# MEHER ASSEL

*Senior Software & Cloud Engineer*

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## Skills

**Infrastructure & Cloud**

Kubernetes, Docker, Go, AWS, GCP, Azure Microservices, Serverless, Prometheus, Grafana, OTel, Terraform, ArgoCD, GHA

**Security**

Ethical Hacking, Exploit writing, Reverse Engineering, Web Security, System Security, CTFs, tools writing

**Scripting**

Task automation, Python, Shell scripting, GitHub actions

**Low-level and system programming**

C/C++, System Programming, Go, Reverse Engineering, Kernel programming & hacking, Linux guru, Assembly

**Back-End Development**

Go, Python, Node.js, GraphQL, PHP, Laravel, API design and development, App architecture, Distributed systems

**Network Programming**

Very good understanding of OSI & TCP/IP models, Sockets, Linux network optimization

**Databases**

Database architecture, modeling, query optimization, mysql, cosmosdb

## Summary

Software Engineering Leader with experience in ethical hacking, mentorship and cloud engineering. Demonstrated ability to build complex, scalable, and fault-tolerant systems at various startups. Proven fast learner with a successful track record in national and international information security competitions. Passionate about Go programming.

## Professional Experience

**Jun 2025 - Present**

### Senior Software Engineer

Grafana Labs - Loki | *Spain*

Member of the Loki Query Squad at Grafana Labs, optimizing query performance for the log aggregation system that processes hundreds of GB/s of data.

- Design query engine optimizations for petabyte-scale log datasets
- Develop LogQL features and query acceleration capabilities

`Go` `Loki` `Grafana` `Kubernetes` `Cloud`

**Jul 2020 - Jun 2025**

### Senior Infrastructure Engineer

RelationalAI | *USA - REMOTE*

RelationalAI is the industry's first AI coprocessor for data clouds and language models. Its groundbreaking relational knowledge graph system expands data clouds with integrated support for graph analytics, business rules, optimization, and other composite AI workloads, powering better business decisions

- Design and implement the current infrastructure hosting both the control-plane and data-plane
- Led the re-write of control-plane service in Go, which led to a significant performance improvements and better observability
- Led the move to more modern cloud native infrastructure.

`Go` `Kubernetes` `AKS` `Kubernetes` `ArgoCD` `SLA/SLO` `Reliability` `Terraform` `Datadog`

**Mar 2021 - Jul 2023**

### Part-Time Professor

INSAT | *Tunisia - Tunis*

Part-time professor at the National Institute of Applied Sciences, mainly teaching DevOps and cloud subjects.

`Teaching` `Mentoring & Supervising` `ArgoCD` `CI/CD` `Delivery pipelines` `AKS` `Observability` `Git`

**Sep 2018 - Jun 2018**

### Senior Software Engineer

Edge.network | *UK - Remote*

Edge is a peer-to-peer serverless infrastructure, powered by blockchain technology and built using the spare capacity of internet users

- I contributed to the fast majority of the distributed peer to peer network services, the ones that run on user's machine such as Agent and Host, and the ones who still runs the company infrastructure like Gateway and Stargate (DNS service).
- Scalability, availability, stability and monitoring were our main concern as the network grew bigger
- Led the design of device's self onboarding, which led to introducing ACL and Vault to the network.
- Led auto stake management which made joigning the network and sending/validating stakes automatic.

`Go` `Network` `Service Mesh` `gRPC` `Prometheus` `Grafana` `Blockchain` `Distributed systems`

Sep 2017 - Jun 2020

### Lead Software Development Engineer
Think-it | *Tunisia - Remote*

Think.iT invests in North Africa's brightest software engineers and integrates them into leading tech teams.

- My role within the team is to mentor developers in order to make them able to be part of big projects.
- Alongside mentoring, I work on internal and clients' projects and guide them to success.

`Mentoring` `Software architecture` `AWS` `Cloud` `Python` `Node`

Apr 2017 - Aug 2017

### Engineer Internship
Asayer | *Tunisia - Tunis*

A startup whose role is to help companies reduce their time to market by providing companies access to a full featured crowdsourced testing platform.

- Modernise the infrastructure by moving from VMs to Kubernetes and containers

`Kubernetes` `AWS` `Node` `Python` `GCP` `Docker`

Jun 2015 - Mar 2017

### Chief Technology Oicer
Wizzlabs | *Tunisia - Tunis*

A young and small Tunisian IT provider company mainly working on software delivery and IT services

- Implemented the infrastructure that hosted the software delivery plaform

`Scalability` `Automation` `Targeted ags` `Project management` `Linux` `Node`

## Education

2012 - 2017

### Software Engineering
National Institute of Applied Sciences and Technology, Tunis, Tunisia

## Achievements

2013 - 2016

### Securidays CTF winner: 2016/2015/2014/2013
National day of computer security.

2015 - 2016

### Esprit Hask days CTF winner: 2016/2015
1st and 2nd edition of EHD CTF, in collaboration with Positive Hack Days and Positive technologie.

2014

### HackZone ENSI CTF winner
1st edition of HackZone CTF made at ENSI university.

2013

### PHD CTF Prequals
Very important international CTF, got 8th place in prequals, did not attend the finals due to VISA issues.

2013

### 2nd place at Hacknowledge
International CTF challenge, got 2nd place in prequals, did not attend the finals due to financial problems.

## Projects

**ContributeHub**

 github.com/segbow/contributehub

Contributehub automatically listens to GitHub event looking for new Go repositories, pull the packages and run various analyzers. Analyzers can fix the code. They statically analyses the code by creating the Abstract Syntax Tree (AST) and mutate it.

`Go` `AST` `Compilers` `Language theory`

## NotifyMe

 github.com/think-it-labs/notifyme

NotifyMe is a simple command line tool that can be used to get notified when commands finish executing.

`Go` `Unix` `POSIX`

## Nethme

 github.com/segflow/nethme

Nethme stands for NETwork Hacking Made Easy, a python library for network hacking and auditing.

`Python` `Network` `Scrapy` `Hacking`

## PwniumOS

 github.com/pwniumos/PwniumOS

An OS written from scratch, The project's code can be used as a boilerplate to start writing custom Interrupt Service Routines (ISR), and custom memory management algorithms.

`Operating System` `Assembly` `C` `Kernel` `Computer Architecture`

## Languages

**Arabic:** Native

**English:** Fluent

**French:** Fluent

## Interests/Hobbies

`Video games` `Traveling` `Hiking` `Driving` `Hacking` `Outdoor adventures`