# Amine El Maghraoui

Data Science Student
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## EDUCATION

**•Boston University, Boston, MA, USA** *January 2024 - August 2024*
*MS in Computer Information Systems, Concentration in Data Analytics*

**•EPITA Engineering School, Paris, France** *September 2022 - January 2024*
*Engineering Degree in Computer Science, Majoring in Data Science*

**•EPITA Engineering School, Paris, France** *September 2019 - June 2022*
*Preparatory Class, Computer Science and Mathematics*

**•André Malraux, French High School** *September 2016 - July 2019*
*High school degree majoring in science with Honours.*

## EXPERIENCE

**•Collective Thinking** *June 2023 – February 2024*
*Junior Data Scientist* Paris
- Led an end-of-study research project to enhance accuracy in extracting textual information from medical documents using content analysis.
- Designed a modular pipeline architecture aligned with MLOPS principles, integrating image segmentation, dynamic OCR, rule-based text area filtering, and NLP named entity recognition.
- Achieved a 99% accuracy rate with robust scalability across diverse data types.

**•Polyconseil** *September 2022 – January 2023*
*Full-stack Developer Internship on the Coviflex Mission* Paris
- Contributed to front-end development using TypeScript and React.
- Addressed and resolved around thirty tickets, enhancing various application features.
- Assisted in reorganizing the domain configuration page to improve user navigation.

## TECHNICAL SKILLS

**Programming Languages**: C#, Python (TensorFlow, PyTorch, Pandas, Numpy, Scikit-learn, Plotly), R, SQL, Rust, C++

**Data Science and Machine Learning Skills**: Classification, Regression, Clustering, CNN, RNN, NLP, LLM, Transformers, HuggingFace

**Big Data and Cloud Technologies**: Hadoop, Spark, Kafka, Azure, AWS

**Tools and Frameworks**: Git, Docker, Linux

**Languages**: French (Native), English (Fluent), Arabic (Fluent), Spanish (Intermediate)

**Soft Skills**: Effective Communication, Collaborative Teamwork, Analytical Problem-Solving, Dynamic Adaptability

## PERSONAL PROJECTS

**•ML for Cybersecurity: Outlier Detection**
*Developed models to identify attacks in cybersecurity datasets*

- Analyzed data and visualized patterns to detect anomalies indicative of cyber attacks
- Implemented algorithms including Local Outlier Factor (LOF), Isolation Forest (IF), and Long Short-Term Memory (LSTM) networks for temporal series analysis
- Applied classification techniques such as XGBoost and Random Forest to enhance detection accuracy

**•Boat Type Classification Challenge**
*Competed in a challenge to classify different types of boats using deep learning.*

- Secured 2nd place among students from four different majors.
- Developed the model using TensorFlow and Keras.
- Created a convolutional neural network inspired by the VGG16 model.

**•Personalized Food Recommendation System**
*Designed a system to provide personalized food recommendations for users.*

- Used Pandas and Numpy for data manipulation and analysis.
- Implemented the system using Alternating Least Squares (ALS) matrices.