# Mohamed AL JALANJI

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### **EDUCATION**

Data Science Tech InstituteSep. 2023 – NowMaster in Data Science & Artificial Intelligence – GPA: 3.8/4.0Paris, France

Université Sorbonne Paris Nord

Bachelor in Computer Science – Joint Dual Degree

Villetaneuse, France

Seconda Università di Napoli

Sep. 2020 – Jul. 2023

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

Caserta, Italy

Tomsk State University

Sep. 2019 – Jul. 2020

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

#### WORK EXPERIENCE

# AI Engineer Apprentice APTIV

• Optimally transformed 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.

#### Machine Learning Research Intern

ETIS lab (CNRS UMR 8051)

May 2022 – Jul. 2022

Cergy, France

Tomsk, Russia

Vannes, France

Sep. 2023 - Now

• Worked on modelling linguistic burst data into time series for clustering applications. Matrix Profile (MP) method was applied to such models and good clustering results were obtained.

Android Developer May 2016 – Sep. 2019

Freelance Tetouan, Morocco

 Developed Android applications for clients using Android Studio with Java. Some apps achieved high success on Google Play Store.

#### PROJECTS (Complete List: github.com/jalanjii)

- Anomaly Detection: An end-to-end ML system to detect anomalies for real-time financial data with TurboML
- 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.
- Attachment Styles: Reproduced a known Adult Attachment study with factor analysis in R. Accuracy: 100%.

#### **CERTIFICATIONS**

- AWS Certified Solutions Architect (Expected: Sep. 2025)
- Neo4i
- Deep Learning Specialization Deep Learning.ai
- Machine Learning Specialization Stanford Univ.
- **Discrete Optimization** Melbourne Univ
- Algorithmic Design UC San Diego
- Mathematical Thinking UC San Diego
- Introduction to Probability Harvard Univ.

## TECHNICAL SKILLS & INTERESTS

- **Programming Languages:** Python, R, SQL, Cypher, C/C++, Java, NetLogo
- Libraries: Scikit-Learn, Pytorch, Transformers, Keras, Tesnorflow, PySpark, Pandas, NumPy, UnslothAI
- Visualization tools: Shiny, Plotly, Folium, Matplotlib
- MLOps: Docker, DVC, AWS ECS, FastAPI, Rest API, MLflow
- Miscellaneous Tools: Git, GitHub Action CI/CD, Tableau, VSCode, SQLite, PostgeSQL
- Languages: English (proficient), French (pre-advanced), Italian (beginner), Arabic (native)
- Interests: Bluegrass music, Kayaking, Hiking, Mountain Biking