

# Ben Mansour Mahdi

Computer Science engineering student

## CONTACT

+216 28 079 643

mahdi.benmansour@enicar.ucar.tn

Tunisia, Tunis, Ben Arous

## LINKED IN

[\(2\) Ben Mansour Mahdi | LinkedIn](#)

## MY WEBSITE

[BriliantEngineer](#)  
[\(inubexx.github.io\)](#)

## PROFIL

Terminal year Computer Science Engineering student looking for his gateway to success

I am capable of learning very fast and open to work in all domains from embedded systems to security to web dev

## PROGRAMMING

C# , C/C++ ,  
Assembly(x86architecture),  
Python , Java ,HTML, CSS,  
javascript ,php,SQL

## LANGUAGES

English 

French 

Arabic 

## Education

### Baccalaureate (Mathematics) | 2018 Tunis

Elementary knowledge in general scientific fields with an emphasis on mathematics(basics in classic and analytic geometry / arithmetic and basic calculus ) and biology

### Pre-engineering maths-physics

### Diploma | 2020-faculty of science Monastir -

I gained a very solid foundation in computer science , the fields of mathematics, physics , automation ,non organic chemistry ,mechanical engineering.

During this diploma i had to endure some difficult circumstances ,going through which i acquired many important skills like a good management of time ,working under stress , and being self reliant It is notable that i was the major of the freshman year during this diploma

### Computer science Engineering

### diploma | 2023 (école national d'ingénieure Carthage )

A well diversified study plan made me able to adapt very fast to any situation / new technologies and concepts

# Technical Skills

## Internships

### ● Summer internship / National center of Informatics 2021

#### Tasks:

- +installation and updating of linux(centos) on a virtual machine
- +various system administration and maintenance tasks
- +basic handling of daemons on linux
- +installation of PostgreSQL services
- +Replication of a data base live using PostgreSQL

### ● Summer internship / Hippo Labs inc 2022

#### Tasks:

- +wrote a web scraper using scrapy (confidential production ready coding)
- +set up and configured kafka clusters to work in conjunction with the web scraper

### ● Summer internship / National center of Informatics 2022

#### Tasks:

- +creation of a full stack simple **highly available** web application for management of clients' orders using spring boot + angular
- +set up a virtual environment with multiple nodes / machines in a network
- +set up replication (postgresql)
- +set up hba load balancer in the proxy node
- +test the different load balancing algorithms on two instances of the application

## Events

### Insta Deep Ai hack 2022 Organizing volunteer:

#### Tasks:

- +set up the contestants in their appropriate seats
- +inform the competitors within my assigned cluster with all the updates / directions
- +set up the badges
- +help out with general explanation of the ai problems presented within the hackathon to the late-coming contestants

In this event i got to meet with world leading characters in the field of **bioAi** and enquire about some technical details on how to get set up for success as a data scientist

## H O B I E S

Gaming  
Sports (chinese boxing)  
Camping

## frameworks and APIs :

- **scrapy beautiful soup** got very familiar with these frameworks in my summer internship
- **angular** Multiple school projects using angular
- **springboot** School projects and internship
- **symfony** Helping out a friend's setting up a small instagram clone end of studies project
- **apache kafka** got familiar with kafka and its basic concepts within my summer internship

## Mathematics:

A solid foundation in different fields of mathematics like linear algebra , topology , advanced calculus and multi variable arithmetic

## Physics:

An overall solid understanding to different fields

from classic mechanics to quantum physics as expected from a pre engineering student

## Data Science :

One of the most fields I'm passionate about because it crosses paths with biology , life saving and future enhancing technologies for humanity in many ways

I made it through most of the beginner friendly tutorials from the MNIST handwritten numbers recognition to the enigma machine rotors configuration prediction

I am familiar with most basic concepts of neural networks , clustering algorithms and a/c analysis

## Video editing :

Using Adobe after effects premier pro and photoshop

## 3D Modeling / 3D animation :

Using blender , i am capable of producing clean meshed models and decent animations

## GameDev :

Participated in many game jams and made a lot of minigames with friends and i am very familiar with Unity and game dev in general

## Mechanical theory:

Basics like calculation of inertia / position of centers of gravity / familiar

with all the coordinates systems , calculation of kinetic / kinematic / dynamic tensors

# Academic projects

## ● A Library management application :

Written in **PL SQL** (oracle) , puts in light the technical dbms/sql knowledge acquired in my academic path

guided by a support with different complex specifications

## ● A Pharmacy management app(in terminal app):

Written in **c++** and puts in the spotlight different technical capacities like

file management ,the use of complex data structures, operators assignment ,pointers and algorithmic concepts

## ● A Syntax / orthographic analyzer : (mini compiler)

Using **flex + latex** ( written in c ) wrote a mini compiler as an illustrative

artifact to show my comprehension of the subject : language and compilation

theory we got in the second year of engineering

## ● Full stack application (e-commerce shop):

Written in typescript,HTML,CSS and Java,using the spring boot framework and angular

as a front end with diverse functionalities and a reactive web design implementing the spring

boot security dependencies

## ● A platformer naruto world game with computer vision hands gestures inputs (webcam to inputs )

Using my experience with unity i made a platformer game which is in the naruto world and you can move fight and perform jutsus using your hands .

I used python (openCV,mediapipe,tensorflow) and c# for this project with a great deal of the computer vision code taken from a github repo by mr kazuhito takashi)

## ● A platform for reading / stocking data coming from a temperature/humidity

sensor (in real time):

Using an **arduino** card and an aht10 **sensor** as hardware

and Xamp ( **MySQL,Apache, PHP** ) , **C** and **javascript** as software

This platform presents two curves (one for temperature and one for humidity)

which are updated in real time

There is also a login/sign-up system with a pin codes, administration and custom hashing encryption methods

## ● A socket communication multi thread "bank network" simulation application :

I set up this application using **python** due to the ease of use of the sockets library

The app provides sockets communication over a LAN with accounts management ,ability to manage balances (using files) and i have also built up a small working mobile app prototype with crude interfaces as a proof of concept for the

possibility of a graphical development phase using **kivy** and python