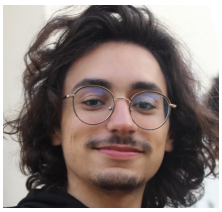

Ahmed Mrabet

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
  - 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
  - Completed a two-year undergraduate program in Mathematics and Physics.

Experience

- **Yakeey** — Casablanca, Morocco
  Machine Learning Engineer Intern — June 2023 - August 2023
  - 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
  - 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.

Projects

- **Protein-Protein Interactions Prediction**
  Research Project in Deep Learning — January 2023 – June 2023
  - 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**
  Academic Project — January 2023 – June 2023
  - 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**
  Personal Project — December 2022 – February 2023
  - 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 (Bilingual), Arabic (Bilingual), English (Fluent), 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
- **Software & Tools :** Docker, Cuda, Jupyter, LaTeX, Postman, AWS
- **Version Control :** Git