

Ahmed BELAAJ

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in <https://linkedin.com/in/ahmed-bellaaj> 🌐 <https://github.com/ahmedbellaaj10>

Education

Artificial Intelligence Postgraduate Diploma

Sep 2023 – Feb 2025

Telecom Paris and ENSTA Paris

Engineer Degree in Computer Science

Sep 2017 – Oct 2022

National Institute Of Applied Science And Technology (INSAT)

Experience

Data Science Intern

Paris, France

EagleAI

Jul 2024 – Dec 2024

- Developed STaR, a recommendation model leveraging attention mechanism, boosting model's allocated offers novelty by 14%.
- Reduced training time by 80% using Flash Attention, mixed precision training, and optimizing workflows.
- Streamlined data workflows, cutting disk I/O redundancy and improving testing efficiency.
- Collaborated with 5 teammates to lead GCP workshops, enhancing team expertise and onboarding efficiency.

Artificial Intelligence Intern

Montreal, Canada

Polytechnique Montreal

Mar 2022 – Aug 2022

- Designed CHATR, an RL-based framework for chatbot testing, improving failure detection rates by 20%.
- Increased input validity above 95% through semantically-preserving transformations.
- Demonstrated 93% valid conversation rates in tests, advancing industry-grade AI evaluation.
- Created a custom reward function, boosting adversarial attack efficiency and fault coverage.

Skills

Programming languages: Python, JavaScript, C, C++, Java, Matlab

Technologies: Pytorch, TensorFlow, Keras, Scikit-learn, SciPy, Numpy, Google Cloud Platform, Kubernetes, KubeFlow, Docker

Data & Machine Learning: Statistics, Data preprocessing, Feature engineering, Machine learning algorithms, Model evaluation, Hyperparameter tuning, Deep learning, Natural language processing (NLP), Computer vision, Data visualization

Projects

Fine-Tuning Open-Source RAG System for Renault

- Fine-tuned a Retrieval-Augmented Generation (RAG) system to enable precise question-answering on Renault's technical jargon and automotive industry knowledge.
- Collaborated with 3 teammates to integrate domain-specific knowledge documents, enhancing system accuracy and relevance.

Retinal Vein Image Segmentation

- Designed a deep learning pipeline for accurate segmentation of retinal vein networks in medical images.

Languages

- English : TOEFL (96 / 120)
- French : TCF (500 / 599)