

# Mohamed AL JALANJI

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## EDUCATION

### Data ScienceTech Institute

Master in Data Science & Artificial Intelligence – GPA : 3.8/4.0

Sep. 2023 – Now

Paris, France

### Université Sorbonne Paris Nord

Bachelor in Computer Science – Dual Degree

Sep. 2021 – Jul. 2023

Villetaneuse, France

### Seconda Università di Napoli

Bachelor in Statistics & Data Analytics – GPA : 3.7/4.0

Sep. 2020 – Jul. 2023

Caserta, Italy

### Tomsk State University

Bachelor in Software Engineering (1<sup>st</sup> year) – GPA : 3.8/4.0

Sep. 2019 – Jul. 2020

Tomsk, Russia

## WORK EXPERIENCE

### AI Engineer - Apprenticeship

APTIV

Oct. 2023 – Now

Vannes, France

- Transformed optimally dataflow graphs to Logical Execution Time (LET) design for automobile projects using Constraint Programming (Z3), ensuring the reduction of LET design manual labor by almost 70%.
- Fine-tuned the LLM model CodeT5 using Pytorch to translate text to a local automobile platform command language, and developed evaluation metrics & parsers needed. Accuracy: 91%.
- Developed Cloner tool for systematic duplication of AUTOSAR Classic elements using lxml Python library to reduce time-execution errors for a local SensorFusion project running on the target automobile platform.

### ML Engineer - Internship

ETIS lab (CNRS UMR 8051)

May 2022 – Jul. 2022

Cergy, France

- Obtained great clustering results of linguistic burst data as time series using the state-of-the-art MPDist (Matrix Profile Distance) to build the distance matrix. Stumpy library, PCA, UMPA & HDBSCAN algorithms were used.

### Junior Data Scientist - CDI

PI Marketing

Mar. 2017 – Sep. 2019

Tangier, Morocco

- Deployed machine learning ensemble models for customer segmentation and predictive lead scoring to optimize marketing campaign performance and personalize outreach using Pandas, Scikit-learn, SQL & Tableau.

### Android Developer - CDD

Smart Source

Feb. 2016 – Jan. 2017

Tangier, Morocco

- Developed an Android app streamlining user engagement and enhancing operational efficiency for clients using Android Studio, Firebase & RESTful API.

## PROJECTS | Github.com/jalanjii | 11 Projects

- Anomaly Detection:** End-to-end real-time statistical anomaly detection for trading data with Fink & Kafka.
- Motif-based Clustering:** Developed a time series subsequence clustering method for sales data based on chain & common motifs, outperforming whole time series clustering on two validation metrics: DBCV & Dunn.

## CERTIFICATIONS

- AWS Certified Solutions Architect** (Expected: Sep. 2025)
- Deep Learning Specialization** – DeepLearning.ai
- Neo4j**
- Discrete Optimization** – Melbourne Univ

## TECHNICAL SKILLS & INTERESTS

- Programming Languages:** Python, R, SQL, NoSQL Cypher, C/C++, Kotlin, NetLogo
- Libraries & Frameworks & MLOps:** Scikit-Learn, Pytorch, Transformers, PySpark, Pandas, NumPy, UnslothAI, SageMaker, LangChain, Docker, DVC, AWS ECS, FastAPI, Rest API, MLflow
- Misc. Tools:** Git, GitHub CI/CD, VSCode, PostgreSQL, Plotly, Folium, Matplotlib, Tableau, Flink, Kafka
- Languages:** English (native), French (pre-advanced), Italian (beginner), Arabic (native)
- Interests:** Bluegrass music, Kayaking, Hiking, Mountain Biking