



Ahmed Mrabet

Final Year AI Engineering Student at Ensias.
Seeking an End-of-Study Internship in Machine Learning/Data Science, starting February 2024.

Email: ahmed_mrabet@um5.ac.ma
Mobile: +212 0708198835
Website: ahmedmrabet.me
LinkedIn: ahmedmrabet
GitHub: Bratet

EDUCATION

- National School of Computer Science (ENSIAS)** Rabat, Morocco
Artificial Intelligence Engineering *September 2021 – June 2024 (3 years)*
 - Relevant coursework includes Mathematics, Statistics, Big Data, Data Analysis, Machine Learning Theory, High-performance computing, Deep Learning, Deep Reinforcement Learning, and Time Series.
- Lycée Moulay Hassan (CPGE)** Tangier, Morocco
Preparatory Classes MPSI-MP *September 2019 – June 2021 (2 years)*
 - Completed a two-year undergraduate program in Mathematics and Physics.

EXPERIENCE

- Yakeey** Casablanca, Morocco
Data scientist Intern *June 2023 - September 2023 (3 months)*
 - Utilized high-resolution satellite imagery for building footprint extraction, replacing manual collection.
 - Designed and implemented a machine learning model that achieved a notable 94.35% accuracy rate.
 - Developed an algorithm to convert predicted segmentation into geospatial coordinates, enhancing mapping accuracy.
 - Integrated APIs, facilitating real-time data acquisition across large regions.
- KubicBits** Casablanca, Morocco
AI & Backend Engineer Intern *June 2022 - September 2022 (3 months)*
 - Engineered an algorithm for the multi-vehicle routing problem, achieving a significant 75% boost in route generation efficiency and a 23% rise in optimization.
 - Contributed to the development and deployment of a responsive web application, leveraging RESTful APIs for instantaneous and dynamic route planning.

ACHIVEMENTS

- Boston Consulting Group Platinion Hackathon 2023 :** In a global Hackathon with 170 talents from Milan, Paris, Casablanca, Dusseldorf, São Paulo, Santiago, and Bogotá, we secured Morocco's top spot and ranked second internationally.

PROJECTS

- Protein-Protein Interactions Prediction** *January 2023 – June 2023 (6 months)*
Research Project in Deep Learning
 - Formulated a Graph Neural Network to predict protein-protein interactions between Homo sapiens and SARS-CoV-2.
 - Explored various features and methods to enhance prediction accuracy, achieving an accuracy of 99.87%.
- Traffic Light Optimization** *January 2023 – June 2023 (6 months)*
Academic Project
 - Constructed a simulation environment to emulate real-world traffic scenarios for reinforcement learning agents.
 - Utilized a state-of-the-art multi-agent Deep Reinforcement Learning (DRL) solution, yielding a 31% alleviation in traffic congestion by optimizing traffic light timings.
- Custom Transformer Model for Medical Assistance** *December 2022 – February 2023 (3 months)*
Personal Project
 - Trained a transformer model built from scratch on a medical dataset to assist doctors in patient interactions.
 - Built a web application for this model, highlighting text generation as a medical assistant tool.

SKILLS

- Languages :** French (C1), Arabic (Bilingual), English (C1), Spanish (Beginner)
- Programming Languages :** Python, R, Java, C/C++, Bash
- Libraries / Frameworks :** Pandas, Scikit-Learn, NumPy, Pytorch, Pytorch Lightning, Transformers, TensorFlow, Keras, Django, Fastapi, Flask, Pytest
- Databases & Big Data Tools :** MySQL, TinyDB, Spark, Cassandra, Hadoop, Kafka, Postgres, MongoDB, Spark
- Software & Tools :** Docker, Cuda, Jupyter, LaTeX, Postman, AWS
- Version Control :** Git