

Yassine Ben Jemaa

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Computer Science Engineer with a focus on AI seeking a first professional experience 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 2021 - 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 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.
- Conducted field operations for 3D scene digitization using a laser scanner, ensuring precise data acquisition for software testing.
- 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
- Implemented advanced data preprocessing techniques, including time series filtration, to enhance the robustness and accuracy of the predictive models.

Diffusion Model Research Project

Nov 2023 - Jan 2024

- Implemented an advanced Diffusion model in Python using Guided Diffusion techniques for Inpainting problems [Link to Paper]
- Mastered cutting-edge concepts and methodologies in generative models
- Reviewed and synthesized relevant scientific literature, demonstrating a strong skillset in reading and comprehending complex research papers about state-of-the-art AI tools.

Skills

Programming	Python (Scikit-learn, PyTorch, Tensorflow), SQL, R, Bash, Git, Docker, 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).