BEN OMRANE MOHAMED SALIM

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EDUCATION

Engineering Degree in Computer Networks and Telecommunications
National Institute of Applied Science and Technology (INSAT), **Tunis, Tunisia (2020-2025)**

Baccalaureate Degree in Computer Science
Farhat Hached High School, Rades, **Tunis, Tunisia (2019-2020)**

SKILLS AND LANGUAGES

- **Programming** Java - C - Python - PHP - Arduino
- **Web Development** Nest JS - Angular - PHP Symfony - Javascript - Spring Boot - SQL
- **Data Science** Machine Learning - Deep Learning - Neural Networks - Convolutional Neural Networks
- **Computer Vision** YOLOv8 - OpenCV - TensorFlow - PyTorch - Image Segmentation - ViT - UNet
- **NLP** BERT - XLM-RoBERTa - Transformers - LLMs - GPT - RAG
- **Cloud Computing** AWS - Microsoft Azure
- **Game Development** Unreal Engine 5 - C++ - SolidWorks

LANGUAGES

French English Arabic

EXPERIENCE

Luxolor Boats
Production Methods Engineer (Part-time) **Manzel Bourguiba, Tunisia(2023- Present)**

Talan Tunisie International
AI and Biotechnology Intern/Web Developer **Charguia, Tunisia(07/2024- 08/2024)**

- Conceived a non-invasive cancer detection solution using AI and sonogenetics, deployed on an Angular platform with AI models integrated via Flask for personalized care.
- Designed a UNet-based model for tumor segmentation in MRI images, achieving an average IoU/DICE score of 98.823 by leveraging a U-shaped architecture for precise size and location determination.
- Implemented a virtual assistant to respond to specific biology-related questions and provide real-time assistance.

Lanterns Studios
Game Programmer/Game Designer **Charguia, Tunisia(07/2023-08/2023)**

- Created an interactive 3D Tic Tac Toe multiplayer game using Unreal Engine 5, and implemented Behavior Trees for AI training to enhance the game's artificial intelligence capabilities.

PROJECTS

- **Multimodal Personality Detection System :** Designed a platform to scrape Instagram profiles using the provided URL, collecting posts, images, and captions for analysis. Utilized XLM-RoBERTa for text analysis and ViT for image feature extraction to predict user personalities. Generated visual representations of predicted personality traits, with the model achieving 76% accuracy.
- **EVENTHUB :** Orchestrated an event management platform with AngularJS and NestJS, enabling event creation, management, ticket sales, and an Incorporated approval process for event quality.
- **Image Anomaly Detection:** Built a system using an autoencoder to automate the detection of screw conditions and identify scratches, achieving accurate predictions from input images with an accuracy of 72%.
- **Real-Time Emotion Detector:** Developed a CNN-based system for real-time emotion detection from images, videos, and webcam feeds. Achieved 75% accuracy in detecting and classifying emotions for multiple faces simultaneously.

ASSOCIATIVE LIFE

- **Securinets INSAT,** Program Manager (NCSC 4.0) 2023-2024

CERTIFICATIONS

- Coursera: Supervised Machine Learning: Regression and Classification
- Coursera: Advanced Learning Algorithms