

Teddy Abera Danamo

DevOps & Platform Engineer · Government & Sovereign Infrastructure

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PROFESSIONAL SUMMARY

Senior DevOps and Platform Engineer with 4+ years operating production-grade infrastructure across cloud-native, hybrid, and edge environments. Proven track record deploying enterprise Kubernetes (RKE2, K3s, EKS), serverless AWS architectures with zero long-lived credentials, and distributed multi-cloud platforms with SR-MPLS networking. Co-validated 23 of 28 claims on a non-provisional utility patent for distributed AI infrastructure. Currently operating three concurrent senior engagements across US (NDIT Solutions), distributed AI (NetrionX), and Ethiopian government digital transformation (OpenG2P).

CORE COMPETENCIES

- Kubernetes (RKE2, K3s, EKS, Rancher)
- AWS (Lambda, ECR, RDS, SQS, S3, EventBridge)
- Service Mesh (Istio mTLS, OVS, OpenFlow)
- GPU Infrastructure (NVIDIA RuntimeClass, vLLM)
- Identity (Keycloak, Teleport, Vault, JWT, OIDC)
- Multi-Agent AI Systems (n8n, Groq, Kimi K2)
- Infrastructure as Code (Terraform, Terragrunt, Ansible)
- CI/CD (GitHub Actions OIDC, GitLab, Jenkins)
- SR-MPLS, BGP, IS-IS, SDN, FRRouting, ONOS
- Observability (Prometheus, Grafana, OTel, ELK)
- Hybrid & On-Prem (Proxmox, XCP-ng, WireGuard)
- PostgreSQL (PostGIS), MySQL, MongoDB, Redis

PROFESSIONAL EXPERIENCE

DevOps Engineer (Remote Contractor) · NDIT Solutions

Mar 2026 – Present

East Rutherford, New Jersey, USA · Remote from Addis Ababa

- ▶ **BugBot (Multi-Agent AI Code Reviewer)** — Architected and deployed self-hosted multi-agent code review system replacing SaaS tools (CodeRabbit, Greptile, Cursor); 5 specialized agents in parallel via n8n + Groq + Kimi K2; reviews 64-file MR in 39 seconds; ~\$50/month cost vs \$5K-15K/month SaaS equivalent
- ▶ **Umoja Booking CI/CD** — Designed dual GitLab CI/CD pipelines for 10-service Docker Compose platform; 6-stage main pipeline with Trivy vulnerability scanning, supply-chain auditing, parallel Docker builds; 4-stage AI service variant; self-hosted GitLab runners with isolated execution
- ▶ **Cross-Client Standardization** — Standardizing DevOps practices, security baselines, and observability patterns across multiple US client engagements for SMBs in regulated industries

Stack: GitLab CI · n8n · Groq · Kimi K2 · Llama 3.3 70B · Trivy · Docker Compose · Self-hosted runners

Platform Engineer (Project-Based) · NetrionX Inc.

Nov 2025 – Present

Distributed AI Infrastructure Orchestration · Remote

- ▶ **Distributed Platform Architecture** — Architected 5-node distributed platform spanning AWS, GCP, and physical edge (Jetson Nano), connected via WireGuard/VXLAN mesh overlay achieving 11.6ms average RTT with 0.35ms jitter across all direct paths
- ▶ **SR-MPLS Transport Fabric** — Built FRRouting transport with IS-IS adjacency and BGP AS65001, assigning segment routing labels 16001-16004 for deterministic path selection and traffic engineering
- ▶ **ONOS SDN Control** — Configured ONOS controller with OpenFlow 1.3 managing 4 virtual devices and 12 bidirectional links, implementing intent-based network control with programmatic flow rule installation
- ▶ **AI Decision Engine** — Integrated autonomous DQN + LSTM placement engine executing 20,820+ decision cycles with 1,015+ autonomous placement actions at 2ms latency and 84.5% average confidence

- ▶ **GPU-Aware Kubernetes** — Deployed K3s cluster with NVIDIA RuntimeClass enabling dynamic workload placement across heterogeneous GPU tiers (T4 16GB / L4 24GB / Jetson Nano) with PyTorch / ONNX-GPU / TensorRT FP16 inference at 150ms / 90ms / 24ms respectively
- ▶ **Patent Validation** — Co-validated 23 of 28 claims on non-provisional utility patent covering DDEF platform architecture, distributed orchestrator, AI placement engine, and SR-MPLS fabric integration

