

# DIOUANE Hicham

Machine Learning Engineering Student

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## Education

### Computer Engineering – Big Data and Cloud Computing

2023 - 2026

ENSET Mohammedia - Morocco

### Bachelor's in Computer Science & Mathematics

2020 - 2023

Ibn Zohr University - Morocco

## Projets

### Air Quality Index (AQI) Prediction System

[Source Code](#)

- Developed a **serverless MLOps pipeline** to predict AQI for the next 3 days using weather and pollution data.
  - Built **feature pipelines** to fetch, process, and store data in **Hopworks Feature Store**.
  - Trained and deployed an **XGBoostRegressor** model using **GitHub Actions** for automation.
  - Created a **Streamlit web app** to visualize predictions in real-time.
- Tech Stack:** Python, XGBoost, Hopworks, Streamlit, GitHub Actions.

### Diabetes Detection

[Source Code](#)

- Designed a **machine learning model** to predict diabetes using patient health data.
  - Performed **data preprocessing** and **feature engineering** to improve model accuracy.
  - Built an interactive **Streamlit dashboard** for real-time predictions and visualizations.
- Tech Stack:** Python, Scikit-Learn, Numpy, Pandas, Matplotlib, Streamlit.

### Facial Recognition System for Attendance Tracking

[Source Code](#)

- Developed a **JavaFX-based desktop application** for real-time facial recognition.
  - Integrated **OpenCV** for face detection and **SQLite** for attendance record storage.
  - Built a **Flask API** to handle image processing and facial recognition tasks.
- Tech Stack:** JavaFX, SQLite, OpenCV, Flask.

## Experience

### Internship in Machine Learning | Noetem (July 2024)

#### English Premier League Match Prediction System

[Source Code](#)

- Created a **machine learning model** to predict match outcomes using historical EPL data.
  - Used **BigQuery** for efficient data storage and querying of large datasets
  - Built a **Power BI dashboard** for data visualization and insights.
  - Deployed the model using **Flask** and integrated it with a **Next.js** frontend.
- Tech Stack:** Python, Scikit-Learn, Numpy, Pandas, Matplotlib, Seaborn, Power BI, NextJS, Flask, GCP

## Technical Skills

**Languages:** C++, Java, Python, JavaScript

**Skills:** Machine Learning, Web/Mobile/Desktop Development, Active Listening

**Frameworks & Libraries:** Scikit-Learn, Flask, Streamlit, NextJS, React Native

**Clouds, Databases & BI Tools:** OCI, GCP, Docker, MongoDB, MySQL, SQLite, Power BI

**Developer Tools:** VS Code, Jupyter, IntelliJ IDEA, Git, GitHub, Postman

## Extracurricular Activities

### Active Member in Google Developer Group Club (GDG)

Participate in hackathons, tech meetups, and learning sessions focused on emerging technologies.

## Language

**Arabic:** Native

**English:** Fluent

**French:** Fluent