

# JAMAL BOUSSOUF

jboussouf.github.io ◇ jamalbssouf@gmail.com ◇ github.com/jboussouf ◇ linkedin.com/in/jboussouf

## EDUCATION

---

### University Mohammed Premier

2022 - Present

*MS of Data Science and Smart systems*

*Nador One, MA*

- In my Data Science and Smart Systems master's program, I immersed myself in vital fields like Data Science, Data Analysis, Machine Learning, Data Mining, Data Warehousing, and Big Data. These areas equipped me with skills to extract insights, interpret data, build predictive models, uncover patterns, design efficient storage systems, and manage large datasets effectively.

### University Mohammed Premier

2018 - 2022

*B.Sc in computer science and mathematics*

*Nador One, MA*

- In my Mathematics and Computer Science Bachelor's program, I focused on essential areas including Java programming, Operating Systems, Networking Administration, Databases Administration, and Web Administration. This involved mastering Java for software development, understanding Operating Systems functionalities, managing networks, organizing data in databases, and effectively handling web-based systems.

### Farkhana High School

2015 - 2018

*science of physic and mathematics*

*Nador One, MA*

- Throughout high school, I focused on Mathematics and Physics. Mathematics honed my problem-solving skills through branches like algebra and calculus, while Physics deepened my understanding of natural phenomena such as mechanics and electricity.

## PROJECTS

---

### Data Science for Healthcare

2023

*Advancing Diabetic Retinopathy Detection: Fine-Tuning VIT Models*

*FPN*

- Analyse diabetic renopathy dataset on kaggle (amanneo/diabetic-retinopathy-resized-arranged), to classify images
  - Data visualisation, data transformation
  - Use deep learning algorithm and architects like CNN, ResNet.
  - Fine tune vision\_transformer from google to classify images.
- URL: <https://jboussouf.github.io//portfolio/portfolio-4/>.

### Data Science for Audio cleanig

2022

*Overcoming Speech Recognition Challenges with GAN based Solutions*

*Nador One, MA*

- Data transformation, transfer audio to images (spectrogram format) to training our deep learning architecture
- reinforcement learning, build a reinforcement learning architecture using the GAN architecture to train an autoencoder model to clean up the audio and give it to another CNN architect to classify the audio.
- URL: <https://jboussouf.github.io//portfolio/portfolio-5/>.

### Data Science for business

2022

*ChatEstimate*

*Nador One, MA*

- This project aims to develop an intelligent system that combines a chatbot interface with an efficient regression model to predict house prices using machine learning techniques. In addition, the project incorporates the use of the LLMs API (gpt 3.5 turbo), in order to improve the chatbot's conversational capabilities.

- URL: <https://jboussouf.github.io//portfolio/portfolio-8/>.

### **Data Science for stock productions**

2022

*Optimizing Investments: Stock Analysis and Predictive Modeling of NVIDIA Corporation.*

- The project begins with data pre-processing techniques to clean and organize the data for analysis. It involves preparing the dataset and conducting a thorough exploration to understand patterns, trends, and important features within the data.
- The study employs four different modeling techniques - logistic regression, PCA, KNN, and LSTM - to predict NVIDIA Corporation's stock prices. These techniques offer varied approaches to analyze and forecast stock behavior, with LSTM specifically chosen for its ability to capture temporal dependencies in time series data.
- The project concludes by presenting the outcomes and insights derived from the modeling techniques. This section likely includes discussions on the accuracy of each method and provides suggestions for potential investment strategies based on the findings, offering valuable guidance for making investment decisions regarding NVIDIA Corporation's stock.
- URL: <https://jboussouf.github.io//portfolio/portfolio-9/>.

## **PUBLICATIONS & CONFERENCE**

---

### **EDPACS**

2023

*IOTA TANGLE 2.0: AN OVERVIEW*

- <https://www.tandfonline.com/doi/full/10.1080/07366981.2023.2293322>.

### **MASI**

2022

*Signing Algorithms Behind Blockchain Digital Transactions*

- <https://drive.google.com/drive/folders/1krIp5X9WD4GDSQc-1NXPieC8cYMjK9ac>.

## **TOOLS & FRAMEWORKS**

---

### **SQL Databases**

- Oracle, MySQL server, SQLite

### **NoSQL Database**

- MongoDB, Firebase

### **Data analytic**

- Python(matplotlib, pandas, numpy), power bi

### **Machine learning & deep learning**

- sklearn, tensorflow, pytorch

### **Big Data**

- Hadoop, spark(pyspar)

### **Networking**

- Packet tracer, GNSS3

### **Programming language**

- Python, Java, Bash, C/C++

### **Tools**

- Git, AWS (EC2, Gamma), Google Colab