Curriculum vitae

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Professional experiences

Internships

Summer internship / National center of Informatics 2021

Tasks:

+installation and updating of linux(centos) on a virtual machine

+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' software demands using spring boot + angular

+set up a virtual environment

+set up replication (postgresql)

+set up hba load balancer

+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

Education

Baccalaureate (Mathematics)2018

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

Pte-engineering maths-physics Diploma 2020 (faculty of science Monastir) - Major of the freshmen year

I gained a very solid foundation in computer science , the fields of mathematics and 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

Computer science Engineering diploma 2023 (école national d'ingénieure Carthage)

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

Technical Skills

programming in :

C# C/C++ Assembly(RISC architecture) Python C# Java HTML CSS javascript php
A proclivity for problem solving (solved a good amount of problems on leetcode)

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 friends 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 and calculus

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 and life saving technologies 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 network, clustring algorithms and acp analysis

Video editing :

Using Adobe after effects premier pro and photoshop

3D Modeling / 3D animation :

Using blender

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:**
Written in **c++** and puts in the spotlight different technical capacities like file managements the use of complex data structures ,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 video game (platformer , supermario clone):**
Written in **java** .
Shows my creativity , algorithmic ingenuity and teamwork spirit (project in duos)
- **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 that are updated in real time and show current data in the last point of the curves
There is also a login/sign-up system with a pin code 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 sockets library
The app provides sockets communication over a lan with accounts managements ,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

- **A platformer naruto world 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 preform 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 decentralized DAPP :**

A minimal decentralized dapp using ganache truffle project for a back end solution using smart contracts and next js for a front to interact with the block chain using ether js as the main library

SOFT SKILLS

- **Associative life**
  - Member of the Melkart Junior Entreprise club ,a development and projects sector memeber responsible for accomplishment of technical tasks (mainly web dev) in a team for software products provided by the club to clients with real contracts and payments

  - Participation in many cs go Local Tournaments as a competitor i always loved to share moments like **LAN parties** with my friends and showcase my skills in fast paced shooter games

  - Proactive with charity clubs and communities I always lend a hand whenever possible to my friends in the Espoire club (mainly financial aid)

- **Hobbies**

  - **Art (mainly 3d modeling and animation)**

  - **Chinese Boxing**

  - **E sports**

  - **Painting**

  - **Lifting waits**

- **Languages**

  - **Arabic (native)**

  - **English (toeic)**

  - **French**

  - **German (basic)**