mission-critical systems in enterprise and military environments.

TECHNICAL SKILLS

Cloud Platforms & Services

AWS (S3, EC2, EKS, Lambda, API Gateway, Cognito, DynamoDB, AWS Backup, Glue, Athena, CloudFront, Route 53, ACM, EventBridge, IAM, CloudWatch)

Infrastructure as Code

Terraform (remote state, modules, VPC networking, EC2), AWS CDK (Python), CloudFormation

Containers & Orchestration

Docker, Amazon EKS, Kubernetes (Deployments, Services, Ingress, StatefulSets, Secrets), StorageClass (EBS gp3), Amazon ECR

Serverless & APIs

AWS Lambda (Python, Node.js), API Gateway (REST), Amazon Cognito (user pools, authentication), DynamoDB, S3 static hosting

CI/CD & DevOps

Git, GitHub, GitHub Actions (linting, testing, CDK synth validation), CloudWatch monitoring and logging

Networking & Security

TCP/IP, VPC design, subnets, routing tables, NAT/Internet Gateways, VPNs (GET-VPN, DMVPN, Site-to-Site), firewalls (Palo Alto, Cisco ASA), security groups, IAM policies, RBAC, security hardening

Programming & Scripting

Python, Bash, FastAPI, JavaScript/TypeScript, React (Vite), SQL/MySQL, PySpark

Leadership & Communication

Cross-team coordination, technical training and documentation, leading small teams in enterprise and military environments

CERTIFICATIONS

- AWS Certified Developer – Associate (2026)
 - CompTIA Advanced Security Practitioner (CASP)
 - Cisco Certified Network Professional (CCNP)
 - Cisco Certified Network Associate (CCNA)
 - CompTIA Security+
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AWS CLOUD PROJECTS

Serverless Data Pipeline – S3, Glue, Athena, CDK, GitHub Actions

- Built fully serverless analytics pipeline with three S3 buckets (raw, processed, Athena results), using AWS Glue crawlers and databases to automatically catalog CSV data and discover schemas
- Developed Glue ETL PySpark job to cast string fields to proper types, compute derived metrics (e.g., total price), and write optimized Parquet data partitioned by order date for query performance
- Defined entire infrastructure (Glue IAM roles, database, crawler, ETL job) as code using AWS CDK in Python, enabling repeatable, version-controlled deployments
- Implemented GitHub Actions CI workflow to lint Glue scripts, run tests, and validate CDK stacks with `cdk synth` on every push, catching errors before deployment

EKS Microservices – FastAPI Backend, MySQL on Kubernetes

- Deployed three-tier microservices application on Amazon EKS with NGINX static frontend, containerized FastAPI backend, and MySQL 8.0 database running as a StatefulSet
- Built and pushed Docker images to Amazon ECR, exposing RESTful health, info, and echo APIs for integration testing and monitoring
- Implemented persistent storage for MySQL using EBS CSI driver with custom gp3 StorageClass and per-pod PersistentVolumeClaims for durable state across pod restarts

- Secured database credentials using Kubernetes Secrets and wired multi-tier application with Kubernetes Service DNS, following cloud-native best practices for stateful workloads

Infrastructure as Code – Terraform VPC + EC2 (Modular)

- Designed production-grade VPC using Terraform modules with /16 CIDR block, two public and two private subnets across multiple Availability Zones, Internet Gateway, NAT Gateway, and route tables
- Implemented secure EC2 module launching Amazon Linux instance in public subnet with hardened security group (SSH restricted to single IP, HTTP open to internet) and automated Nginx installation via user data
- Configured remote Terraform state in S3 with DynamoDB state locking to prevent concurrent modifications and enable team collaboration
- Created architecture diagram and parameterized variables (region, CIDRs, instance type, key pair) to make infrastructure stack reusable across dev, staging, and production environments

Serverless To-Do Application – Cognito, API Gateway, Lambda, DynamoDB

- Built secure serverless web application with user authentication via Amazon Cognito, RESTful API on API Gateway, and AWS Lambda functions for CRUD operations on DynamoDB
- Hosted static frontend in private S3 bucket fronted by CloudFront with Origin Access Control (OAC), enforcing least-privilege access and HTTPS encryption throughout
- Applied strict IAM policies for Lambda execution roles, DynamoDB table permissions, and S3 access, plus JWT-protected API endpoints with proper CORS and token validation
- Documented common serverless pitfalls (Lambda handler mappings, CORS preflight, JSON parsing, token audience/issuer) and solutions to accelerate future serverless deployments

AWS Disaster Recovery Plan – AWS Backup, Lambda, EventBridge

- Implemented tag-based disaster recovery solution using AWS Backup, automatically protecting workloads tagged Backup=Yes with daily backup plan and 30-day retention in dedicated vault (DRVault)
- Wrote Terraform configurations to provision backup vaults, backup plans, resource selections, IAM roles, and Lambda functions in single AWS region with remote state management
- Developed dr-verify-backup Lambda function triggered by EventBridge schedule to call AWS Backup APIs, verify recent job completion status, and log pass/fail health metrics to CloudWatch Logs

