# /ahid Rahimzadeh

# in Linkedin | GitHub $\overline{10/25/1997}$ | Tehran, Iran

## RESEARCH INTERESTS

Large Language Models (LLMs), Information Retrieval (IR), Computational Social Science (CSS), LLMs in IR, LLMs in CSS, LLM-based Agents, User Behavior Modeling using LLMs, Retrieval-Enhanced Machine Learning, Personalization & Recommender Systems using LLMs, Reasoning in LLMs, Risks of LLMs, Cultural Studies & Biases in LLMs

#### **EDUCATION**

• University of Tehran [ )

Sept. 2022 – Present

M.Sc in Information Technology Engineering

Tehran, Iran

Thesis: User Behavior Modeling in Social Networks using LLMs

Supervisors: Dr. Azadeh Shakery, Dr. Masoud Asadpour

**GPA:** 4.00/4.00 (18.5/20)

• Isfahan University of Technology [ B.Sc in Mechatronics, Automation & Robotics

Sept. 2016 - Sept. 2021

Isfahan, Iran

Final Project: Android App for Planar Dynamic Balance of Rotors using Real-time Accelerometer Data

**GPA:** 3.11/4.00 (15.59/20)

## **PUBLICATIONS**

PerCul: Story-Driven Cultural Evaluation of LLMs in Persian. Accepted at NAACL 2025 main conference.

V Rahimzadeh\*, E Mousavi\*, Y Yaghoobzadeh, A Shakery, MT Pilehvar. \*equal contribution

From Millions of Tweets to Actionable Insights: Leveraging LLMs for User Understanding. Accepted at MisD @ AAAI ICWSM 2025.

V Rahimzadeh, A Hamzehpour, A Shakery, M Asadpour.

PolitiSky24: U.S. Politics Bluesky Dataset with User Stance Labels. Submitted to EMNLP 2025.

P Rostami\*, V Rahimzadeh\*, A Adibi, A Shakery. \*equal contribution

#### PROFESSIONAL EXPERIENCE

• Research Assistant

Oct. 2024 - Present

Tehran, Iran

Tehran, Iran

Tehran Institute for Advanced Studies (TeIAS) [�] • Working in Large Language Models Lab under the supervision of Dr. Mohammad Taher Pilehvar & Dr. Yadollah Yaghoobzadeh

• AI Engineer | LLM, LLMOps

Oct. 2023 - Oct. 2024

RamonAI, ModAI App [ )

- Maintaining the main GitLab Repository with 7+ people actively working on it
- Implementing & Monitoring LLM based Real-time pipelines on Millions of data using scalable queuing, databases & monitoring systems like NATs, Redis, PostgreSQL, Prometheus, Grafana & Sentry
- Scalable Deployment & Monitoring of LLMs using vLLM, TGI, LangFuse, Grafana & Sentry
- Implementing complex Chatbot backend using LangGraph
- Using & Fine-tuning Different LLMs & VLMs
- Implementing various RAG based Solutions based on LLMs & KBs like ElasticSearch & Milvus
- Involvment in complex semantic/lexical search & retrieval systems using ElasticSearch

# Co-Founder, Software Engineer Qorfechi [ )

Iun. 2019 - Oct. 2023

Tehran, Iran

**[\(\phi\)**]

- Planned, designed & developed multiple world class standard websites using the latest technologies
- Implementing AI based features in Dashboards

# LEADERSHIP EXPERIENCE

Advising an M.Sc. Student (Admitted Through Exceptional Talents Program)

Oct. 2024 - Present

Intelligent Information Systems Lab, University of Tehran

Currently advising on thesis proposal defense and collaborating on a paper for SIGIR 2025

Mentored the first-ranked student of the B.Sc. Computer Engineering Class of 2021

Jun. 2024 - Oct. 2024

Intelligent Information Systems Lab, University of Tehran

Covered NLP from basics to LLMs

Mentored 2 Interns focused on NLP

Jun. 2024 - Sept. 2024

Resulted in a submission to ECIR 2025 & subsequent research projects are in progress

## RamonAl

- Covered relevant NLP concepts from tokenization & embeddings to LLMs
- Covered relevant Industry knowledge from python to API for AI products & Dockerized applications
- They both landed jobs as junior NLP engineers in the company
- One of them is maintaining the backend for a product & the other is in charge of APIs

