

# YASSIN ASERMOUH

Data Scientist · ML Engineer

Rabat, Morocco

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yassin-asermouh

Thedarkiin

Remote Ready

## PROFILE

Data Science Engineering student at INSEA (Class of 2028) with hands-on experience building production-ready ML solutions. Proficient in Python, PyTorch, Scikit-learn. Available immediately for remote part-time work (15-25h/week) and freelance opportunities. Portfolio: [github.com/Thedarkiin](https://github.com/Thedarkiin)

## TECHNICAL PROJECTS

### Wind Power Forecasting

Python · PyTorch · Pandas · Scikit-learn

GitHub

2025

- Built Transformer neural network achieving **19% improvement** over LSTM baseline for 24-hour wind power prediction on industrial SCADA dataset (110k samples)
- Developed custom Ramp Loss function for critical event detection with **F1-score of 0.85**; applied Monte Carlo Dropout for uncertainty quantification
- Implemented complete ML pipeline: data cleaning, time series preprocessing, feature engineering, cross-validation. 37-page technical report

### Customer Churn Prediction

Python · Scikit-learn · XGBoost · Pandas

GitHub

2024

- Designed end-to-end ML pipeline (6 modules) for telecom churn prediction. XGBoost achieved **75% recall**, catching 3 of 4 at-risk customers
- Performed feature engineering using Mutual Information on 10 key factors (contract type, tenure, security). Identified actionable retention strategies
- Built production-ready architecture with modular design, structured logging, and automated metrics export

## EXPERIENCE

### ML Project Support

INSEA Students

2024 – Present

Remote

- Provided Python debugging and code architecture guidance for 5+ student ML projects spanning classification, regression, NLP, and time series analysis
- Delivered under tight deadlines with focus on clean, modular code design and technical documentation

### Survey Analyst Intern

High Commission for Planning (HCP)  
Morocco

Summer 2024

- Observed field data collection methodology: sampling protocols, statistical validation, and quality control measures

## EDUCATION

### Engineering Degree in Data Science

INSEA

2023 – 2028

Rabat, Morocco

**Core Coursework:** Machine Learning, Deep Learning, Statistical Learning, Data Engineering, Time Series Analysis, NLP, Optimization

**Focus:** Production ML systems, end-to-end pipeline development

### Classes Préparatoires (CPGE)

2021 – 2023

Tangier, Morocco

Intensive training in Advanced Mathematics, Physics, Computer Science. Passed national competitive exam for top engineering schools

## LEADERSHIP & COMMUNITY

### Innovation Edge Club

Active Member

INSEA

2024 – Present

- Provided technical support during Data Science workshops (20+ participants): Python debugging, dependency resolution, environment troubleshooting
- Assisted with event logistics and organization for tech-focused activities and coding sessions

### INSEA Charity

Volunteer

INSEA

2024 – Present

- Organized Ramadan initiatives: meal distribution to hospitals in Rabat, coordinated logistics for community events
- Created graphic design materials (logos, posters) for charity campaigns and fundraising activities

## LANGUAGES & INTERESTS

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Languages: French (Native), English (Fluent), Arabic (Native)

Interests: Volleyball, Rock Climbing, Calisthenics, Reading, Drawing, E-sports