- Enabled optional `dr-backup-trigger` Lambda for on-demand backup jobs, providing operators with simple, automated DR workflow for ad-hoc recovery point creation

Texas Shiners Website – Serverless Marketing & E-Commerce Foundation

- Created production-ready, mobile-responsive React (Vite) single-page application for fishing lure business, hosted on S3 and fronted by CloudFront for global performance and HTTPS delivery
 - Managed all infrastructure (S3 buckets, CloudFront distribution, Route 53 hosted zone, ACM certificate, IAM roles) as code using Terraform with remote S3 backend and state locking
 - Built reusable `static_site` Terraform module provisioning private S3 bucket, CloudFront distribution with Origin Access Control, DNS alias records, and ready-to-use site URL output
 - Designed extensible architecture for future e-commerce capabilities, planning API Gateway + Lambda backends and DynamoDB tables for payment processing and customer reviews
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PROFESSIONAL EXPERIENCE

Senior VTC / Network Engineer – SAIC (USACE) | Houston, TX | Jun 2022 – Present

- Lead design, installation, and maintenance of video teleconferencing and network systems across multiple USACE sites, ensuring 99.5% uptime for mission-critical communications
- Collaborate with network engineering teams to integrate VTC infrastructure into existing LAN/WAN environments, including routing, QoS policies, VLAN configuration, and security controls
- Perform root-cause analysis and remediation for complex VTC and network incidents, reducing average resolution time by 35% through systematic troubleshooting methodologies
- Conduct training sessions for 200+ end users and junior technicians on system usage, troubleshooting procedures, and best practices, improving user adoption and reducing support tickets
- Execute regular system maintenance, security updates, and performance optimization to maintain service reliability and security compliance

Security Analyst II – Highroam LLC (LNG Houston) | Houston, TX | May 2021 – Jun 2022

- Designed and integrated cybersecurity controls and architectures for systems and networks across 5 geographically dispersed data centers, identifying security gaps and driving risk mitigation initiatives
- Configured and managed enterprise firewalls (Palo Alto Networks, Cisco ASA) with advanced security policies, active/standby failover, interface redundancy, intrusion detection, and deep packet inspection
- Built and documented encrypted VPN solutions (GET-VPN, EZVPN, DMVPN, LAN-to-LAN, GRE tunnels) for secure remote connectivity and site-to-site communications
- Implemented Cisco Secure ACS for authentication proxy and role-based CLI access control, enhancing administrative security and audit capabilities
- Created comprehensive documentation for security system installation, integration, and optimization procedures across multiple data centers

Network Engineer – Vectrus, Afghanistan | Mar 2019 – May 2021

- Administered Cisco Unified Communications Manager (CUCM) for enterprise phone systems supporting 1,000+ users, including gateway configurations, dial plans, and routing protocols
- Designed IP addressing schemes using subnetting for efficient network segmentation, scalability, and security isolation in deployed operational environment
- Implemented Cisco switch stacking, performed password recovery procedures, and executed IOS upgrades to maintain current security baselines and feature sets
- Managed team of 10 employees as active Site Point of Contact (POC) for Shorab location, coordinating projects with military stakeholders to meet mission requirements
- Monitored LAN/WAN availability and reliability, achieving 99.8% network uptime through proactive monitoring and rapid incident response
- Served as Network Administrator Subject Matter Expert (SME) for Area of Operations (AOO), providing technical guidance and escalation support

Network Administrator Lead – Vectrus, Turkey | Aug 2017 – Dec 2018

- Led build-out of imaging servers and standardized imaging of 200+ workstations, maintaining 95% first-call resolution rate for incident tickets in compliance with SLA guidelines
- Authored Standard Operating Procedures (SOPs) and delivered technical training sessions combining tooling expertise and customer service skills to improve support team capabilities
- Implemented automated router and switch configuration management tools, enabling consistent, large-scale configuration changes across 50+ network devices
- Deployed network monitoring solutions to proactively identify and resolve performance issues before user impact

NCOIC Network Administrator – Army - Erbil, Iraq | Sep 2015 – Jun 2016

- Designed and configured networks for Joint Special Operations Command (JSOC), including workflow analysis, systems access control, and stringent security requirements for classified environments
- Administered routers and switches using web-based management applications to configure interfaces, establish routing protocols, and maintain network connectivity
- Documented network architecture, traffic flow patterns, and firewall rule sets to maintain secure and resilient operational posture in high-security environment

IT Specialist – Army | May 2011 – May 2017

- Coordinated installation and maintenance of hardware systems, routers, and switch interfaces to support secure military communications infrastructure
- Monitored secure networks for performance issues and routing correctness, ensuring reliable delivery of mission-critical traffic
- Provided technical support and mentorship to diverse IT staff to meet evolving organizational support requirements