Abderrahim Boussyf

Data Scientist & Machine Learning Engineer

📍 Marrakesh, Morocco • 📞 +212 632-187305 • ✉ Boussyf0@gmail.com
💼 linkedin.com/in/abderrahim-boussyf • 🔗 github.com/Boussyf0 • 🌐 boussyf0.github.io/portfol

Professional Summary

Results-driven Computer Engineering student specializing in **Machine Learning** and **Data Science**. Proven track record in developing AI systems with measurable business impact: **50% increase in lead qualification, 60% CAC reduction, and 40% conversion improvement**. Seeking **Machine Learning / Data Science Internship** in an innovative global environment.

Skills

Technical

- **Programming & Tools:** Python (Advanced), SQL, Java, C++, C#,Git, Docker
- **Machine Learning:** Scikit-learn, XGBoost, LightGBM, TensorFlow, PyTorch, Feature Engineering, Model Optimization
- **AI & NLP:** LLMs, RAG Systems, Transformers, BERT, GPT, Conversational AI, Prompt Engineering
- **Data Science:** Pandas, NumPy, Matplotlib, Seaborn, Plotly, Statistical Analysis, Predictive Modeling, A/B Testing
- **Development:** Streamlit, Flask, FastAPI, REST APIs, ETL Pipelines, AWS & Azure (Fundamentals), CI/CD

Soft

- **Problem-Solving & Analytical Thinking:** Strong ability to break down complex technical challenges into actionable solutions
- **Team Collaboration:** Proven experience working in cross-functional teams (engineers, data scientists, business stakeholders)
- **Communication:** Effective at presenting technical concepts to non-technical audiences and documenting solutions
- **Adaptability & Learning:** Quick learner with demonstrated ability to master new technologies and methodologies independently.

Professional Experience

Machine Learning Engineer Intern   *Jul 2025 – Sep 2025*
Brain Gen Technology   *Casablanca, Morocco*

- Designed and deployed a **RAG-based conversational AI platform**, improving lead qualification by **50%**
- Reduced **Customer Acquisition Cost (CAC) by 60%** through conversational analytics and data-driven targeting
- Enhanced customer conversion by **40%** via NLP-powered chatbot with ML-based lead scoring

Data Analyst Intern   *Jul 2024 – Aug 2024*
L'ONEEP - Dakhla   *Ad Dakhla, Morocco*

- Built an analytics tool for electrical grid loss analysis, cutting reporting time by **30%**
- Identified 3 factors responsible for **over 40% of technical losses** through exploratory data analysis
- Proposed actions projected to reduce network losses by 5–10%

Process Engineering Intern   *Jul 2023 – Aug 2023*
OCP Group (MPI)   *Safi, Morocco*

- Monitored NISSAN process parameters to optimize phosphoric acid production efficiency
- Collaborated with multidisciplinary teams to identify and implement process improvements

Projects

- **AeroIntelliCAD AI-Powered Aerospace Design Platform**
  Leading development of **intelligent CAD platform** with 3D visualization (Three.js), AI assistant (PyTorch/TensorFlow), and CFD simulation (OpenFOAM). Targeting aerospace industry to reduce design errors and **$10B+ annual losses** from accidents.
- **Real-Time Predictive Maintenance Platform for Smart Factories**
  Designed end-to-end **microservices architecture** integrating IIoT data ingestion (MQTT/OPC UA), anomaly detection, and **RUL prediction (LSTM/GRU)**. Deployed with Docker/Kubernetes, Kafka streaming, TimescaleDB, and MLflow for production ML pipelines.
- **AI-Powered Technical Interview Simulator**
  Built a local **LLM-based** application for personalized interview training with dynamic question generation and response evaluation (Python, Streamlit, NLP).
- **Intelligent Chess Engine (C#)**
  Developed a chess AI using minimax algorithm and alpha-beta pruning to evaluate optimal moves.

Education

Master's in Computer Engineering   *Sep 2023 – Present*
École Marocaine des Sciences de l'Ingénieur (EMSI)   *Marrakesh, Morocco*
Engineering Diploma – Process & Materials   *Sep 2021 – Jul 2023*
École Nationale des Sciences Appliquées (ENSA)   *Safi, Morocco*
Preparatory Classes (Maths & Physics)   *Sep 2018 – Jul 2020*
Classes Préparatoires aux Grandes Écoles   *Ad Dakhla, Morocco*

Languages & Interests

Languages: Arabic (Native), French (Fluent), English (Intermediate)
Interests: Football, AI Innovation, Data Visualization, Reading() , Industrial IoT, Aerospace Engineering.