

Bertrand Mbanwi

Cloud platforms. Secure delivery. Applied AI.

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github.com/bertrandmbanwi

<https://bertrandmbanwi.dev>

DevOps and cloud security engineer with experience across AWS, Azure, infrastructure automation, Kubernetes, and secure software delivery. Independent projects extend that work into AI agents and developer tooling.

Career history

DevOps Engineer

CaeliCode Solutions | Oct 2025 - Present

Migrated delivery infrastructure to Azure AKS and restored access across source control, container builds, and database services.

- Delivered a GitLab migration from on-premises Kubernetes to Azure AKS, including test-environment validation and cutover preparation.
- Recovered GitLab repository access from backup and restored Keycloak sign-in, validating recovery through login and repository-clone checks.
- Restored a container-image build pipeline by diagnosing registry access and applying scoped read permissions.
- Renewed PostgreSQL and PgBouncer certificates, resolved certificate-chain trust issues, and documented the renewal and verification procedures.
- Built external availability monitoring for Jira and Confluence with Blackbox Exporter and Alertmanager.
- Performed staged Linux kernel updates with service checks and database-team validation; automated patching with Rundeck.

DevSecOps Engineer · Contract

Mechanicode | Nov 2024 - Oct 2025

Introduced container delivery and automated security checks for a CDC government contract.

- Supported Operations & Maintenance with infrastructure automation and DevSecOps pipeline ownership.
- Containerized applications on Amazon EKS and introduced Argo CD deployment workflows.
- Integrated Trivy, SonarQube, Snyk, and OWASP ZAP into Jenkins and GitHub Actions pipelines.

DevOps Engineer · Federal Subcontract

CaeliCode Solutions | Apr 2023 - Nov 2024

Automated Azure application delivery for a federal subcontract supporting GSA TOTAL-BIMS.

- Integrated Azure Key Vault and Fortify scanning into GitHub Actions.
- Built containerized environments with Docker and AKS, and managed Terraform changes through Atlantis.
- Automated REST API deployment to Azure API Management using a build-once, deploy-many approach.

DevSecOps Engineer

CaeliCode Solutions | Jun 2019 - Mar 2023

Built repeatable infrastructure and automated security operations for Azure and Kubernetes.

- Built infrastructure frameworks with Terraform and ARM templates.
- Operated AKS clusters with Helm deployments, RBAC, and network segmentation.
- Developed Python and Bash automation for compliance reporting, vulnerability tracking, and drift detection.

Cloud Security Engineer

CaeliCode Solutions | Dec 2017 - May 2019

Built AWS infrastructure with automated provisioning, access controls, monitoring, and recovery procedures.

- Designed AWS infrastructure using VPC, EC2, S3, and RDS.
- Automated deployment with CloudFormation and Ansible, with IAM and AWS Config controls.
- Built centralized CloudWatch and CloudTrail monitoring, backup strategies, and recovery procedures.

Cloud Infrastructure Engineer · Internship

MTN Cameroon | Jun 2017 - Nov 2017

Supported AWS infrastructure operations, troubleshooting, and security patching.

- Worked with AWS infrastructure, monitoring, access controls, and CloudFormation automation.
- Supported infrastructure troubleshooting and security patching.

Selected independent projects

J.A.R.V.I.S.

A personal AI assistant that connects conversation to tools, browser actions, and a native macOS interface.

- Python and FastAPI server with WebSocket delivery to web, extension, and desktop clients
- AI agents coordinate specialized tasks with cloud model tiers and a local Ollama option

Case study: <https://bertrandmbanwi.dev/work/jarvis>

Source: github.com/bertrandmbanwi/Jarvis

Ephemeral Azure Platform

A complete cloud lifecycle: provision an AKS platform, verify it independently, preserve evidence, then tear it down.

- Ordered Terraform stacks with isolated state
- GitHub OIDC authentication without stored cloud credentials

Case study: <https://bertrandmbanwi.dev/work/azure>

Source: github.com/bertrandmbanwi/terraform-azure-platform

Actions Runner Control Plane

An operational view of self-hosted runners, repository policy, onboarding, and audit evidence.

- Webhook ingestion for workflow jobs, runs, and repositories
- Runner heartbeat agent and server-sent dashboard updates

Case study: <https://bertrandmbanwi.dev/work/runner>

Source: github.com/bertrandmbanwi/actions-runner-control-plane

Education & credentials

B.S. Computer Science

AWS DevOps Engineer - Professional | Azure Developer Associate

Listed on the professional profile. Issuer verification and validity dates have not been supplied.

Exported 2026-09-06. Career history updated 2026-09-05. Independent projects are separate from employer work. Visit the portfolio for current repository activity.