

# **MAJD SOUISSI**

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Majd Souissi

# **SUMMARY**

Engineering student specializing in Applied Mathematics and Modeling, passionate about AI, data science, and digital innovation. Skilled in machine learning, software development, and data analysis, with proven leadership experience in technical project management and marketing.

## **EDUCATION**

Applied Mathematics and Modeling Engineering | National Higher Engineering School of Tunis

**2**023 - Present

Tunis, Tunisia

Preparatory Cycle for Engineering Studies | Preparatory Institute for Engineering Studies of Sfax-IPEIS

**2021 - 2023** 

Sfax, Tunisia

• Section: Physics - Chemistry

# **TECHNICAL SKILLS**

#### Al and Data Technologies

Web Scraping | Machine Learning |
Deep Learning | Computer Vision

NLP Generative AI LLMs

Explainable AI(XAI) Reinforcement Learning

#### **AI Frameworks**

TensorFlow PyTorch Keras

NVIDIA NeMo Shap GradCam Lime

NVIDIA NIM OpenCV

#### **Data Visualization**

Power BI Matplotlib Seaborn Excel

SPSS Tableau

#### **Time Series Forecasting**

SARIMA LSTMs XGBoost ARIMA

Prophet

## **PROJECTS**

Pneumonia Detection Using X-ray Chest Images with explainable AI

**2024 - 2025** 

- Developed a deep learning-based web application for detecting pneumonia in chest X-ray images.
- Integrated Grad-CAM and LIME for model explainability and user trust, with an interactive frontend for real-time analysis.

Computer Vision, CNNs, Explainable AI, Grad-CAM, LIME, Flask, JavaScript

#### MindMate Al Chess Game

**2024 - 2025** 

- Built a web-based chess game powered by reinforcement learning, enabling the AI to learn and improve with experience
- Integrated a custom chess engine with a Flask backend and a dynamic JavaScript-based interface.

⟨/> Reinforcement Learning, Chess Engine, HTML, CSS, JavaScript, Flask

## CryptoCrack AI for Encryption/Decryption

**2024 - 2025** 

 Developed an AI-powered web app for encryption and decryption using classical cryptographic methods with integrated chatbot assistance.

♦ Al Decryption, Cryptography, Chatbot, NLP, Flask, Python, HTML, CSS, JavaScript

#### **Educational Platform for Statistics in Tunisia**

**2024 - 2025** 

• Created a web-based platform featuring e-learning modules, chatbot support, interactive dashboards, and curated articles to promote statistical literacy.

Technologies: React.js, Node.js, SQL, NLP, Power BI, HTML, CSS, JavaScript

## Java App for Student and Grade Management

**2024 - 2025** 

## **Optimization Techniques**

Linear Programming Genetic Algorithms

approximation metaheuristics

## **Programming Languages**

Python Java JavaEE C++ R

Matlab PL/SQL

#### Web Development

HTML CSS JavaScript Bootstrap

PHP Flask Streamlit

#### **Databases**

Oracle SQL MySQL

## **Soft Skills**

Communication Leadership

Problem-solving Adaptability

# **LANGUAGES**

Arabic:  $\bullet \bullet \bullet \bullet \bullet$  English:  $\bullet \bullet \bullet \bullet \bullet$  French:  $\bullet \bullet \bullet \bullet \bullet$ 

# **CERTIFICATIONS**

- Microsoft Azure Al Fundamentals (Al-900)
- Microsoft Azure Data Fundamentals (DP-900)
- Generative AI with Diffusion Models (NVIDIA)
- Deep Learning Fundamentals (NVIDIA)
- Computer Vision for Industrial Inspection (NVIDIA)

- Developed app with admin and teacher spaces for user management, authentication, grade management, and average calculation
- Java, SQL, Spring Boot, MySQL

## JEE palm Sales Management App

- **2024 2025**
- Built app with admin and client spaces for product and sales management, including user authentication

Java, JavaEE, Apache Tomcat, SQL, Spring Boot, MySQL, HTML, Bootstrap, JavaScript, CSS

## Loan Approval in Banks Prediction — PFA 1 Academic Project

- **2023 2024**
- Developed a predictive model to determine bank loan approval based on applicants' financial and social indicators.
- Applied classification techniques with detailed exploratory data analysis and visualization.

Classification, Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn Statistical Study of Healthcare in Tunisia

- 2023 2024
- Conducted a comprehensive analysis of Tunisia's medical personnel, leveraging data scraping, analysis, and visualization techniques.

**⟨/>** Data Analysis, Python, Web Scraping, Pandas, Data Visualization, Power BI

## ASSOCIATIVE LIFE

## Marketing Manager | NERDATA ENSIT CLUB

- **2**023 Present
- Tunis, Tunisia
- Organized data science and AI workshops
- Spearheaded the promotion of the club's activities through media channels.
- Coordinated technical training for 50+ club members

#### Media Manager | VANGUARD CHESS ENSIT CLUB

**2023 - 2024** 

- Tunis, Tunisia
- Organized soft skills workshops and chess competitions
- Spearheaded the promotion of the club's activities and event through media channels.
- Operated as media and logistics manager in the club's biggest event ENSIT GAMBIT 1.0

#### Logistics team Member | ENSIT National Forum

**2023 - 2024** 

- Tunis, Tunisia
- Assisted with event logistics, including setup and on-site coordination

#### Logistics Manager | ENSIT Geeks Club Hackathons

**i** 2023 - 2024

- Tunis, Tunisia
- Secured smooth competitions atmosphere for all participants