Mohamed AL JALANJI

aljalanjii@gmail.com | +33659937888 | Vannes, France
Personal site: https://aljalanjimohamed.dev

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*

Tomsk State University — **Sep. 2019 – Jul. 2020**
Bachelor in Software Engineering (1st year) – GPA: **3.8/4.0** — *Tomsk, Russia*

WORK EXPERIENCE

AI Engineer Apprentice — **Sep. 2023 – Now**
APTIV — *Vannes, France*

- Optimally transformed dataflow graphs to Logical Execution Time (LET) design for automobile projects using Constraint Programming (Z3), ensuring the reduction of theoretical LET design manual labor by almost **70**%.
- Fine-tuned the LLM model CodeT5 using Pytorch to translate text to commands of a local automobile tool & developed evaluation metrics and parsers needed. Accuracy obtained: **91**%.
- Developed Cloner tool for systematic duplication of AUTOSAR Classic elements for applications targeting the LET intervals optimization for lower probability of preemption and time-execution errors.

Machine Learning Research Intern — **May 2022 – Jul. 2022**
ETIS lab (CNRS UMR 8051) — *Cergy, France*

- 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)

- **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)
- **Neo4j**
- **Deep Learning Specialization** – DeepLearning.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 (Intermediate), Arabic (Native)
- **Interests:** Bluegrass music, Kayaking, Hiking, Mountain Biking