Marzoug Nabil

Data Science and Artificial Intelligence Engineer

Moncton, Canada
📞 +1 506-962-7564
✉ emn3789@umoncton.ca
GitHub   LinkedIn Portfolio

Objective

Graduate in Data Science and Artificial Intelligence Engineering, with experience in Python and R and in developing machine learning and deep learning models. Skilled in data analysis, including exploration, visualization, and interpretation. Currently pursuing a thesis-based Master's program at the Université de Moncton, with research interests in Artificial Intelligence and Quantum Computing.

Education

2025–Present **Master's with Thesis in Computer Science - Specialization in Artificial Intelligence**, *Université de Moncton*, Moncton, Canada.

2021–2024 **Engineering Degree in Data Science and Artificial Intelligence**, *National School of Applied Sciences*, Safi, Morocco.
Relevant courses: Data Science, Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, and Big Data.

2019–2021 **CPGE - Preparatory Classes for Engineering Schools**, Morocco.
Preparatory training in mathematics, physics, and engineering sciences to enter engineering schools.

Professional Experience

2025–2027 **Research Assistant in Artificial Intelligence and Robotics**, *Prime Lab, Université de Moncton*, Canada (On-site).
Participation in client projects in the field of Artificial Intelligence and robotics. Contribution to the design, development, and optimization of AI-based solutions for industrial and research applications.

2023–2024 **Quantum Machine Learning Intern**, *Prime Lab, Université de Moncton*, Canada (On-site).
Development and implementation of Quantum Machine Learning models for medical image classification. Benchmarking between quantum and classical models. Co-authoring research articles.

2022–2023 **AI Research Assistant**, *Université de Moncton*, Canada (Remote).
Analysis of the CICDarknet-2020 dataset and development of machine learning models for network traffic classification.

2022–2023 **Data Science and Machine Learning Intern**, *3D Smart Factory*, Morocco.
Implementation of a credit card fraud detection system using Python and advanced classification algorithms.

Publications

2025 **Quantum-Enhanced Dual-Backbone Architecture for Accurate Gastrointestinal Disease Detection Using Endoscopic Imaging.** *BioMedInformatics*, September 2025.

2024 **Optimizing Spare Parts Inventory Management Using Genetic Algorithm.** *Proceedings of the 10th International Conference on Optimization and Applications (ICOA)*, October 2024.

2024 **LIDarknet: Experimenting the Power of Ensemble Learning in the Classification of Network Traffic.** *8th IEEE Cyber Science and Technology Congress*, 2024.

Blogs

2023 Mastering Decision Trees For classification: Unleashing Their Full Potential.

2023 Data Science: Web scraping with python.

Skills

- **Programming Languages:** Python, R, SQL, LaTeX.
- **Data Analysis:** Numpy, Pandas, Seaborn, Matplotlib, Plotly, Power BI, Excel.
- **Machine Learning:** Supervised and unsupervised learning, Classification, Clustering.
- **Deep Learning:** CNNs, RNNs, LSTMs, Transfer learning.
- **Computer Vision:** OpenCV, Image processing, Object detection, Classification.
- **Quantum Learning:** Pennylane, Qiskit.
- **Frameworks:** TensorFlow, PyTorch, scikit-learn.
- **Databases:** SQL, MySQL.
- **Soft Skills:** Teamwork, Communication, Leadership, Adaptability.

Certificates

- Exploratory Data Analysis for Machine Learning, IBM
- Foundations: Data, Data, Everywhere, Google
- intro-to-machine-learning, Kaggle
- Computer Vision, Kaggle
- The Elements of Data Science, Machine Learning Online Course, AWS Training & Certification
- Machine Learning for Leaders | Machine Learning Online Course | AWS Training & Certification
- Time Series Analysis in R, Great Learning
- Statistics for Data Science, Great Learning