Shafagh Rastegari

Bologna, Italy | shafaghrastegari@gmail.com | (+39)351 734 4192 | linkedin.com/in/shafagh-rastegari-411767223
github.com/ShafaghRastegari

About Me

Second-year AI Master student with a Computer Engineering background, specializing in Deep Learning, Machine Learning, NLP, and Large Language Models (LLM). Project experience includes fine-tuning a model to achieve a top-5 team ranking in an NLP challenge, developing an end-to-end LLM pipeline to remove biased reasoning, and engineering a Dockerized MIP optimization solution using PuLP. Eager to apply AI theory and advanced modeling skills to real-world projects in an AI/ML role.

Education

University of Bologna   Bologna, Italy
Master of Science in Computer Science, Artificial Intelligence   Sep 2023 – Current

Iran University of Science and Technology   Tehran, Iran
Bachelor of Science in Computer Engineering   Sep 2017 – Oct 2022

Experience

Front-end Developer   June 2021 – March 2022
Targoman Intelligent Processing Company   Tehran, Iran

- Developed an admin and user panel websites using Vue.js and Typescript and connect it to the backend.

Projects

Cifar10 Image Separation | *Deep Learning*

- A Deep Learning model that takes as input an image created by averaging two random samples from CIFAR-10 dataset and is tasked with predicting the categories of the two components using Convolutional Neural Network.
- Tools Used: Python, Tensorflow, Keras, Numpy, Matplotlib

Bias Mitigation in Reasoning LLMs with Multi-Judge Pipeline | *LLM, Reasonable AI*

- A pipeline to detect and remove biased reasoning steps of Chain-of-Thought in reasoning LLMs to reducing stereotype propagation without compromising accuracy, benchmarked model performance across bias score and accuracy on BBQ (Bias Benchmark for QA) and MBBQ (Multilingual BBQ) datasets.
- Tools Used: Python, LangChain

Multiple Couriers Planning Problem | *Optimization*

- Implemented a Mixed-Integer Programming (MIP) using PuLP to efficiently solve courier planning problem, and Dockerize it as combinatorial decision making and optimization approach.
- Containerized the solution via Docker, guaranteeing the execution across diferent systems.
- Tools Used: Python, MIP, PuLP, Docker

Subjectivity in News Articles | *NLP, LLM*

- Fine-tune mDeBERTaV3-base model for 5 different languages in 3 different settings (Multilingual, Monolingual, and zero-shot) for a binary classification task in order to detect the Subjectivity or Objectivity of the news sentences a part of this challenge. Our results placed us among the top 5 teams in almost all languages.

Technical Skills

Languages: Python, C++, Prolog, Vue.js, React, JavaScript, TypeScript

Libraries: LangChain, TensorFlow, Keras, scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, PuLP

Technologies: Git, Docker, Latex

Languages

Persian: native, **English**: proficient, **Italian**: beginner