Stack: Python · ONOS SDN · OpenFlow 1.3 · FRRouting · SR-MPLS · BGP · IS-IS · WireGuard · VXLAN · K3s · NVIDIA RuntimeClass · PyTorch · ONNX · TensorRT · Prometheus · Grafana

DevOps Engineer · [OpenG2P Ethiopia](#)

Mid-2025 – Present

Government Digital Transformation · 3 Ministries (ATI, MoWSA, EDRMC)

- ▶ **Multi-Ministry Infrastructure** — Leading DevOps implementation across Agricultural Transformation Institute (ATI), Ministry of Women and Social Affairs (MoWSA), and Ethiopian Disaster Risk Management Commission (EDRMC); deployed production RKE2 clusters with Rancher, Istio service mesh with mTLS, and Keycloak SSO across all entities
- ▶ **Hybrid Architecture** — Architected dual-infrastructure deployments across Ethio Telecom cloud and on-premises environments with Hardware RAID 1+0, XCP-ng hypervisor, and WireGuard site-to-site VPN tunnels
- ▶ **National-Scale Data Migration** — Implementing large-scale beneficiary data migration from ODK to OpenG2P for national social protection programs; supporting Fayda National ID-enabled G2P systems serving millions of citizens

Stack: RKE2 · Rancher · Istio · Keycloak · XCP-ng · WireGuard · OpenG2P · Helm · Hardware RAID 1+0

Backend / DevOps Engineer · [Centriweb](#)

Jun 2025 – Dec 2025

Auckland, New Zealand · Remote from Addis Ababa

- ▶ **International Client Engagements** — Delivered backend and DevOps solutions for scalable cloud-based applications serving international clients
- ▶ **Infrastructure Automation** — Implemented Terraform-based infrastructure automation for consistent, auditable, repeatable deployments across multiple client environments
- ▶ **Pipeline Optimization** — Streamlined CI/CD pipelines and deployment strategies, accelerating release cycles while monitoring cloud resources for performance, reliability, and cost-efficiency

Backend & DevOps Engineer · [WeTruck](#)

Jan 2025 – Apr 2025

Cloud-Native Serverless Logistics Platform · Remote

- ▶ **Serverless Architecture** — Designed AWS Lambda (Python 3.12) serving REST APIs via FastAPI + Mangum; handled synchronous HTTP and asynchronous job processing across dev/prod environments with containerized deployments via ECR and semantic version tagging
- ▶ **Zero-Credential CI/CD** — Built end-to-end GitHub Actions pipeline with OIDC federation to AWS (zero long-lived credentials); automated testing, Docker build/push to ECR, Lambda deployment, and post-deploy migration triggers
- ▶ **Geospatial Data Layer** — Managed PostgreSQL (RDS) with PostGIS for geospatial queries (SRID 4326), SQLAlchemy 2.0 connection pooling, and Alembic migrations with PostgreSQL advisory locking to prevent concurrent races
- ▶ **Async Processing** — Implemented SQS-driven async job processing with batch item failure reporting, configurable visibility timeouts, and 11+ job types (email, GPS tracking, payment fulfillment, shipment dispatch)
- ▶ **Distributed Tracing** — Integrated OpenTelemetry with OTLP HTTP exporter, AWS X-Ray propagation, and auto-instrumentation across FastAPI, PostgreSQL, Botocore, SQS, and HTTP clients
- ▶ **Security** — Implemented JWT (HS256) auth, role-based access control, security headers middleware (HSTS, CSP, X-Frame-Options), and IAM OIDC federation for GitHub Actions

Stack: Python · FastAPI · AWS Lambda · ECR · RDS PostgreSQL · PostGIS · SQS · S3 · GitHub Actions · OIDC · OpenTelemetry · Docker · JWT

Senior DevOps Engineer (Cloud & Platform Team) · [Exponent.ch](#)

Apr 2025 – Jun 2025

Switzerland · Remote Contract

- ▶ **GPU AI/ML Infrastructure** — Deployed NVIDIA GPU-enabled RKE2 Kubernetes clusters supporting n8n, Langfuse LLM observability, LibreChat, and ClickHouse with GPU resource allocation, monitoring, and driver management

- ▶ **IaC & GitOps** — Provisioned RKE2 clusters with Terraform/Terragrunt adhering to GitOps and DRY principles; multi-environment Helm shared-stacks across 5+ environments
- ▶ **Observability & Zero-Trust** — Designed full-stack observability with Prometheus + Grafana + Mimir; integrated Teleport for identity-aware Kubernetes access; automated secret injection via Lade and 1Password

