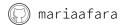
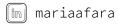
Maria Afara

ML/NLP Engineer











EXPERIENCE

ACOLAD | NLP ENGINEER

March 2021 - Current | Paris, France

- → Researched, prototyped, built features and optimized machine learning and deep learning models using scikit-Learn, keras, and tensorflow on CPU/GPU environments.
- → Containerized(Docker) and deployed re-producible machine learning models/APIs into production through GitHub actions CI/CD onto Google Cloud Platform.
- → Automated tools by building and managing data pipelines using Airflow.
- → Developed/Tested/Maintained internal text-processing libraries.
- → Solved business issues include classifying domains and languages of translation projects using classification models, identifying personal information based on GDPR using NER models, and estimating the output quality of machine translation.

SAP LABS | NLP DATA SCIENTIST

March 2020 - April 2020 | Sophia Antipolis, France

- → Researched & developed SOTA techniques for information extraction & sentence level classification
- → Performed weak supervision approach to label unlabelled data
- → Designed, developed, and tested several topic classifiers using transfer learning for confidential French dataset.
- → Created custom Named Entity Recognition models using spaCy.
- → Built a large English dataset about real people biographies which highly contains PII using DBpedia KB and Wikipedia dumps.
- → Built a Relation Extraction pipeline that combines Named Entity Recognizer & Relation Classifier to identify the sensitive information according to GDPR.
- → Mostly worked with Keras, Tenserflow, Spacy, Pandas, Numpy, Matplotlib, Sklearn, mBert, CamemBert, Snorkel, PySpark, BiLSTM, CNN, FastText, SPARQL, Git, Docker

PROJECTS

QUESTION ANSWERING SYSTEM

- → Implemented question answering system through semantic similarity matching
- → Bert, MongoDB, Docker, Milvus, Pandas, FastApi...

NEURAL MACHINE TRANSLATION

- → Worked with Encoder-Decoder architecture with and without attention mechanism to build a seq2seg models to translate English sentences into French sentences.
- → Tensorflow, LSTM, GRU, Sklearn, Pandas, Numpy

BREAKING NEWS DETECTION

- → Built a summarization model that summarizes a text and a classifier that predicts if the summarized news is breaking or not, prior to that the training data was labeled by unsupervised learning
- → Tensorflow, Keras, Pytorch Word2vec, CNN, Sklearn, Pandas, Numpy, LDA

SKILLS

Python • PySpark • SpaCy NLTK • SparkNLP • Keras Scikit-learn • TensorFlow PyTorch • HuggingFace

Airflow • FastAPI • Docker SQL • GitHub actions CI/CD Git • GCP • Gradio • Streamlit Jupyter • WandB • PyCharm

EDUCATION

MASTER 2 IN NLP

Universitè de Lorraine, France **Coursework:** Deep Learning, Machine Learning, Data & Text Mining, Recommendation System, Speech & Text Processing, etc.

MASTER 1 IN AI AND BIG DATA

Coursework: Al, ML, Big Data, Cloud Computing, Design Patterns, Distributed Systems, Advanced Databases, etc.

BACHELOR'S IN COMPUTER SCIENCE

LEBANESE UNIVERSITY, LEBANON

Coursework: Data Structures,
Graph Theory, OOP,
Databases, Project
Management, Software
Engineering, etc.

LANGUAGES

Arabic Native English Fluent French Beginner