



CONTACT

- 25 years old
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- Driving licence B

HARD SKILLS

- Machine Learning :** Python (pandas, numpy, matplotlib, OpenCV, scipy, Scikit-Learn, keras, pytorch) .
- Computer Vision :** Wolfram, OpenCV, scikit-learn , scikit-image, Pytorch.
- NLP :** Topic Modeling, LLMs fine tuning, Text Summarization, Keywords Extraction, Word Embeddings, Graph Learning .
- MLOps :** Packaging, Deployment, Docker, Containers, Cloud, Microservices, Streamlit, FastAPI, VueJS.
- Linux :** Bash Scripting, Commands.
- Data Base :** MongoDB, MySQL, SQL
- Tools :** VsCode, Jupyter Notebook, Excalidraw, Agile.
- Graphic Design :** Photoshop, Premiere Illustrator, Xd.
- Hardware :** ESP32, Arduino.

SOFT SKILLS

- Time Management :** prioritizing tasks effectively.
- Market Research and Analysis :** conducting comprehensive market studies.
- Team Collaboration :** contributing to a positive team dynamic.
- Adaptability:** quickly adapting to new technologies or methodologies.

LANGUAGES

- Arabic** Mother Tongue.
- French** Fluent.
- English** Advanced.
- Spanish** Beginner

HOBBIES

- Amateur Astronomy
- Programming
- Teaching
- Graphic Design

YASSIR LAIRGI

Research and Development Engineer in Artificial Intelligence

Teamwork, Flexibility, Continuous Learning

- “ Yassir has shown an ability to lead a project from A to Z. He was able to investigate complex issues in a proactive and autonomous manner. ”
P.C - AUVALIE INNOVATION
- “ We are very satisfied with the work that Yassir brought. He succeeded perfectly in adapting his knowledge to our application, hence the proposal to include a small chapter on the subject in a SPIE article. ”
F.B - CNES

EDUCATION

- 2021 - 2022 ECOLE DES MINES DE SAINT ETIENNE FRANCE - TRIPLE DEGREE**
MASTER OF SCIENCE - MATHEMATICAL IMAGING AND SPATIAL PATTERN ANALYSIS
- 2020 - 2021 ECOLE DES MINES DE SAINT ETIENNE FRANCE - DOUBLE DEGREE**
2021 - 2022 INGÉNIEUR CIVIL DES MINES | MAJOR-1 DATA SCIENCE , MAJOR-2 COMPUTER SCIENCE , TOOLBOX COMPUTER VISION & ARTIFICIAL INTELLIGENCE
- 2018 - 2020 ECOLE HASSANIA DES TRAVAUX PUBLICS MOROCCO**
- 2016 - 2018 PREPARATORY CLASSES, MATHEMATICS AND PHYSICS**

PROFESSIONAL EXPERIENCE

R&D ENGINEER IN AI

24 November- Now
2022 - NOW

AUVALIE INNOVATION - LYON FRANCE - CDI

- Generating valuable insights (competitive intelligence) for business stakeholders through innovative AI models, with a particular emphasis on massive data collection, scraping, NLP, graph learning, LLMs, and machine learning.
- Developed an information retrieval tool for massive data scraping.
- Developed a fine-tuned Q&A chatbot LLMs-based for custom documents.
- Successfully supervised three interns and drove impactful results.
- Developed a graph-based explainable AI tool for business holders.
- Troubleshoot and optimize AI systems to improve their performance.
- Leading ideation process for algorithm development.
- Conducting research and development to design and implement innovative AI models and systems that improve business growth and customer satisfaction.
- Performing comprehensive feasibility analysis and market research to determine feasible AI solutions that would drive business insights for business holders.

Keywords: AI R&D Innovation, Competitive Intelligence, Feasibility Analysis, Market Research and Analysis , Business Development, Massive Data Analysis, Information Retrieval, Business Insights Prediction.

Tech keywords: Machine Learning, Natural Language Processing, Text Mining, Big data analysis, ALgorithm design and development, Graph Learning, Graph Embeddings, Word Embeddings, Python, SQL, Cypher, Hexagonal Pattern, SOLID Principles, OOP (Object-Oriented Programming), Domain-Driven Design, Microservices, PostgreSQL, Neo4J, MongoDB, GitHub, VS Code, Jupyter Notebook, NLP, LLMs.

COMPUTER VISION INTERN

04 April - 30 Sept
2022

CENTRE NATIONAL D'ETUDES SPATIALES - TOULOUSE FRANCE - INTERNSHIP

- Proposed an innovative approach to reduce satellite failures, in hyperspectral 3D cubes, through automatic detection of organic materials which have the disadvantage of outgassing under vacuum and contaminating the satellite detectors.

This approach was published as a scientific paper.

Keywords : Hyperspectral Image Processing, openCV, ICA, PCA, Kmeans, Automatic Segmentation, 2DCNN, Fast3DCNNs , keras , Parallel computing, GUI.

RESEARCH INTERN

24 January - 30 March
2022

UNIVERSITY OF GADJAH MADA - INDONESIA - INTERNSHIP

- Improved an emotion recognition model through the development of a data augmentation GAN model designed to augment the training dataset.

Keywords : Emotion Recognition, Data Augmentation, GANs, Deep Learning, Pix2pix.

R&D IN NATURAL LANGUAGE PROCESSING INTERN

01 June- 01 Sept
2021

AUVALIE INNOVATION - LYON FRANCE - INTERNSHIP

- Developed an NLP tool reducing document comprehension time from 1 hour to 3 minutes for approximately 50 pages.
 - Implemented a graph-based approach to estimate semantic relatedness in technical documents.
 - Enhanced team productivity by saving 95% of time while maintaining output quality.
- Keywords :** NLP , Topic Modeling, LDA , KeyBERT, Graph theory, Mind Mapping, Relatedness measure, Streamlit and FastAPI for MLOPS.

FULL-STACK DATA SCIENCE INTERN

10 Sept- 20 January
2021-2022

- Enhanced the infrastructure of the tool by creating a dockerized flow, background tasks and high-performance web server.

Keywords : Docker Containers, Microservices, MLOPS, Parallel processing.