Stack: RKE2 · Terraform · Terragrunt · Helm · Teleport · Prometheus · Grafana · Mimir · 1Password · NVIDIA GPU

DevOps Engineer · Atlas Computer Technology

Feb 2023 – Jun 2025

Addis Ababa, Ethiopia · Banking Infrastructure (Siinqee, Hijra, Wegagen)

- ▶ **Banking Containerization** — Deployed Docker and Kubernetes clusters with resource limits, HPA, and load balancing for mobile banking, USSD, and REST microservices on WildFly and Nginx
- ▶ **CI/CD for Java Banking** — Implemented Jenkins pipelines automating the full lifecycle for Maven-based Java applications: builds, unit/integration tests, and environment-specific deployment stages; reduced deploys from 4 hours to 15 minutes
- ▶ **Hybrid Infrastructure** — Managed Proxmox clusters for HA virtualization and AWS infrastructure (EC2, VPC, IAM); configured ActiveMQ message brokering and MySQL tuning for banking workloads; achieved ~35% cost reduction via hybrid cloud optimization
- ▶ **Observability & Logging** — Integrated ELK stack for centralized logging at 10TB+/day, Zabbix/Prometheus/Grafana for resource monitoring across WildFly, MySQL, Nginx, Keycloak, and Kubernetes clusters
- ▶ **Security & HA** — Implemented Keycloak SSO, Heartbeat HA failover, and comprehensive security policies across production banking environments; sustained 99.95% uptime

Stack: Docker · Kubernetes · Jenkins · Proxmox · AWS · Nginx · WildFly · ActiveMQ · MySQL · PostgreSQL · ELK · Zabbix · Prometheus · Grafana · Keycloak

Junior DevOps Engineer · Atlas Computer Technology

Sep 2021 – Jan 2023

Addis Ababa, Ethiopia

- ▶ **Virtualization Operations** — Managed on-premise Proxmox infrastructure creating and scaling 50+ VMs for application servers, web servers, and databases in production environments
- ▶ **UAT & Production Deployment** — Deployed and tested USSD and mobile banking solutions in UAT with 100% functional compliance
- ▶ **Monitoring Foundation** — Implemented security policies and monitoring with Zabbix, Grafana, and ELK; collaborated with development teams to reduce production issues by 70% through robust testing

SELECTED PROJECTS

BugBot (NDIT Solutions) — Self-hosted multi-agent AI code review system; 5 agents (security, performance, quality, architecture, testing) in parallel via n8n + Groq + Kimi K2 + Llama 3.3 70B; 39s for 64-file MR; ~\$50/month vs \$5K-15K SaaS

NetrionX DDEF Platform — Distributed AI orchestration with patent-validated architecture (23/28 claims); 5-node multi-cloud (AWS + GCP + Edge); SR-MPLS fabric with ONOS SDN control

OpenG2P Ethiopia (3 Ministries) — National-scale digital transformation infrastructure for ATI, MoWSA, EDRMC; hybrid Ethio Telecom + on-prem; RKE2 + Istio + Keycloak; Fayda National ID integration

WeTruck Serverless Logistics — Full-serverless AWS (Lambda + FastAPI + PostGIS); GitHub Actions OIDC with zero long-lived credentials; OpenTelemetry distributed tracing; 11+ async SQS job types

Multi-Bank Mobile Banking — Production banking infrastructure for Siinqee, Hijra, and Wegagen banks; Kubernetes + Jenkins + ActiveMQ + WildFly; 99.95% uptime; HA Heartbeat failover

Ministry of Revenue ITAS — Clustered Kubernetes platform for Ethiopia's Integrated Tax Administration System; Ansible config management, GitLab CI, HashiCorp Vault, Keycloak SSO, ELK + Superset reporting

EDUCATION

Bachelor of Science in Computer Science · Admas University

2018 – 2022

Addis Ababa, Ethiopia

CERTIFICATIONS

LinkedIn Learning (2025): Advanced Kubernetes · Advanced Terraform · Build a CI/CD Pipeline · DevOps Foundations: Site Reliability Engineering · Running Kubernetes on AWS (EKS)
Linux Fundamentals Bootcamp · NGINX Web Server from Scratch

LANGUAGES

English (fluent business and technical) · Amharic (native) · French (A1) · Spanish (A1)

REFERENCES

Available on request — Anteneh Temesgen (Senior Software Engineer), Biruk Tesfaw (Senior Software Developer), Muluken Solomon (Senior Software Engineer)

Portfolio: tedion.github.io/teddy-portfolio · Last updated: May 2026