Marwan Ayman — DevOps / Cloud Engineer

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Summary

Creative and detail-oriented web developer with a passion for building user-friendly and responsive websites. Skilled in modern web technologies and committed to delivering high-quality solutions. Adept at collaborating with cross-functional teams to achieve project goals and exceed client expectations.

Skills

- **Programming Languages:** Java, Python, Go, C , Bash
- **Tools and Platforms:** Git, Github, Docker, AWS, Kubernetes, Jenkins, Github Actions
- **Databases:** MySQL, PostgreSQL, MariaDB, SQLite, SQL Server
- **Infrastructure:** Linux, Ansible, Terraform

Work Experience

DevOps Engineer   Jan 2026 — Present
IP Protocol INC   *Cairo, Egypt*

- Forked and adapted a cloud GitOps project to meet specific on-premises infrastructure requirements.
- Deployed applications on Rocky Linux virtual machines provisioned and managed via Proxmox VE.
- Designed and configured a multi-node high-availability Kubernetes cluster for production-grade reliability.
- Implemented a private Docker registry integrated with MinIO using the S3-compatible API for artifact storage.
- Deployed and configured Gitea to serve as the primary Git source for automated GitOps workflows.
- Automated infrastructure state synchronization and application delivery using Flux CD pipelines.

DevOps Trainee   Jun 2025 — Dec 2025
Digital Egypt Pioneers Initiative   *Cairo , Egypt*

- Undergoing structured training in DevOps, cloud computing, and Linux administration
- Developing practical projects focusing on automation and cloud-native architectures.

Education

Bachelor of Science in Computer Science
Helwan University   *Cairo, Egypt*

- Graduated with honors, specializing in web development and user experience design.
- Completed a senior capstone project focused on building a responsive e-commerce platform.
- Relevant coursework: Data Structures, Web Development, Database Management, Human-Computer Interaction.

Projects

GitOps CI/CD Notes Application with ArgoCD
AWS EKS, Terraform, Docker, Helm, ArgoCD, GitHub Actions

- Built a full 3-tier notes app deployed on AWS EKS using Terraform, Docker, Helm, ArgoCD, and GitHub Actions for a complete GitOps CI/CD pipeline.
- Designed infrastructure-as-code for cluster provisioning, ECR image builds, and automated EKS deployments to enable reproducible environments.
- Configured Nginx reverse proxy, Flask REST API, MySQL storage, and Prometheus health/metrics endpoints for monitoring and reliability.

Highly-Available Web App Deployment with Auto Scaling & S3 Backup
Terraform, VPC, EC2, Auto Scaling, ALB, S3

- Built a highly available AWS infrastructure using Terraform, including VPC, subnets, security groups, and a bastion host.
- Deployed a scalable web application with Auto Scaling, EC2 instances, and an Application Load Balancer (ALB).
- Automated instance provisioning via user-data to install and configure Nginx and implemented S3 for storage and backups following IaC best practices.

Python Note Web App – Cloud Backup Infrastructure
Flask, MariaDB, SQLAlchemy, EBS backups

- Deployed a Flask-based web app on AWS EC2 with MariaDB using SQLAlchemy ORM.
- Configured EBS-mounted backups for high data reliability and automated backup strategies.
- Built a robust CRUD backend with automated backup and restore procedures for production readiness.

Go Notes App – Automated Deployment
Go, SQLite, Ansible, Cron

- Developed a Go-based note management app using SQLite for lightweight storage.
- Automated provisioning with Ansible from controller to node and integrated cron jobs for scheduled maintenance tasks.
- Packaged deployment and maintenance scripts to streamline operations and repeatable environment setup.