## Computer Science PhD Student +216 26 754 545 | iyed.nasra.in@gmail.com | Ariana, Tunisia

## **EDUCATION**

PhD Student in Computer Science

2024 - 2027

National School of Computer Science

Manouba, Tunisia

Master's Degree in Web Intelligence

2022 - 2024

Higher School of Digital Economy

Manouba, Tunisia

- Awarded the laureate distinction prize in the first year, exclusive to the top two students.
- Graduated the second year as the top of the class student and defended master's thesis with the grade "very good with the highest honors"

## Higher National Diploma in Big Data and Data Analysis

2019 - 2022

Higher Institute of Multimedia Arts

Manouba, Tunisia

Baccalaureate, Mathematics

2019

Pioneer Secondary School

Gafsa, Tunisia

#### MASTER'S THESIS

- Title: Choquet fuzzy integral based ensemble learning for credit score modelling
- Supervisor: Mr. Tawfik Ben Amor (ESEN)
- The thesis tackled a key pain point in fin-tech: the inflexibility of traditional credit scoring models, building an ensemble system combining artificial neural networks, convolutional neural networks, gradient boosting machines to capture diverse data patterns, then fusing their outputs using the Choquet fuzzy integral—a method adept at handling model inter-dependencies. This hybrid approach outperformed standalone models by 6% and surpassed statistical methods by 25%, proving its value for high-stakes lending decisions. The project bridged theory and practicality, with results visualized and validated on real-world financial data.

#### **PUBLICATIONS**

1. Nasra, I., Hervé, C., Manita, G., Dhraief, A., & Korbaa, O. (2025, July). Orthogonal Genetic Algorithm for Efficient **Delivery Route Planning in TSP-D.** In GECCO '25: Proceedings of the Genetic and Evolutionary Computation Conference (pp. 1443-1452). ACM.

### EXPERIENCE

• Ooredoo - Tunisia Aug 2023

Computer Vision Engineer Intern

Tunis, Tunisia

- Implemented a computer vision model to extract data from passport machine-readable zones with >95% accuracy.
- Deployed via API, enabling rapid form population, saving Ooredoo agents and clients around 5 minutes per interaction.

 DigiBrain Agency Feb 2022 - May 2022

Data Analyst Intern

Tunis, Tunisia

- Developed a Python script for real-time web scraping of the "Startup Act" website to ensure up-to-date data for dynamic visualizations.
- Automated and streamlined the data ingestion and cleaning process.
- Designed and implemented data visualizations using Microsoft Power BI.

#### **CERTIFICATIONS**

Mathematics for Data Science and Machine Learning Specialization (Deeplearning.AI)

3 courses

• Machine Learning Specialization (Stanford University | Deeplearning.AI)

3 courses 5 courses

• Deep Learning Specialization (Deeplearning.AI) Algorithms Specialization (Stanford University)

C2 English Proficiency (EF Standard English Test)

4 courses

- Introduction to Psychology (Yale university)
- 32 Datacamp certificates in various python and machine learning topics

# **SKILLS**

- Programming: Data structures, algorithms, problem solving, optimization frameworks, OOP
- Mathematics: Linear algebra, calculus, optimization, statistics, probability
- Machine Learning: Predictive AI, generative AI, reinforcement learning; ML/DL architectures and libraries
- Languages: C, C++, Python
- Tools: Git, FastAPI

# **LANGUAGES**

Arabic (Native), English (Bilingual), French (Professional)

# **INTERESTS**

Algorithms, optimization, problem solving, artificial intelligence