Mohamed CHTOUROU

Engineering Student

✉ mohamed.chtourou@insat.ucar.tn

📞 +21625985403

📍 Ariana, Tunisia

○ https://github.com/medsnok7

in https://www.linkedin.com/in/mohamed-chtourou-61a002242/

PROFILE

Third-year Engineering Student in Industrial Computing and Automation at INSAT, Strong communication, leadership, and emotional intelligence skills, highly motivated, looking for an End-of-Studies internship.

EDUCATION

Engineering Cycle in Industrial Computing and Automation
National Institute of Applied Sciences and Technology
09/2021 – present | Tunis, Tunisia

Integrated Preparatory cycle
National Institute of Applied Sciences and Technology
09/2019 – 06/2021 | Tunis, Tunisia

Baccalaureate in Computer Science
Monji Slim High School
09/2015 – 07/2019 | Sfax, Tunisia

PROFESSIONAL EXPERIENCE (INTERNSHIPS)

Mobile Application Development with a user-friendly interface 08/2023 – 10/2023
Front-end developer Sfax, Tunisia

> Based on a UI model from Figma. I coded a signup page, login page, and logout page using Firebase. I also created a page where users can explore products and search for specific products, each with its own detail page. When users choose products, they are added to a cart page where users can generate an invoice in PDF format, save it, and add it to a list of invoices that can be modified or deleted.

Tools used: Flutter, Dart, Firebase, SQLite.

6 degrees of freedom robotic arm 08/2022 – 09/2022
Designer Ariana, Tunisia

> I handled various tasks such as:
> Implementation of specific calculations for precise gear ratios, creation of components such as planetary gears and pulleys for the actuator and then assembling them, classification of robust materials capable of withstanding significant torsion forces, research for specific motors such as brushless DC motors and stepper motors, chosen for their precision and torque characteristics that allow them to withstand external forces.

Tool used: Solidworks

PROJECTS

Face Detection & Recognition App 2023

> I employed OpenCV to apply the Haar Cascade method for face detection. After that, I applied Mathematics by utilizing the Local Binary Patterns algorithm to train the detected face data and perform facial recognition, providing an accuracy percentage and a label of the predicted person as the outcome

Tools used: Python, Opencv.

Building a Chatbot with NLP and PyTorch 2023

> Developed a chatbot prototype that can understand human language and generate contextually relevant responses.

Tools used: Python, Pytorch, NLP

Project Inverted Pendulum (Automation Benchmark Project) 2023

> I designed a prototype pendulum using SolidWorks. then designed An electrical circuit using Proteus to ensure accurate control and signal processing. Matlab and Simulink were employed to model and simulate the system's behavior, while LabVIEW provided an effective platform for data acquisition and real-time monitoring.

Tools used: Solidworks, Proteus, Matlab, Simulink, Lalbview

Data Base use-case 2022

> I designed a database by proposing an Entity-Relationship model and deriving the corresponding relational schema. I realized a script that contains SQL commands according to a given specification document.

Tool used: Oracle, SQL

COMPETITIONS

Awarded 3rd place in Space Tech Hackathon at Amideast/ Awarded 2nd Place in Line Follower at FST Institute/ Top 10 in Tunisia in IEEEXTREME at INSAT/ Competitor in Winter-Cup(problem-solving) at INSAT

LANGUAGES

Arabic (Native), **English** (Toeic Certification B2), **French** (Working proficiency)

SKILLS

Programming Languages	**Machine Learning**	**Data Science Libraries**	**Mobile App Devolpment**
Python, C, C++, Javascript, Dart	Pytorch, OpenCV, TensorFlow	Pandas, Numpy, Matplotlib, Scikit-Learn	Flutter/ Firebase
Embedded	**Database Managment**		**Operating systems**
Arduino, STM32	SQL, SQLite	**Software** Visual Studio Code, Git, Solidworks, Oracle, Sap, Microsoft Excel	Linux, Windows