Yassine Ben Jemaa

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Computer Science Engineer with a focus on AI seeking a VIE starting February 2025

Education

MSc in Data Science, *Ecole Polytechnique – France* *Sep 2023 - Dec 2024*
- **Coursework** : Deep Learning, Natural Language Processing (LLM and Transformers), Monte Carlo Methods to Data-based generative model, Hidden Markov models, Computer Vision, Causal Inference, Supervised and Unsupervised Learning

Degree in Computer Science Engineering, *Telecom SudParis – France* *Sep 2019 - Dec 2024*
- **Coursework** : Reinforcement Learning, Data Mining, Bayesian Estimation in Markovian Models and Web Architectures
- Modules include: Sustainable Development, Business Law, Economic Performance, and Quality Management.

A 2-year intensive Mathematics and Physics course, achieved with the highest honors. *Paris* *Sep 2019 - Jun 2021*
- Preparation for the selective entrance examination to French engineering schools

Relevant Experience

Koordinat, *Research AI Intern - Copenhagen* *May 2024 - Oct 2024*
- Developed AI solutions and state-of-the-art methods for computer vision applications.
- Engineered features and performed data cleaning on large datasets to enhance model performance.
- Designed and implemented large language models (LLMs) for text summarization tasks.
- Contributed to scalable AI solutions and Data Pipelines aligned with organizational needs.

Trimble, *Software Engineering Intern - Paris* *Jun 2022 - Jul 2022*
- Contributed to the development cycle of 3D scanning and point cloud processing software.
- Developed a Python and QML-based application to streamline data extraction processes, enhancing team efficiency.
- Improved Quality Assurance workflows by implementing automated validation techniques for data integrity.

Hi!ckathon, *Hackathon Participant* *Nov 2023*
- Enhanced technical skills in data science through hands-on challenges at a competitive hackathon
- Demonstrated effective collaboration within a diverse team, achieving successful outcomes in a short timeframe
- Gained proficiency in CUDA and GPU systems, optimizing algorithms for parallel processing
- Finished in the top 5 out of 50 participating teams.

Projects

Machine Learning Project with Michelin *Jan 2024 - Mar 2024*
- Collaborated with Michelin on a project to implement a machine learning model for time series analysis
- Developed and compared machine learning models, including GRU and LSTM neural networks, against traditional physical models based on integral and differential equations (Kalman Filter)
- Implemented advanced data preprocessing techniques, including time series filtration, to enhance the robustness and accuracy of the predictive models.

Financial Risk Analysis *Nov 2023 - Dec 2023*
- Implemented a generative AI model for extreme value samples for financial risk analysis
- Programmed in TensorFlow and PyTorch, gaining hands-on experience with both deep learning frameworks
- Developed a deep understanding of VAE mechanisms and explored techniques for enhancing their performance (WAE, LARS...).

Skills

Programming	Python (Scikit-learn, PyTorch, Tensorflow), SQL, R, Bash, Git, Docker, Jax, AWS.
Tools	Jupyter Notebook, QGIS, CUDA, CI/CD Pipelines, Visualization (Matplotlib, Seaborn).
Soft Skills	Communication, Analytical Thinking, Teamwork, Adaptability.
Languages	French (Native), English (Fluent), Spanish (Intermediate), Arabic (Conversational).

Certificates

Deep Learning specialization - Coursera *2023*

Neural Networks and Deep Learning, Hyperparameter Tuning, Regularization and Optimization.

Online Course, Advanced Planning and Management of Creativity and Brainstorming - MOOC *2021*
- Developed skills in using a variety of tools and techniques for facilitating creativity sessions
- Acquired knowledge on how to manage and lead creative teams and innovative groups (Agile methodology).