# 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 – 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 Sep. 2019 – Jul. 2020 **Tomsk State University** 

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

#### WORK EXPERIENCE

# AI Engineer Apprentice

*APTIV* Vannes, France Optimally transformed dataflow graphs to Logical Execution Time (LET) design for automobile projects,

- ensuring minimal design length and maximum parallelisms over K cores, using Constraint Programming (Z3).
- Fine-tuned small LLM model for natural text to code translation of a local automobile tool & developed evaluation metrics and parsers. Results obtained using cross-validation-based accuracy: 91%
- Developed Cloner tool for systematic duplication of AUTOSAR Classic elements for optimizing parameters for lower probability of preemption and time-execution errors.

### Machine Learning Research Intern

ETIS lab (CNRS UMR 8051)

May 2022 – Jul. 2022

Cergy, France

Tomsk, Russia

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 of these applications achieved good success on Google Play Store.

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

- **Real-time Detection:** A complete pipeline for a trained model & real-time data to detect anomalies.
- 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.
- Two Attachment Styles: Reproduced a classical attachment theory study with 100% accuracy in R language.

#### CERTIFICATIONS

- AWS Certified Solutions Architect (Expected: Sep. 2025)
- Neo4i
- Deep Learning Specialization Deep Learning.ai
- Machine Learning Specialization Stanford Univ.
- **Discrete Optimization** Melbourne Univ.

- Data Structures UC San Diego
- Algorithmic Design UC San Diego
- Mathematical Thinking UC San Diego
- Introduction to Probability Harvard Univ.
- Linear Algebra Frontiers Texas Univ.

# TECHNICAL SKILLS & INTERESTS

- **Programming Languages:** Python, R, SQL, Cypher, C/C++, Java, NetLogo
- Libraries: Scikit-Learn, Pytorch, Transformers, Keras, Tesnorflow, PySpark, Pandas, NumPy, Matplotlib.
- MLOps: Docker, DVC, AWS ECS, FastAPI
- Miscellaneous Tools: Git, GitHub CI/CD, Tableau, VS Code, SQLite, PostgeSQL
- Languages: English (Proficient), French (Intermediate), Arabic (Native)
- Interests: Bluegrass music, Kayaking, Hiking, Mountain Biking