# **SELECTED PROJECTS**

#### LLM based Medical Assistant Chatbot Using LangGraph

Tools: LLaMa 3 70B, FAISS, LangChain, Sentence Transformers

[YouTube][GitHub]

• Developed a chatbot system leveraging advanced language models for medical assistance

## • LLM Based Book Search System on Ketabrah Books

Tools: BeautifulSoup, LangChain, ChromaDB, Sentence Transformers, Numpy

[GitHub]

Implemented a conversational book search system & evaluated retrieval using nDCG, P@K

# • Dynamic Benchmarking Logic Adaptable to Different LLMs, Prompts & Visualizations

Tools: LangChain, Python, tqdm, Pandas,

[GitHub]

Conducted benchmarking of 32+ language models as part of the PerCul paper

# • Processing & Filtering of 6M+ Tweets

Tools: PyTorch, Peft, Scikit Learn, Pandas, LanceDB

[GitHub]

Implemented tweet selection algorithms & scalable retrievers, clustering methods
& semi-supervised fine-tuned BERT based classifier as a part of my second paper

# • Personalized Apply Agent

Tools: CrewAI, LangGraph, LangChain, Milvus, Jina Embeddings

[GitHub]

 $\circ \ A \ tool \ to \ organize \ and \ efficiently \ retrieve \ information \ for \ PhD \ apply \ of \ myself \ based \ on \ LLM \ based \ agents \ and \ pipelines$ 

#### TEACHING EXPERIENCE

## TA in Large Language Models

2025–Present

ECE @ University of Tehran, Dr. Yadollah Yaghoobzadeh, Dr. Mohammad Javad Dousti

## • TA in Advanced Natural Language Processing

2024-Present

CS @ University of Cardiff, Dr. Mohammad Taher Pilehvar

 $_{\circ}$  Designined Hands-on Assignments on Fine-tuning and In Context Learning techniques in LLMs

# • Head TA in Advanced Data Mining

2023-Present

ECE @ University of Tehran, Dr. Azadeh Shakery

[Course Website]

- Implemented the course's website
- Worked with a wonderful diverse team of 6 TAs
- Coordinated 6 CAs, 3 Workshops & Paper presentation module for the course

## • TA in Intelligent Information Retrieval

2023-2025

ECE @ University of Tehran, Dr Azadeh Shakery

[Course Website]

- Designed a completely new final project for the course based on curation of relevancy dataset & implementing various retrieval algorithms & evaluations in the context of a conversational RAG system (2024)
- Implemented the course website (2024)
- Held workshops on fine-tuning BERT for classification for the first time (2023)

## TA in Natural Language Processing

2023

ECE @ University of Tehran, Dr. Heshaam Faili

[Course Website]

- $\circ$  Implemented the course website
- · Changed the dialogue system & chatbot (Final Project) entirely from Rasa to LangGraph & LLM based approaches
- Designed a 12 step carefully crafted CA based on cutting edge technologies & open source tools
- Held a Workshop on the matter since the high quality relevant materials were not available on the Internet

## **SKILLS**

- Soft Skills Teamwork, Meeting Tight Deadlines
- Programming Languages Python, Javascript
- Large Language Models vLLM, LangChain, LangFuse, TGI, Unsloth, HF Trainer, PEFT, Datasets, TRL
- Databases ElasticSearch, Milvus, lanceDB, Redis, PostgreSQL
- Pipeline & Monitoring Tools NATs, Prometheus, Grafana, Portainer, Sentry
- Tools & Misc GitLab, JIRA, Docker Compose, Confluence
- Machine Learning PyTorch, Scikit Learn, evaluate
- Retrieval Sentence Transformers, Lexical Retrieval, Semantic Retrieval, ColBERT, BM25
- Web Technologies Laravel, VueJS, Swiper, Streamlit, Gradio
- Additional Skills: Code Reviewing, Repository Maintenance, Team Management

## **HONORS & AWARDS**

Ranked 2nd in Nationwide Graduate Level University Entrance Test of Information Technology Engineering

2022

Ranked 6th in Nationwide Graduate Level University Entrance Test of Computer Engineering

2022

LANGUAGES

Persian: Native, English: Fluent