Mohamed AL JALANJI

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EDUCATION

Data ScienceTech Institute	**Sep. 2023 – Now**
Master in Data Science & Artificial Intelligence – GPA : **3.8/4.0**	*Paris, France*
Université Sorbonne Paris Nord	**Sep. 2021 – Jul. 2023**
Bachelor in Computer Science – **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**	*Tomsk, Russia*

WORK EXPERIENCE

AI Engineer - Apprenticeship   **Oct. 2023 – Now**
APTIV   *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   **May 2022 – Jul. 2022**
ETIS lab (CNRS UMR 8051)   *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   **Mar. 2017 – Sep. 2019**
PI Marketing   *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   **Feb. 2016 – Jan. 2017**
Smart Source   *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:** 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.

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
- **Miscellaneous Tools:** Git, GitHub CI/CD, VSCode, PostgeSQL, Shiny, Plotly, Folium, Matplotlib, Tableau
- **Languages:** English (native), French (pre-advanced), Italian (beginner), Arabic (native)
- **Interests:** Bluegrass music, Kayaking, Hiking, Mountain Biking