oussama.ziada@insat.ucar.tn
(+216) 55 068 561
linkedin.com/in/oussama-ziada-bb88aa17b

Oussama ZIADA

Currently a student at INSAT, the prestigious school renowned for its excellence in scientific and technological education.I specialize in computer science and am strongly interested in artificial intelligence and data science. Passionate about data analysis and machine learning technologies, I have developed solid skills in:

- Artificial Intelligence: Data preparation, Data analysis, Predictive modeling, deep learning, computer vision.
- Programming: Python, back-end development with NestJS.
- Libraries and Tools: TensorFlow, Keras, PyTorch, Scikit-Learn, Pandas, NumPy, Matplotlib, Seaborn,openCV,Microsoft Azure, etc.

EXPERIENCE

Karunya Institute Of Technology, India — *Data Science Intern*

July 2024 - September 2024

- Data collection, cleaning, and preparation.
- Trend analysis of various meteorological and hydrological parameters in India using historical data.
- Development of predictive models to estimate meteorological parameters using machine learning techniques.

Acquired Skills: deep learning, Time-series analysis, Python, Pandas, TensorFlow, Data visualization, Project management.

KPI Associates, Tunis — *Data Analysis Intern*

June 2023 - August 2023

- Data analysis of Tunisian university results and implementation of an interactive skills dashboard.

Acquired Skills: Data analysis,Python, matplotlib,Seaborn, pandas, Data storytelling, PowerBI.

EDUCATION

National Institute Of Applied Sciences And Technology— *Computer Science Engineering Degree*

September 2020 - June 2025, Tunis

As a fifth-year student at INSAT, specializing in computer science, I have taken courses in Big Data, Business Intelligence, Machine Learning, Deep Learning, Data Analysis, Computer Networks, Image Processing, Cloud Computing, etc., further strengthening my expertise in artificial intelligence and data science.

PROJECTS

- **STATE OF THE ART AND IMPLEMENTATION OF A GRAPH TRANSFORMERS ARCHITECTURE FOR EMBRYO IMAGE CLASSIFICATION**: A project focused on applying Graph Transformers to human embryo classification, exploring the extension of transformer networks to graphs for machine learning. As part of a team of 4, my task was to design a CNN architecture for graph feature extraction and to adapt a Graph Transformer architecture specifically to our embryo image classification task.

Acquired skills: Deep learning, Graph-ml, Graph theory, Image processing, Python, TensorFlow, PyTorch, Transformers, CNN.

- **CLUB-HUB:** Development of a website facilitating student engagement by providing a space for inter-club coordination, idea sharing, and event participation. As part of a team of three, my task was to design the back-end of this website using NestJS.As part of a team of three, my task was to design the back-end of this website using NestJS.

Acquired skills: Back-end development, NestJS, API design, Database management, TypeScript

- **IMAGE ANOMALY DETECTION:** Creation of an anomaly detection algorithm for images using autoencoders and deep learning.

Acquired skills: Autoencoders, Deep learning, Computer vision, Image processing, Unsupervised learning, Data preprocessing, Python, PyTorch, OpenCV.

CERTIFICATIONS

- **Coursera** Unsupervised Learning, Recommenders system, Reinforcement Learning - October 2023
- **Coursera** Advanced Learning Algorithms - January 2023
- **Coursera** Supervised Machine Learning: Regression and Classification - December 2022
- **IBM** Data science and analytics intro - April 2022

LANGUAGES

- **French/English/Arabic**

VOLUNTEER EXPERIENCE

- Vice-president of the 2023 National Cybersecurity Congress in Tunisia.
- Active member of Securinets Insat.
- Active member of IEEE Insat.