



ILYAS MODNI

ABOUT

- ✉ modniilyas@gmail.com
- 🏠 CASABLANCA, MOROCCO
- 📅 24 years old
- ☎ +212(0) 648 373 492

LANGUAGES

- English Upper Intermediate
- French Advanced
- Arabic Advanced

INTERESTS

- Sports : Football, Swimming
- Reading Scientific Articles
- Active Participation in Online Learning

SKILLS

- Programming Languages
 - Python, SQL
- Business Intelligence Tools
 - Power BI, Tableau
- Web Development Tools
 - React, Flask
- Data Visualization Tools
 - Matplotlib, Seaborn, Plotly, Dash
- Data Analysis Tools
 - Pandas, NumPy
- Machine Learning
 - Supervised Learning, Regression, Classification, AutoML
 - Time Series Forecasting
 - Facial Recognition Technology
- Data Preprocessing
 - Data Cleaning, Feature Engineering
- Big Data Tools
 - Apache Hadoop, Hive, NIFI
 - Databases : MongoDB, Hbase, MySQL

SUMMARY

I'm a **second-year Ph.D. student** at the Mohammadia School of Engineering. My research focuses on **Road Safety through Artificial Intelligence**, integrating **quantitative and qualitative data** to **optimize tree-based methods**. This approach enhances both **interpretability and predictive accuracy in accident analysis**. By leveraging AI, I identify key risk factors and support data-driven safety strategies. I work towards **developing AI-driven solutions that improve public safety**.

EDUCATION

Ph.D. Student in Road Safety through Artificial Intelligence Since 2023

[Mohammadia School of Engineering-EMI](#) Rabat, Morocco

- **Second-Year Ph.D. Student**

Master's in Data Science and Big Data 2023

[Faculty of Science Ben M'sik -FSBM](#) Casablanca, Morocco

- **Specialization: Big Data with Honors**

Bachelor's in Mathematics and Informatics Sciences 2021

[Faculty of Science Ben M'sik -FSBM](#) Casablanca, Morocco

- **DataBases Option with Honors**

High School Diploma in Experimental Sciences 2018

[Baroudi High School](#) Casablanca, Morocco

- **Scientific Option with Honors**

WORK EXPERIENCE

Data Analyst & Market Research Team Member Since November 2022

[Manageering Inc](#) Waterloo, Ontario, Canada

- Collaborating with a cross-functional team on a **research project** focused on creating a Moroccan platform for **smart home security**.
- Utilizing **BI & Data Analyst** techniques to analyze the smart home security market, including user behavior and preferences.

Data Scientist Intern From February 2023 to August 2023

[Leoni](#) Berrchid, Morocco

- Designed and implemented dynamic KPI visualizations using **BI tools** and a standalone, user-friendly application to support **real-time, data-driven decision-making**.
- Applied **advanced predictive algorithms** to forecast KPI trends, enabling proactive business strategies.
- Built a robust data pipeline to consolidate and centralize data for **streamlined analysis and reporting**.

Class Attendance Management System using Facial Recognition 2023

[Faculty of Science Ben M'sik -FSBM](#) Casablanca, Morocco

- Created an innovative technology solution for automating classroom attendance tracking.
- Utilized facial recognition technology to identify and record student presence, enhancing efficiency and accuracy in educational institutions.

CONFERENCES & WORKSHOPS

Responsible ML Winter School Umeå March 2025

[Umeå University](#) Umea, Sweden

Winter School: Next-Generation AI and Economic applications February 2025

[UM6P](#) Benguerir, Morocco

International Conference on Optimization and Learning May 2024

[OLA 2024](#) Dubrovnik, Croatia

- Presented: **"Machine Learning Applications in Road Safety: A Comprehensive Review"**
- Covered trends, challenges, and gaps in applying machine learning to road safety.

Multimodal Foundation Models and Generative AI From April 2024 to May 2024

[International Spring School](#) Rabat, Morocco