

Khalil Bouazizi

Junior Cloud & DevOps Engineer

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Summary

Junior Cloud & DevOps Engineer (Software Engineering degree, ESPRIT 2026) with 3 DevOps/Cloud internships, including a real-world GKE→OKE migration on GCP and OCI. Hands-on with Linux, Kubernetes, Docker, Terraform, Ansible, CI/CD (GitLab CI, Jenkins, ArgoCD/GitOps) and observability (Prometheus, Grafana, Loki, CloudWatch) across AWS, GCP, Azure and OCI. HashiCorp Terraform Associate certified; AWS, Azure and OCI Foundations certified. Based in Tunis, open to remote work and international relocation.

Technical Skills

Cloud: AWS (EC2, S3, RDS, IAM, VPC, CloudWatch, CloudFront, SQS, SNS, Lambda, API Gateway, Step Functions, DynamoDB), GCP (GKE, GCS), Azure, OCI (OKE, Object Storage), OpenStack | **IaC & Configuration:** Terraform, Ansible, Helm | **Containers & Orchestration:** Docker, Kubernetes, ArgoCD (GitOps), Velero | **CI/CD & Version Control:** Git, GitLab CI/CD, Jenkins | **Observability:** Prometheus, Grafana, Loki, Promtail, AWS CloudWatch | **DevSecOps:** Trivy, SonarQube, Checkov | **OS & Scripting:** Linux, Bash, Python | **Databases:** PostgreSQL, MySQL, MongoDB | **Development:** Java/Spring Boot, Flask, Angular, REST APIs

Professional Experience

Cloud Migration & Infrastructure Intern (Final-Year Internship), Looyas 02/2026 – 08/2026 | Tunis, Tunisia

- **Designed and built** a Unified Migration & Deployment Engine (Python, Bash, Terraform) automating GCP→OCI workload migration, handling **up to 20 Kubernetes namespaces and 50 object storage buckets** per migration.
- **Orchestrated** Kubernetes workload migration from **GKE to OKE** using **Velero** backup/restore, replacing manual, error-prone steps with a **repeatable automated workflow**.
- **Automated** object storage synchronization between **GCS and OCI Object Storage** with rclone and cloud CLIs, including post-transfer integrity checks.
- **Implemented** rollback strategies and validation pipelines, enabling **safe, repeatable migrations with zero data loss**.
- **Wrote** cloud-agnostic Terraform modules to provision target infrastructure on **GCP and OCI**.

Technologies: Terraform, GCP (Migrate, GKE, GCS), OCI (Cloud Migrations, OKE, Object Storage), Velero, rclone, Bash, Python

DevOps Intern (Cloud & ML Optimization), ESPRIT 07/2025 – 09/2025 | Tunis, Tunisia

- Designed and implemented a **multi-cloud infrastructure** across AWS, Azure and DigitalOcean using **Terraform**, fully automated through GitLab CI/CD.
- Deployed a secure PostgreSQL RDS database behind a Bastion Host, with Terraform state stored remotely on **Amazon S3**.
- Automated Kubernetes cluster management with **Ansible**, including auto-scaling (HPA/VPA) and self-healing.
- Set up centralized monitoring and logging with Prometheus, Loki and Promtail, and standardized deployments with Helm charts.
- Trained an ML model recommending optimal cluster configuration per application, cutting over-provisioned CPU requests by **~20%** on test workloads.

Technologies: Docker, Kubernetes, Helm, Ansible, Terraform, GitLab CI/CD, AWS (IAM, EC2, RDS, S3, VPC), Azure, DigitalOcean, Prometheus, Loki, Promtail, Python, Scikit-learn

DevOps Intern, Insomea Computer Solutions 06/2024 – 08/2024 | Tunis, Tunisia

- Built a Flask web application **automating Excel/CSV-to-SQL conversion**.
- Containerized the application with **Docker** and deployed it on Microsoft Azure.
- Built an end-to-end **Jenkins** CI/CD pipeline with SonarQube code-quality gates and Trivy vulnerability scanning.
- Optimized pipeline stages (caching, parallel jobs), reducing deployment time by **~30%**.

Technologies: Flask, Docker, Azure, Jenkins, GitHub, SonarQube, Trivy

Projects

Serverless Image Processing Pipeline on AWS (AWS SAA preparation) 09/2026 – Present

Personal project: github.com/Khalil-Bouazizi/Serverless-Image-Processing-Pipeline

- Built an event-driven serverless pipeline: uploads to **S3** trigger **SQS** events processed by **Lambda** (resize, watermark), with a dead-letter queue for failed jobs.
- Orchestrated multi-step processing (validate → resize → watermark → store) with **Step Functions**, and stored image metadata in DynamoDB.
- Exposed pre-signed upload URLs via API Gateway and served processed images globally through **CloudFront**.
- Monitored pipeline health with **CloudWatch** metrics (Lambda errors and duration, SQS queue depth), with SNS notifications on job success or failure.

Technologies: S3, SQS, Lambda, Step Functions, API Gateway, DynamoDB, CloudFront, SNS, CloudWatch, IAM

Petopia: Private Cloud Infrastructure on OpenStack & Kubernetes, Personal project 11/2025 – 05/2026

- Deployed an **OpenStack** private cloud from scratch: Nova (compute), Neutron (networking), Cinder (block storage) and Keystone (identity).
- Provisioned VMs on OpenStack and automated **Kubernetes** cluster setup with Ansible.
- Implemented a GitOps delivery workflow with **ArgoCD**, auto-syncing deployments from Git.
- Used the platform to host a full-stack pet adoption app (Angular, Spring Boot, JWT).

Technologies: OpenStack, Kubernetes, Ansible, ArgoCD, Git, Docker

Education

Private Higher School of Engineering and Technology (ESPRIT) 09/2021 – 07/2026 | Tunis, Tunisia

Engineer's Degree in Software Engineering — Cloud Computing Specialization

Certifications

- HashiCorp Certified: Terraform Associate [↗](#)
- Oracle Cloud Infrastructure 2025 Certified Foundations Associate [↗](#)
- AWS Certified Solutions Architect – Associate (in progress)
- AWS Certified Cloud Practitioner [↗](#)
- Microsoft Certified: Azure Fundamentals (AZ-900) [↗](#)

Languages

English: B2 (Upper Intermediate) | **French:** B2 (Upper Intermediate) | **Arabic:** Native