

# HAMZA ALAOUI MHAMDI



## PROFILE

Second-year **Data Engineering** student, passionate about artificial intelligence, big data, and distributed systems. Autonomous and motivated, I am seeking an internship to contribute to innovative projects in AI, NLP, or data engineering, while developing my skills in a stimulating environment.

## CONTACT

✉ alaoui.hamza2002@gmail.com  
☎ +212 670 588 416  
🌐 @hamza-alaoui-mhamdi  
📱 @hamza-rx12  
🌐 alaouihamza.vercel.app

## LANGUAGES

- **Arabic** (native)
- **French** (fluent)
- **English** (fluent)

## INTERESTS

- **Technologies:** Big Data, Artificial Intelligence, Programming
- **Hobbies:** Linux Ricing, Reading, Music, Travel
- **Culture:** Anime and Manga

## EXTRACURRICULAR ACTIVITIES

- **Clubs:** DATAI, O1 Club, ASIANHUB

## PROJECTS

### BIG DATA NETWORK BILLING PIPELINE



Network billing data pipeline processing large volumes of customer usage records (SMS, voice calls, data), batch and real-time processing, pricing, invoice generation, and dashboard visualization.

- ♦ **Tools:** Java, Spark, Kafka, Flink, Docker Compose, MongoDB, MinIO, Streamlit.

### TAGWIZE



Collaborative data annotation platform for efficient dataset labeling intended for machine learning workflows.

- ♦ **Backend:** Spring Boot, MariaDB, Redis
- ♦ **Frontend:** React, TailwindCSS
- ♦ **Security:** JWT Authentication

### LINUX COMMAND COMPLETION



Automatic Linux command completion system based on neural networks, analyzing history to predict and suggest commands in real-time.

- ♦ **Models:** LSTM, GRU, RNN with TensorFlow and Keras
- ♦ **Integration:** Bash scripts for smooth shell interaction
- ♦ **Evaluation:** Top-K accuracy, Sparse Categorical Cross-Entropy loss

### TYPO TAMER



Typo Tamer is a typo corrector developed from scratch using the minimum edit distance algorithm and Jellyfish for phonetic comparison, offering automatic text correction.

## EDUCATION

### DATA ENGINEERING SPECIALIZATION.

2023–present

- ♦ National School of Applied Sciences of Al Hoceima (ENSAH).

### PREPARATORY CYCLE FOR ENGINEERING STUDIES.

2021–2023

- ♦ National School of Applied Sciences of Al Hoceima (ENSAH)

### BACCALAUREATE IN MATHEMATICAL SCIENCES B.

2020–2021

- ♦ Technical High School of Errachidia.

## SKILLS

- **Languages:** C, Java, Python, PL/SQL, Shell (Bash), JavaScript/TypeScript.
- **Artificial Intelligence:** Machine/Deep learning and NLP using TensorFlow, Keras, Scikit-learn, Hugging Face, LangChain.
- **Data Analysis:** Pandas, NumPy, Matplotlib, Seaborn, NLTK, SpaCy.
- **Big Data:** Hadoop, Spark, Kafka, Flink.
- **Web Development:** Flask, FastAPI, Spring Boot, React, Tailwind CSS.
- **Databases:** Oracle Database, MySQL, PostgreSQL, MongoDB.
- **DevOps:** Docker, Docker Compose, Linux.