Fouad AURAG
Data Scientist

I'm Fouad Aurag, a second-year Master's student in Data Science and Intelligent Systems at the Pluridisciplinary Faculty of Nador. I'm passionate about Data Science and Artificial Intelligence. I have solid experience in Data Mining, as well as Machine Learning and Big Data with Hadoop, in additional to Data Warehouse technologies. I'm eager to continue learning and developing my knowledge in these fields.

in @fouad-aurag
@aurag-fouad
R⁶ @Fouad-Aurag

✉ aurag.fouad@gmail.com
🔗 https://aurag-fouad.github.io
🏠 Midar, Driouch
📅 Date of birth 04/05/1999
🚩 Moroccan
📱 0618-460997

Education

Master of Science
Mohammed First University
2022 – 2024
Nador, Morocco
- Data Science and Intelligent Systems

Bachelor of Science
Mohammed First University
2017 – 2022
Nador, Morocco
- Mathematics and Computer Science

Work experience

Internship in Web Development
OMDATA Consulting
12/2021 – 08/2022
France
- **Mission:** Development of a web application to be hosted on the company's website so that employees can register their monthly activities, validate them and generate invoices.
- **Tools:** Angular - Nodejs - Express - HTML - CSS - TypeScript - Bootstrap
- [Certificate] & [Recommendation Letter]

Academic projects

Credit Card Fraud Detection For Classifying Legitimate and Fraudulent Transactions
- This project aims to develop a model capable of predicting normal and fraudulent transactions. I trained and selected the best model, which I deployed in a web application, allowing us to use, explain and interpret the model.
- **Tools: Pycaret, catboost, xgboost, lightgbm, pandas, numpy, matplotlib, seaborn, sklearn, imblearn, shap, Angular, flask.**
- [Link to the Project]

Multi-Source ETL Integration: On-Premise and Cloud
- I managed an ETL project involving extracting data from various sources(SQL Server, Excel, and CSV files), applying necessary transformations, and then loading it into a Data Warehouse. I replicated this process in both on-premise and Azure cloud environments using SSIS and Java programming with multithreading.
- Tools: SSIS, Azure SQL Database, Azure Data Factory, SQL Server, Java, Vaadin.
- [Link to the Project]

Expertise

Data Preparation

Machine Learning

Deep Learning

Data Mining

Data Security

Model Interpretability

Web Development

AutoML NLP

Technical skills

Programming languages
- Python, C, C++, Java, php, HTML/CSS/JS , XML, SQL avancé

Python libraries
- Pandas, Numpy, Seaborn, Matplotlib, Plotly, Sklearn, imblearn, PyCaret, Keras, TensorFlow, BeautifulSoup, shap, PyQt, Joblib, Pickel, NetworkX, WordCloud

FrameWorks/Technologies
- Spring MVC, JSP, Hibernate, LARAVEL , ANGULAR, Angular Material, Bootstrap, Moment JS , Node JS, Docker

Databases/servers
- MongoDB, Oracle, MySQL, Access, SQL Server, Tomcat

Academic projects

Intrusion detection systems based on machine learning models
- This project aimed to develop an intrusion detection system capable of surpassing the limits of classic IDS. Using artificial intelligence techniques.
- **Tools: Sklearn, Tensorflow, Numpy, Pandas, Matplotlib, Seaborn.**
- [Link to the Project]

Analyzing Instagram Threads with Hadoop for Optimizing User Experience
- This project aimed to optimize user experience in mobile applications by analyzing user reviews on Instagram Threads, using tools such as HDFS, Apache Spark, and Zeppelin.
- **Tools: Hortonworks Sandbox HDP 3.0, HDFS, Spark, Zeppelin, Ambari, pandas, wordcloud, seaborn, matplotlib.**

Gruphoo: Cuckoo Search algorithm for Graph Path Optimization
- This project implements the Cuckoo Search Optimization Algorithm in Python to search for the optimal path within a non-oriented graph. Multithreading is incorporated to enhance efficiency. Additionally, a user-friendly web application is developed using Angular and Flask, then deployed on Docker.
- **Tools: Python, Networkx, Plotly, Angular, Flask, Multithreading, Docker, DockerHub.**
- [Link to the Project]

Chatbot for Real Estate Price Prediction
- The project's aim was to develop an intelligent model utilizing the various steps of the CRISP-DM process. This model was then deployed in a web application which uses a Google Dialogflow agent to ensure smooth communication and provide accurate predictions to users based on the selected model.
- **Tools: PyCaret, pandas, numpy, seaborn, pickle, Angular, Nodejs, Dialogflow, flask.**
- [Link to the Project]

Voluntary experience

Founding Member, Club of Artificial Intelligence and its application (I2A)
FPN - UMP

04/2023   *Nador*

I am a Founding Member and Vice-President of the first Club of Artificial Intelligence and its application (Club I2A) at the Multidisciplinary Faculty of Nador.

Hackathon Organizer
FPN - UMP

06/2023   *Nador*

I was a core member of the organization team for the first Hackathon at the Multidisciplinary Faculty of Nador, focusing on Artificial Intelligence.
[Certificate]

Organized a workshop on artificial intelligence and scientific research.
المجلس العلمي المحلي لإقليم الدريوش

11/2023   *Driouch*

I was a core member of the organization team to orgnize a workshop on utilizing artificial intelligence for scientific research.[Certificate]

Technical skills

BigData
- Hadoop, Spark, Hortonworks Sandbox HDP 3.0

Data Warehousing
- SSIS, SSAS, SSRS, SSMS

Web development
- HTML , CSS , JAVASCRIPT , TYPESCRIPT , PHP , XML

Microsoft Office
- Word, PowerPoint, Excel, Access, Project

Languages

French   Arabic   English

Personality

Research Mindset

Critical Thinking

Good communication skills

Creativity

Interests

Artificial Intelligence

NLP

Video games