Joseph Beasse

Data Scientist

Using AI to solve meaningful business problems

EXPERIENCE

•Data Scientist Consultant

January 2025 - Today Permanent, Bordeaux

Cdiscount

- Consulting Data Scientist for Cdiscount, France's leading e-commerce platform.

- Design and maintain automated pricing algorithms, integrating demand prediction and competitor data.
- Optimize product assortment strategies to improve catalog relevance and business performance.

•AI Engineer

February - September 2024

Orange

Internship, Lannion

- Analyzed alarm data from optical fiber transport networks to identify patterns and correlations.
- Implemented a modified BERT-based transfer learning model for unsupervised language masking.
- Automated root cause extraction from alarms using LLMs and clustering algorithms.

•AI Engineer Sopra Steria April - September 2023

Internship, Toulouse

- Developed AI-based tools to streamline the writing and verification of Requests for Proposals.

- Created NLP-powered tools for text summarization and document proofreading.
- Implemented advanced document search with Elasticsearch and evaluated document similarity.

EDUCATION

•Engineering Degree in Artificial Intelligence and Cognitive Sciences

2021-24

ENSEIRB-MATMECA & ENSC, Bordeaux

GPA: 4.0

Relevant Courses: Machine & Deep Learning, Reinforcement Learning, Search Algorithms, AI for Video Games & Music, Computer Vision, Software Engineering for AI, Natural Language Processing.

•Preparatory Classes for Grandes Écoles (Specialization in Physics & Engineering Sciences)

2019-2021

Chateaubriand, Rennes

PROJETS

Automated Knowledge Graph Generation

Extraction and visualization of textual relationships from PDF files to generate a knowledge graph.

- Extracted 'subject-predicate-object' triples from economic documents using the REBEL language model.
- Built knowledge graphs with Pygraft and rdflib for structured representation of data.
- Developed a Streamlit-based UI to visualize generated graphs for user interaction.
- Tech Stack: Python, nltk, LLM, Pygraft, rdflib, Torch, Transformers, Streamlit, Flask.

•DeepLanguage: Automatic Language Identification

 $Development\ of\ an\ AI\ system\ capable\ of\ identifying\ spoken\ languages\ in\ audio\ files.$

- Collected and preprocessed audio data, converting it into WAV format for training.
- Extracted features using spectrograms and MFCCs for model training.
- Developed and evaluated CNN and RNN models for accurate language identification.
- Tech Stack: Python, TensorFlow, Librosa, Flask, HTML, CSS, JavaScript.

TECHNICAL SKILLS AND INTERESTS

Programming Languages: Python, SQL, R

Frameworks: Pytorch, Tensorflow, Flask, FastAPI

Libraries: Pandas, Numpy, Transformers, Nltk, Scikit-learn

Development Tools: Linux, Git, Azure, SnowFlake, Kibana, Graphana

Areas of Interest: Finance, Product building & business creation, AI Research, Personal Development Certifications: DeepLearning.AI: Tensorflow Professional (03/2023) | Generative Deep Learning (03/2023)

Languages: French (native), English (C1: IELTS 7.5), Spanish (B2), German