

# Mohamed Karam

 [linkedin.com/in/mohamedkaram4134](https://www.linkedin.com/in/mohamedkaram4134)

 [github.com/mkaram007](https://github.com/mkaram007)

**Mail:** mohamedkaram4134@gmail.com

**Address:** Cairo, Egypt

**Phone:** +20 106 206 5022

**Military:** Completed as an officer

**Site:** mkops.com

I'm a Systems and DevOps Engineer and a Red Hat instructor in Linux Plus Information Systems specializing in ansible automation (RHCE® certified), CI/CD pipe-lining, software deployment, containerization, and virtualization, Well-versed in Python development, and with 2-years of experience in Linux administration (RHCSA® certified), over 500 paid freelancing hours, more than 8 projects, and seek to learn new technologies.

## PROJECTS

**Openshift Extended Operations** — Implementation of a hub cluster, scanning, and mitigating cluster issues in SAIB-Bank

Cluster scanning and remediation, image vulnerability scanning, and network policies management using RHACS.

**Openshift Implementation** — Four OCP clusters in Mid-bank

Including a hub cluster for centralized management, and performing the post-installation operations.

**Network Automation** — Automating the administration of network devices

Develop playbooks for retrieving & changing, and backing up network devices' configuration.

**Automation of Baremetal OS Installation** — Linux OS Installation automation

Automating the installation of Linux Client OS on bare metal using PXE network booting.

**Message Queuing** — Apache Kafka Implementation and API development

Implementation of dockerized Apache Kafka and Zookeeper and develop a kafka API client to interact with the OBP API.

**Squid System** — Full Proxying System

Integrate squid with a WebUI, develop its API with Python, and develop a command line interface to interact with it.

**PassEg** — Password manager

Creating the API of a password manager to store the encrypted passwords of a user in his account in Python.

**OBP (Open Bank Project)** — Banking API

Deployment of the API of an open-source banking API system.

## SKILLS

**Orchestration:** Kubernetes, and Red Hat® Openshift.

**Containerization:** Build, run, and administrate containers using Docker, Docker-compose, podman, and skopeo.

**Automation:** CI/CD by Jenkins & Github actions & IAAC using Ansible, Terraform, and scripting using Bash & Python.

**Software Deployment/Administration:** Nginx, Apache, Nexus, PostgreSQL & MongoDB, pgAdmin & Mongo-express, CATTR for time tracking, Dokuwiki for wikis, Passbolt for password management, and OpenBankProject (a banking API).

**Programming:** Python for software & API development, task automation scripting, and network programming, and FLASK.

**Repository Managers:** Docker Hub, Nexus, Quay, Red Hat® Registries, and Helm.

**Package Managers:** apt, snap, yum, dnf, pacman, yay, and pip.

**Cloud Platforms:** Digital Ocean, AWS, and Linode.

**Source Control:** GitHub, GitLab, and CodeCommit.

**Build tools:** Maven, Gradle, npm, yarn, and CodeBuild.

**Freelancing:** Over 500 hours paid freelancing hours.

**Virtualization Hypervisors:** VMware (Workstation, ESXi, vSphere), Virtualbox, Vagrant, and Nutanix.

**Security:** RHACS (Red Hat Advanced Cluster Security), Container images vulnerability management, Cluster network policies management, Squid proxy, OPNSense firewall, iptables, local & LDAP authentication, SSO, and OpenSSL.

**Linux:** RHEL, Centos, Fedora, Debian, Ubuntu, Manjaro, Kali.

**Solaris:** Solaris-11.

**Networking:** EVE & Packet Tracer, Cisco IOS/IOSXR.

## WORK EXPERIENCE

### Linux-Plus Information Systems — *Systems and DevOps Engineer* — Maadi, Cairo Egypt

Nov 2022 - PRESENT

Responsibilities: Openshift Implementation & Administration, Ansible network automation, Red Hat Courses Delivery, Ansible Automation Controller (ansible tower) deployment, PXE bare-metal OS deployment automation, Apache compilation, upgrade, and administration on a Solaris cluster, and implementing SSO systems.

### Freelancing — *Systems Administrator* — Remote

Dec 2020 - Oct 2022

Responsibilities: Deployment of software applications like CATTR for time tracking, Dokuwiki for creating wikis, Passbolt for password management, Development of PassEg password manager, and the configuration of ESXi server and integrating with OPNsense firewall.

### Egirna Technologies — *Systems Administrator* — Sheikh Zayed, Giza, Egypt

Dec 2019 - Jun 2020

Responsibilities: Deploy, maintain, and troubleshoot software systems on Ubuntu servers, configure servers' security using iptables, create and deploy docker images, develop APIs using Python, and deploy and configure Nginx web servers.

## EDUCATION

### National Telecommunication Institute (NTI) — *Smart Village, Egypt* — *Cyber Security internship*

Sept 2019 - Oct 2019

### FEE (Faculty of Electronic Engineering), CSE (Computer Science & Engineering Department) — *Menofia University, Egypt* — *Bachelor's degree*

Oct 2013 - Jul 2019

### Information Technology Institute (ITI) — *Smart Village, Egypt* — *Cyber Security Summer Training*

Aug 2018 - Sept 2018

## CERTIFICATES

### Red Hat® RHCE (Red Hat Certified Engineer)

Mar 2023 - Mar 2026

### Red Hat® RHCSA (Red Hat Certified System Administrator)

Jan 2023 - Mar 2026

## TRAINING EXPERIENCE (Courses Delivery)

### Red Hat® System Admin 1 V9 (RH124)

Client: EBI (Egypt Banking Institute) & NBE (National Bank of Egypt)

Aug 2023

### Red Hat® System Admin 1 V9 (RH124)

Client: EBI (Egypt Banking Institute) & NBE (National Bank of Egypt)

Jul 2023

### Red Hat® System Admin 2 V9 (RH134)

Client: Orange & Oracle

Mar 2023

### Red Hat® System Admin 1 V9 (RH124)

Client: Oracle

Dec 2022

## EXTRACURRICULAR ACTIVITIES

Organizer of The 7th control exhibition in FEE, Improved my team working skills

2016

Students' Union member in FEE, Improved my work efficiency

From 2014 to 2017

Team Leader in Robotics Transporter competition in FEE, Improved my leadership skills

2015

## LANGUAGES

Mother-tongue: Arabic

Second Language: Good English speaker