

ACADEMIC QUALIFICATIONS

Computer Science Engineering's Degree  
Tunis, Tunisia  
September 2020 - September 2023  
National School of Computer Sciences - Manouba

Undergraduate Studies in Mathematics and Physics  
Tunis, Tunisia  
September 2018 - September 2020  
Faculty of Mathematical Physical and Natural Sciences Of Tunis

Baccalaureate Degree In Mathematics  
From 2014-2018  
In 2018 with 'Good average' grade

COMPUTER AND LANGUAGE SKILLS

	Beginner	Intermediate	Advanced
Development	Bash, Flask, VHDL, STM32	Android, Java, C++,C,Javascript,ReactJs	Assembly, QT, Python
Scientific Computing	OPENCV	Tensor Flow	
Network		Packet Tracer,Wireshark	
Modeling	Method B, BPMN	UML	
Methodology	2TUP, SCRUM	Waterfall, V-Shape Model	
DMBS	OracleDB	MySQL,MongoDB	
Languages	German		French, English, Arabic

PROFESSIONAL EXPERIENCE

- GPU Implementation of Spike neural Network using CUDA**  
*School Lab*  
June - August 2022 (2 months)
  - Study of the GPU architecture and familiarization with the **CUDA ToolKit** and **Jetson Nano TX2**.
  - Development of an N-dimensional Array library with **C++** with the different types of algebraic operations.
  - Optimizing different algorithms present inside **Pytorch Library** for n dimensional computations.
  - Developed and executed test plans and analyzed test results with **GoogleTest** Library and **CMAKE** platform.
  - Optimized training up to **60% less time** for more than **1000 pixel images width**.
- Spike Neural Network Based Face Recognition**  
*School Lab*  
February - April 2022 (3 months)
  - Research on the different techniques used up to day for face detection and face recognition.
  - Review of the existing solutions using SNN and extracting comparative tables.
  - Created a Face Recognition Model with SNN using **Pytorch** with **62,91% accuracy**.
  - Built integral Data Preprocessing Pipeline for converting input data into time varying sequence.
  - Developed a Detector Model using **OPENCV** and **Tensorflow**.

PROJECTS

- Medical Practice Project**  
*From April 2019 - May 2019*
  - Built a CLI to manage and monitor resources in a medical practice using **Python** to interact with the operating system.
- Belote Card Game project**  
*From March 2021 - May 2021*
  - Development of a multiplayer card game using object-oriented programming and integration of a graphical user interface with **Qt** and **C++** to facilitate the use of the application.
- Web Application For The Management Of a Driving School**  
*From August 2021 - September 2021*
  - Created with **ReactJS** and **MongoDB** to manage and record resource activities through an admin interface, including HR, accounting and financial management, enabling users to access an interactive interface to review their tasks and progress.
- Algorithm visualizer**  
*From March 2022 - September 2022*
  - Developing Pathfinder and sorting Algorithm Visualizer based on multiple algorithms using **ReactJS** to visualize the process of the algorithm.
- Drone Simulation using neural network Genetic algorithms**
  - Designed and Implemented a simulator for a 2D-QuadCopter for moving to desired target using **Pygame** and **NEAT-Python**.

COMMUNITY LIFE & ACHIEVEMENTS

- ENSI Junior Entreprise**
  - Active Member from 2020 to 2021
  - President from August 2021 to October 2021
- Junior Enterprise Of Tunisia**  
*Jan 2021 - Mar 2021*
  - Organization committee of the JTED : Junior Tri-Hybrid Evolution days.
- Competitive Programming Club**  
*October 2020 - Currently*
  - Active Member
  - TCP C Finalist 2022
- Tunisian Finals Of Microsoft's Imagine cup 2017**
  - Reaching local Finals with the project of an entertainment adventure game quest (Mobile app) inspired from the new solar system discovered by NASA,Trappist-1. The app was developed using **BotFramework** and **Android Studio** then deployed on **Microsoft Azure**.
- Codingame**
  - Ranked 6700th - MAD POD RACING Challenge - Gold League
  - Ranked 2804th - Spring Challenge 2021 - Silver League

CERTIFICATIONS

- Fundamentals of Accelerated Computing with CUDA Python([Nvidia](#))
- Building Real-Time Video AI Applications([Nvidia](#))
- Using Python to Interact with the Operating System - ([Coursera](#))
- Python Classes and Inheritance -University of Michigan ([Coursera](#))
- Neural Networks and Deep Learning - DeepLearningAI ([Coursera](#))
- Parallel Programming in Java - Rice University ([Coursera](#))
- Introduction to git and github - ([Coursera](#))

HOBBIES

- Running
- Reading Books
- Writing Articles
- Solving Coding Problems