

Naji NAJARI

PHD IN MACHINE LEARNING AND SENIOR DATA SCIENTIST

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WORKING EXPERIENCES

Since September
2024

Senior Data Scientist

[Brevo](#) Paris, FRANCE

- Engineered and deployed a **multi-agent AI assistant** (LangChain, LangGraph, ADK) capable of answering documentation queries and analyzing campaign performance in real-time (Brevo MCP)
- Implemented **production-ready RAG** pipelines (R2R, Neo4j) to retrieve information from the Brevo Knowledge Base and answer customer queries
- Integrated Langfuse for end-to-end **tracing and automated quality checks** via LLM-as-a-judge.
- Trained and deployed ML **audience recommendation** models (MLOps with ZenML and Python) to optimize targeting and maximize e-commerce campaign ROI.
- Fine-tuned** a pre-trained neural network (BERT) to detect spam and classify fraudulent email patterns.
- Implemented scalable API endpoints (FastAPI) to serve AI microservices (image generation for email campaigns, speech recognition for phone calls)

From February
2023 to
September 2024

Senior Data Scientist - Technical Leader

[Forvia](#) Paris, FRANCE

- Developed Innovative Data-Driven Solutions in Automotive Manufacturing: Machine Learning
- Machine predictive maintenance, process parameter optimization, time series forecast, recommendations.
- Selected as a Machine Learning Expert

From 2019 to
2023

Data Scientist

[Orange](#) Grenoble FRANCE

- Explored machine learning-based anomaly detection, applied to network monitoring
- Published papers at international conferences
- Submitted two patents to INPI

From February
2019 to August
2019

Data Scientist Intern

[Orange](#) Grenoble FRANCE

- Conducted research on IoT device fingerprinting using machine learning: Time Series Analysis
- Published a paper at an IEEE conference

From June 2018
to August 2018

Internship in mobile application development

[LSI Technologies](#) Grenoble FRANCE

ABOUT ME

Senior Data Scientist with a PhD in Machine Learning and a strong engineering focus. **Over 6 years of experience** building end-to-end AI solutions, from fine-tuning neural networks (pre-trained transformers) for fraud detection to deploying multi-agent architectures (LangGraph) in production. Specialized in delivering robust, scalable AI infrastructure that solves concrete business challenges

SKILLS

Machine/Deep learning, NLP/Generative AI

Anomaly Detection

Time Series Analysis

Data Visualization

Agile Methodologies

Unit Testing, API Design & Development

CODING

Python, SQL, Java, R, C

LangChain, LangGraph, ADK, LangFuse, CrewAI

Pytorch, Tensorflow, Keras

FastAPI, dbt

GCP, BigQuery, PubSub

PySpark, Kafka

Git, JIRA, release-please

Palantir Foundry (certified)

Elasticsearch, Kibana

EDUCATION

- From 2019 to 2022
- PhD degree in Machine learning**
[INSA Lyon university and Orange](#) Grenoble
- Robust unsupervised anomaly detection, applied to network traffic monitoring.
 - Topics: unsupervised anomaly detection, transformers, autoencoders, variational autoencoders, extreme value theory, robust training, data processing.
- From 2018 to 2019
- Master's Degree in Computer Science : data science**
[ENSIMAG](#) Grenoble
- Topics : data management, machine learning, data mining, probability, computer vision, convex and distributed optimization.
- From 2017 to 2019
- Engineer's degree: embedded systems, connected objects**
[ENSIMAG](#) Grenoble
- Topics : IP networks, VoIP, security, object-oriented programming, signal processing. database management, network security.

PUBLICATIONS

- July 2022
- RESIST: Robust Transformer for Unsupervised Time Series Anomaly Detection**
[N. Najari, S. Berlemont, G. Lefebvre, S. Duffner and C. Garcia](#), AALTD workshop of the ECML-PKDD conference
- For more details, <https://najari-najari.github.io/publications/aaltd22>
- April 2022
- Robust Variational Autoencoders and Normalizing Flows for Unsupervised Network Anomaly Detection**
[N. Najari, S. Berlemont, G. Lefebvre, S. Duffner and C. Garcia](#), The 36th International Conference on Advanced Information Networking and Applications, AINA 2022.
- July 2021
- RADON: Robust Autoencoders with Dynamic Outlier Rejection**
[N. Najari, S. Berlemont, G. Lefebvre, S. Duffner and C. Garcia](#), The 14th International Conference on Security of Information and Networks, SINConf 2021.
- September 2020
- Network Traffic Modeling For IoT-device Re-identification**
[N. Najari, S. Berlemont, G. Lefebvre, S. Duffner and C. Garcia](#), The IEEE International Conference on Omni-layer Intelligent Systems, IEEE COINS 2020

PATENTS

- June 2022
- Contextual Anomaly Detection For The Maintenance Of IoT Devices**
[N. Najari, S. Berlemont, G. Lefebvre](#), Orange Meylan
- November 2020
- Assistance For The Identification Of Malfunctioning Devices Using Traffic Metadata**
[S. Berlemont, N. Najari, G. Lefebvre](#), Orange Meylan

LANGUAGES

- English** Fluent
- French** Fluent
- Arabic** Native language
- Spanish** Basic

VOLUNTARY EXPERIENCE

- ALAMAL** autism association
- LPM** Alumni
- National Association of Tunisians Abroad**

INTERESTS

- Reading**
- Travelling**
- Tennis - Badminton**
- Football - Basketball**