

# HASSAN S. MOUSSA

Software Engineer

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## PROFILE

I've always been a great problem solver, an independent introvert, and a technophile obsessed with the latest devices. I'm currently interested in : Algorithm Optimization & Stochastic Methods, Operations Research & Data structures. At the end :  
Take the risk, or lose the chance!

## EMPLOYMENT HISTORY

❖ **Research Assistant, Lebanese University - Faculty Of Science** ..... Jan 2021 — Present  
Beirut

- Performing research in domain of CVRP , combinatorial problems
- Coding And Testing the ideas using C and Python
- Suggesting new idea in domain of Continuous Optimization
- Developing new concepts to improve Particle Swarm Optimization

❖ **Intermediate Software Engineer, Hyphen Technologies** ..... Sep 2020 — Present  
Remote , Dubai UAE

- Developing Back-End solution using golang & python
- Coding the infrastructure using IAC (TerraForm)
- Developing Front-End solution using Angular (TypeScript)
- Using CircleCI for developing DevOps CI/CD
- Using Operations Research methods like Genetic Algorithm & Stochastic methods to solve Capacitated Vehicle Routing Problem
- Using Microservices Architecture (Distributed System) and relating services together using Go Micro (gRPC and GraphQL)
- Using AWS to insure the infrastructure and to integrate the API Gateway
- Developing Android Mobile Application using Kotlin
- Using Kafka & Nats for event streaming and assuring Pub/Sub Model between services

❖ **Full Stack Engineer, Mobation** ..... Dec 2019 — Aug 2020  
Beirut

- Worked well independently and on a team to solve problems.
- Served as a friendly, hardworking, and punctual employee.
- Developing backend solutions using : Golang & Python
- Developing the automated deploying and DevOps using Docker , Azure DevOps , to insure the CI/CD flows
- Using Supervised Machine Learning techniques such as linear regressions to predict stats in future
- Performing tasks in infrastructure area.
- Developing Android Mobile Application using Kotlin

❖ **Software Engineer Intern, Decentra Tech** ..... Sep 2019 — Oct 2019  
Beirut

My internship was focused in:

- Developing Backend solutions using the following languages : Golang, python and C.
- Developing Front End Solution using HTML, CSS and Bootstrap
- Insuring Real Time GPS Tracking from IOT devices using Kafka event streamer
- Learning the basics of multi threading
- Developing Android Mobile Application using Kotlin

## EDUCATION

❖ **Lebanese University** ..... Sep 2017 — Jun 2021  
*Bachelor Of Applied Mathematics* ..... Nabatieh

Courses : Linear Algebra , Real Analysis , Numerical Analysis , Programming with C , Logical Programming , Data Structures , Advanced Data Structures , Data Science , Object Oriented Programming , Image processing , Graph Theory , Theory Of Computation ( Abstract Model ) , ASP.net , PHP , Project Management , UML

## SKILLS

|                                   |                              |
|-----------------------------------|------------------------------|
| Amazon AWS .....                  | Information Technology ..... |
| Enterprise Infrastructure .....   | gRPC .....                   |
| Cloud Computing .....             | GraphQL .....                |
| Docker .....                      | Data Structures .....        |
| Terraform .....                   | Golang .....                 |
| Amazon RDS .....                  | NATS .....                   |
| Microservices .....               | Apache Kafka .....           |
| Distributed Systems .....         | MongoDB .....                |
| Amazon EC2 .....                  | Android Development .....    |
| Kubernetes .....                  | Kotlin .....                 |
| MySQL .....                       | IAC .....                    |
| Docker .....                      | Microsoft Azure .....        |
| DevOps .....                      | Go Micro .....               |
| Git .....                         | Parallel Processing .....    |
| Python .....                      | API Gateways .....           |
| CI / CD .....                     | Computer Networking .....    |
| Object Oriented Programming ..... | Computing .....              |

## COURSES

- ❖ **Optimizing Travelling Salesman and Vehicle Routing Problems** ..... Mar 2021 — Mar 2021  
*Udemy*
- ❖ **Combinatorial Problems and Ant Colony Optimization Algorithm** ..... Feb 2021 — Feb 2021  
*Udemy*
- ❖ **Apache Kafka Certified** ..... Aug 2019 — Aug 2019  
*Udemy*

❖ MSP "Microsoft Student Partners 2018/19" ..... Sep 2019 — Sep 2019  
*Udemy*

❖ Algorithm & Data Structures ..... Feb 2020 — Mar 2021  
*University Of California San Diego*

## LANGUAGES

Arabic ..... *Native speaker*      French ..... *B1*  
English ..... *Good working knowledge*

## HOBBIES

*Basketball , Swimming & Chess Player*

## REFERENCES

❖ References available upon request .....

