ASSEL MEHER

Senior Software & DevOps Engineer

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Skills

Security
Ethical Hacking, Exploit writing, Audits, Web Security, System Security, OWASP, CTFs, tools writing

Scripting
Task automation, Python, Node.js, Shell scripting

DevOps & Cloud
Kubernetes, Docker, Go, Amazon Web Services, Google Cloud platform, Microservices, Cloud, Serverless Architecture, Prometheus, Grafana, Consul

Low-level and system programming
C/C++, System Programming, Go, Reverse Engineering, Kernel programming & hacking, Linux guru, Assembly Skills and exploit writing

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, Requests and Twisted python libraries

Front-End Development
JavaScript (ES6), React, Redux, HTML5, CSS3, jQuery

Summary

Senior software engineer & hacker, and teacher who took big roles at early-stage companies: helped manage teams of engineers at a very young age. A fast learner who can pick up new skills easily with a proven track record on multiple national/international competitions in information security! Big Go lover with contributions to the language compiler.

Professional Experience

Sep 2018 - Present

Senior Software Engineer
Edge.network | *Remote - England*

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.

I also led auto stake management which made joigning the network and sending/validating stakes automatic.

`Go` `Distributed systems` `Network` `Service Mech` `gRPC` `Prometheus` `Grafana` `Containers`

Sep 2017 - Present

Lead Software Development Engineer
Think.iT | *Tunis - Tunisia*

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.

`Mentor` `Software Architect` `Go` `AWS` `Cloud Engineer` `Python`

Apr 2017 - Aug 2017

Engineer Internship
Asayer | *Tunis - Tunisia*

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

I worked on the infrastructure, mainly as a DevOps. My job was to take care of our infrastructure scale, setup pipelines and monitoring systems.

`Go` `Kubernetes` `Serverless` `AWS` `Python` `Docker` `GCP`

Jun 2015 - Mar 2017

Chief Technology Officer
Wizzlabs | *Tunis - Tunisia*

A young Tunisian IT provider company, we started from scratch with only 5 people. I had the opportunity to work as the CTO, from creating and managing the entire infrastructure to projects management. I've led all the technical part of the company. Through various missions abroad (Spain, France) I got the opportunity to experience working with different people from different cultures.

`Software Architect` `Scale` `Automation` `Project Manager`

Databases

Database architecture, modeling, query optimization, mainly MySQL database with some mongodb & dynamodb

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Aug 2014 - May 2015

Sofware Developer
Pixels Trade | Tunis - Tunisia

Part-time developer at PixelsTrade, this was my first professional experience.

From web-development to bank systems security and auditing. I played a big role designing & implementing REST api for different mobile applications where Pixels Trade lead the local market.

`Auditing` `REST API` `Go` `Web Development` `Wordpress` `PHP`

2012 - Present

Trainer/Teacher
TEK-UP and INSAT engineering universities | Tunis - Tunisia

Python, Devops and Computer security teacher, mainly at universities and clubs. With my innate teaching skill, I've led many training sessions at different clubs and associations like: INSAT Google Club, Netlinks, Sigcom, Securinets.
After my graduation, I started teaching at engineering universities different subjects such as: OWASP (Tek-up), Advanced Operating Systems (Tek-up) and DevOps (INSAT).

`Computer Security` `OWASP` `Python` `Cloud and Devops` `Ethical Hacking`

Education

2012 - 2017

Software Engineer
National Institute of Applied Sciences and Technology

2012

Baccalaureate Degree in Computer Science
Ranked 13th nationally

Achievements

2016

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

2016

Esprit Hask II days CTF winner
Second edition of EHD CTF.

2015

Esprit Hask days CTF winner
1st 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
Second most important international CTF (after defcon), got 8th place in prequals, did not attend the finals due to financial problems.

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/segflow/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 GitHub

NotifyMe
 github.com/think-it-labs/notifyme

 clinotify.me

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

Go Unix

Nethme
 github.com/segflow/nethme

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

Python Network Scapy Hacking

Elfparsing-py3
 github.com/segflow/Elfparsing-py3

A library for analysing Unix ELF files (executables). Used in CTFs and wargames, the api is so flexible and complete which allows to write any other tools based on it.

Python Linux Reverse Engineering Assembly

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 language

English: Business fluent

Frensh: Intermediate knowledge