

IHSSANE BAMMAD



PROFILE

Second-year engineering student at École Centrale Casablanca, seeking a three to four-month internship starting April 21 in the field of data science and artificial intelligence.



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Casablanca, Maroc



ihssane2002



ihssane bammad

EDUCATION

General Engineering Student/ Courses: Probability & Statistics, Coding Week, Object-Oriented Programming & Modeling, Introduction to AI.

Bachelor's Degree in Electronic Engineering & Telecommunications/Courses: Industrial Computing

University Scientific and Technical Studies Diploma/Courses: Computer Science, Algorithms & Programming, Descriptive Statistics & Probability



Ecole Centrale Casablanca

2023 - 2026



FST Beni Mellal

2020 - 2023



FST Beni Mellal

2020 - 2022

PROFESSIONAL EXPERIENCE

Internship – IDSUD Energie

October 2024 - January 2025

Designed a predictive maintenance model for the Neholight hybrid system, implementing Isolation Forest and Gradient Boosting algorithms to detect and prevent system failures.

Operator Internship – ONEE

July 2024 - August 2024

Development of a web application using CNN models for incident detection and automatic report generation, aimed at optimizing the maintenance of Low Voltage (LV) networks.

Internship – NOMAC

April 2023 - June 2023

Designed and supervised a meteorological station at the NOOR 1 solar plant in Ouarzazate, analyzing real-time data to anticipate performance variations due to weather conditions.

TECHNICAL SKILLS

- Data Analysis & Visualization: Matplotlib, Seaborn, Power BI
- Machine Learning & AI: Python, Hyperparameter Optimization (GridSearchCV), Random Forest, SVM
- Deep Learning: TensorFlow, Keras
- Big Data: Google Cloud Platform, BigQuery
- Simulation & Modeling: MATLAB
- Database Management: SQL (Access), NoSQL (MongoDB)
- Programming: Python, C, Object-Oriented Programming (OOP)
- Web Development: HTML, CSS, JavaScript, React, Flask
- Project Management: ProjectLibre
- Diagramming & Schematics: Draw.io

PROJECTS AND ACHIEVEMENTS

Surface Segregation Modeling in Alloys| AI-Based Scientific Project

Developed and compared two AI models: a classic Neural Network (NN) and a Graph Neural Network (GNN) to predict surface segregation in ternary alloys.

Supervised Colon Cancer Classification

Applied supervised classification models (Logistic Regression, SVM, k-NN, Decision Tree, Random Forest) to distinguish between normal and cancerous samples using gene expression data.

Coding Week Project

Designed a movie recommendation system based on collaborative filtering using ALS and SGD models for personalized suggestions.

TDLOG Project

Developed a waste management website using React, Flask, and SQL to optimize waste collection and tracking

"Learning by Doing" Project

Developed an interactive platform using HTML, CSS, and JavaScript to enhance student engagement in lectures, integrating quizzes to boost participation.

Object-Oriented Programming & Modeling

Developed a web-based platform for optimizing school processes and improving management efficiency.

COURSERA CERTIFICATES IN TECHNOLOGY AND ARTIFICIAL INTELLIGENCE

- Google Cloud Big Data and Machine Learning Fundamentals
- Deep Learning Specialization
- Client Needs and Software Requirements
- Introduction to Artificial Intelligence (AI)
- Generative AI: Introduction and Applications
- Programming Foundations with JavaScript, HTML, CSS
- Software Engineering: Modeling Software Systems using UML
- Data Science Methodology

ENGAGEMENT ASSOCIATIF

Débat Club Centrale Casablanca
Communication Manager

Quanta Club Centrale Casablanca
Training Manager

LANGUAGE SKILLS

French: Professional Level (DALF C1)

English: Intermediate Level

Arabic: Native Language

PROFESSIONAL QUALITIES

- Seriousness & Commitment
- Adaptability & Creativity
- Teamwork & Communication
- Time Management & Organization