Tarek Zaki

Education

Alexandria University Sep 2017 – Jul 2022

B.Sc in Electrical Engineering Grade: Very Good

Experience

Giza Systems, Cairo Sep 2024 – Feb 2025

Site Reliability Engineer

- · Built and managed Kubernetes clusters (multi-master, kubeadm) for staging and production workloads.
- Developed a scalable messaging pipeline using MQTT, Kafka, and Elasticsearch.
- Implemented centralized logging with Fluent Bit, Loki, and Grafana.
- Automated CI/CD workflows with ArgoCD and Helm; explored OpenShift pipelines.

MIA Robotics, Alexandria University

Dec 2019 – Jun 2022

Electrical Team Lead

- Led hardware integration and control logic for autonomous robots.
- Represented Egypt at ABU Robocon (China 2021, India 2022).

Autotronics Research Lab, Ain Shams University

Nov 2021 - Jan 2022

Embedded Hardware Research Assistant

• Developed embedded hardware circuits and low-level drivers for autonomous vehicle control systems.

Egyptian Space Agency, Cairo

Jul 2021 - Sep 2021

Embedded Software Engineer

• Developed control software for satellite tracking systems.

Projects

Scalable Web Application on AWS

(GitHub)

- Deployed a highly available architecture with EC2 Auto Scaling, ALB, S3, and Route 53 across multiple AZs.
- Initially used self-managed MySQL, Memcached, and RabbitMQ; re-architected with RDS, ElastiCache, and Amazon MQ for scalability and maintainability.
- · Automated deployment via Elastic Beanstalk with ACM, Route 53, CloudFront, and CloudWatch integration.

Kubernetes Weather App Deployment

(GitHub)

- Containerized front-end and back-end services; deployed with Kubernetes deployments and StatefulSets.
- · Configured Nginx Ingress with TLS, health checks, and routing for secure access and traffic control.
- Managed run-time configuration using ConfigMaps and Secrets to enforce secure, environment-specific deployments.

Skills

Languages: Bash, C/C++, Golang, OOP, Python

Operating Systems: Linux, Windows

Cloud Platforms: AWS, GCP

Containers & Orchestration: Docker, Kubernetes, OpenShift

CI/CD Tools: ArgoCD, Helm, Jenkins, Tekton **Infrastructure as Code:** Ansible, Terraform

Monitoring & Logging: Datadog, ELK, Fluent Bit, Grafana, Loki, Prometheus

Messaging & Streaming: Kafka, Mosquitto, RabbitMQ

Version Control: Git

Certifications

AWS Certified Cloud Practitioner (2024) DevOps Bootcamp – Sprints