BEN OMRANE MOHAMED SALIM

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Linkedin:MOHAMED SALIM BEN OMRANE Github: MedSalimBenOmrane Portfolio

EDUCATION

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

EXPERIENCE

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

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

- Developed a non-invasive cancer detection solution using AI and sonogenetics, deployed on an Angular platform with three AI models integrated via Flask for personalized care, along with patient management features.
- 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 **Tunisia(07/2023-08/2023)**

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

PROJECTS

Multimodal Personality Detection System | XLM-RoBERTa,ViT, Python, Streamlit, Selenium **2023-2024**
- Designed a platform to scrape Instagram profiles using provided URLs, collecting posts, images, and captions for analysis
- Predicted user personalities from the last 100 posts using XLM-RoBERTa and ViT for text and image analysis
- Generated visual representations of predicted personality traits, achieving 76% model accuracy

EVENTHUB | AngularJS, NestJS **2023-2024**
- Orchestrated an event management platform enabling event creation, management, and ticket sales
- Incorporated an approval process for ensuring event quality

Image Anomaly Detection | Autoencoder, Python, TensorFlow **2022-2023**
- Built a system to automate detection of screw conditions and identify scratches in images
- Achieved 72% accuracy in predicting anomalies from input images

Real-Time Emotion Detector | CNN, Python, OpenCV **2022-2023**
- Developed a CNN-based system for detecting real-time emotions from images, videos, and webcam feeds
- Achieved 75% accuracy in detecting and classifying emotions for multiple faces simultaneously

TECHNICAL SKILLS

- **Languages** Java, Python, C/C++, PHP, Arduino, JavaScript, SQL
- **Frameworks:** Angular, Nest JS, Spring Boot, Symfony, Flask, Keras, TensorFlow, PyTorch, Streamlit
- **Developer Tools:** Git, Docker, AWS, Microsoft Azure, VS Code, IntelliJ, Eclipse
- **Libraries:** pandas,NumPy, scikit-learn, Matplotlib, OpenCV, Selenium
- **Computer Vision:** YOLOv8, Image Segmentation, ViT, UNet
- **NLP:** BERT, XLM-RoBERTa, GPT, Transformers, RAG
- **Game Development:** Unreal Engine 5, C++, SolidWorks
- **Domain of Interest:** Fine-Tuning LLMs, Multimodal AI

LANGUAGES

French : Fluent **English : Fluent** **Arabic : Native**

CERTIFICATIONS

- Coursera: Supervised Machine Learning: Regression and Classification 2023-2024
- Coursera: Advanced Learning Algorithms 2023-2024

ASSOCIATIVE LIFE

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