Morteza Afifehzadeh Kashani

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EDUCATION

Sharif University of Technology

Tehran, Iran

Bachelor of Science in Aerospace Engineering and Computer Science September 2019 - September 2024 BSc Project: Enhancing Loan Approval Processes with Advanced Large Language Models.

National Organization for Development of Exceptional Talents

Isfahan, Iran

Diploma in Mathematics and Physics

September 2016 - June 2019

RESEARCH INTERESTS

- Reasoning and commonsense knowledge in Large Multimodal Models
- Large Language Models for Information Retrieval

RESEARCH EXPERIENCE

Cohere AI Expedition Aya Program

Toronto, Ontario

Researcher in a 6-week challenge

March 2025 - May 2025

- Concentrating on enhancing the reasoning abilities of multilingual models, specifically Aya Expanse and Aya Vision, our research aims to explore how these models can be optimized to improve logical inference and contextual understanding across diverse languages.

University of Amsterdam

Amsterdam, Netherlands

Research Intern

January 2024 - March 2024

- Focusing on Query Performance Prediction enhanced by re-ranking LLMs in conversational search systems.

University of Ottawa

Ottawa, Canada

Research Intern

July 2023 - September 2023

- Worked on Vision-Language Models in analyzing evaluation systems and metrics (CIDER) for downstream tasks such as Image Captioning and Visual QA.

TEACHING EXPERIENCE

- Signals & Systems
- Principles of Computer Systems
- Statistics & Its Applications
- Operating Systems
- Engineering Statistics and Probability

VOLUNTEER WORK

Cohere for AI October 2024 - Present

- As a Cohere Ambassador, I contributed to the testing and deployment of the groundbreaking Aya Expanse model, a multilingual language model supporting diverse languages, including Persian and English. My role involved evaluating the model's performance, identifying areas for improvement, and actively engaging in community discussions. I collaborated with researchers and developers globally to explore applications of Aya Expanse in information retrieval and conversational systems, contributing to research insights shared within the Cohere community.

Sharif Scientific Association

July 2020 - July 2021

- Organized training courses for students.

Ooj Student Magazine

November 2019 - December 2020

- Wrote about Artificial Intelligence news and developments.

SKILLS

Programming Languages: Python, Java, C, R, PostgreSQL, MATLAB

Machine Learning Tools: OpenAI, LangChain, PyTorch, TensorFlow, PySpark, MLflow, Pinecone

Software Tools: Microsoft Azure, Tableau, Anaconda, Microsoft Power BI, Docker