# **Mahsa Amani**

#### COMPUTER SCIENCE

Tehran, Iran

mahsa.ama1391@qmail.com | 🎢 mahsaama.qithub.io | 🖸 mahsaama | 🛅 mahsa-amani-760b0518a | 🕲 live:mahsa.ama1391 | 🖡 (+98) 914 667 1940 Education **Sharif University of Technology (SUT)** Tehran, Iran B.Sc. IN COMPUTER ENGINEERING Sep. 2018 - Feb. 2023 • GPA: 18.03/20 Farzanegan High School (National Organization for Development of Exceptional Talents Tabriz, Iran (NODET)) DIPLOMA IN MATHEMATICS AND PHYSICS Sep. 2011 - Jun. 2018 GPA: 19.97/20 Academic Honors \_\_ 2018 **Membership** In Iran's National Elites Foundation 2018 Rank 51st Mathematics and Physics B.Sc. entrance exam among more than 144,000 participants Research Interests Natural Language Processing (NLP) 4 **Machine Learning** 2 **Computer Vision** Relevant Courses\_ Natural Language Processing 20/20 **Artificial Intelligence** 20/20 **Advanced Information Retrieval** 19.3/20 Signals and Systems 20/20 **Probability and Statistics** 20/20 **Data Structure and Algorithm** 18.4/20 **Languages** English IELTS Overall Bandscore: 7.5 ( ∩ Listening: 9, ↑ Reading: 7, ♦ Speaking: 6.5, ↑ Writing: 6.5) Persian Native Language **Azerbaijani** Mother Tongue **Certificates 2**023 **Generative AI with Large Language Models,** Andrew NG. DeepLearning.Al **2**2022 **Deep Learning Specialization,** Andrew NG. DeepLearning.Al **2**021 Introduction to Computer Vision and Image Processing, IBM **2**021 **Machine Learning,** Andrew NG. Stanford University **2**021 **Introduction to Git and GitHub,** Google 2021 Natural Language Processing in TensorFlow, Laurence Moroney DeepLearning.Al **2**2021 **Web Application Technologies and Django,** Charles Severance University of Michigan **2**020 Advanced Python Programming and Object-Oriented Thinking, Quera **Quera Publications** The Language Model, Resources, and Computational Pipelines for the Under-Resourced Iranian Azerbaijani M. Amani, M. Nouri, R. Zohrabi, E. Asgari Sep. 2023 • In Proceedings of AACL 2023 (Asia-Pacific ACL), Accepted Linguistic Resources and Transformer-based Models for the Machine Translations between Luri and Yazdi Dialects versus Standard Persian

DECEMBER 10, 2023 MAHSA AMANI · RÉSUMÉ

Oct. 2022

M. Amani, M. Nouri, Z. Bahmani, M. Mirbeygi, N. Hashemi, E. Asgari, M. Soleymani Baghshah, H. Beigy, A. Movaghar

· Journal of the Linguistics Society of Iran, Under Revision



Programming </>
Python, R, C/C++, JAVA, SQL, ŁTFX

ML tools Pytorch, Tensorflow, Keras, Scikit-learn, Numpy, Pandas

## Research Experience \_

### Multigenerator, Multidomain, and Multilingual Black-Box Machine-Generated Text Detection

SEMEVAL2024

Ongoing

· Development of automatic systems to identify machine-generated text with the goal of mitigating its potential misuse

**Pipelines for low-resource Iranian Languages** 

Ongoing

• Developing pipelines for low-resource languages such as Azerbaijani, Luri, Yazdi, and Kurdi

A Large Language Model for Persian

RESEARCH ASSISTANT

RESEARCH ASSISTANT

Oct 2023

• Development of a multilingual large language model fine-tuned for Persian

#### **Explainable Detection of Online Sexism**

Feb. 2023

SEMEVAL2023

· Development of English-language models for sexism detection with fine-grained classifications for sexist content from Gab and Reddit

## Work Experience \_\_\_\_

**Junior Data Scientist** 

ZAREBIN Oct. 2022 - Apr. 2023

• Developing a Shopping Information Retrieval System using Deep Learning Methods

**Teaching Assistant** 

SHARIF UNIVERSITY OF TECHNOLOGY (SUT) Sep. 2020 - Jul. 2023

- Natural Language Processing, Dr. Ehsaneddin Asgari
- · Probability and Statistics, Dr. Ali Sharifi
- · Database Design, Dr. Abbas Heydarnoori
- · Operating Systems, Dr. Hossein Asadi
- Python Programming, Dr. Issa Moradnejad
- · Digital System Design, Dr. Farshad Baharvand
- · Digital Design, Dr. Laleh Arshadi

**Junior Data Analyst** 

VIVETENNIS Jun. 2022 - Aug. 2022

· Developing and Analysing Robot Monitoring System

**Undergraduate Student Internship** 

Tehran, Iran

Jul. 2021 - Sep. 2021

• Eye Disease Diagnosis using Artificial Intelligence

## Projects \_\_\_\_\_

AIMEDIC

#### Iranian Azerbaijani NLP Pipeline

THE LANGUAGE MODEL, RESOURCES, AND COMPUTATIONAL PIPELINES FOR THE UNDER-RESOURCED IRANIAN AZERBAIJANI Jan. 2023 - May. 2023

**3D Vision Transformers and Convolutional Models for Segmentation Tasks** 

Jan. 2022 - Jan. 2023

DEVELOPING JOEYNMT FRAMEWORK FOR TRANSLATING AZERBAIJANI TO FARSI USING TRANSFORMERS AND SEQ2SEQ MODELS

Jun 2022

Iran

FINE TUNING BERT MODEL FOR NAME ENTITY RECOGNITION AND LANGUAGE SPELL CORRECTION

May. 2022 - Jun. 2022

April 2022

EXTRACTING QUESTIONS AND RESPECTIVE ANSWERS FROM A TEXT USING REGULAR EXPRESSIONS

DEVELOPING A PREPROCESSING PIPELINE FOR TURKISH LANGUAGE

BACHELOR'S THESIS ON 3D MRI BRAIN TUMOR SEGMENTATION

**Azerbaijani to Farsi Translation** 

**Persian NER and Spell Corrector** 

**Turkish Preprocessing Pipeline** 

**Persian OA Extractor** 

April 2022

Modern Information Retrieval	Iran
A project including Indexing, Compressing, Query Correction, Language Models, Classifiers, and Clustering	Feb. 2021
TeleNurse	Iran
A LOGISTIC PROJECT FOR PROVIDING HEALTHCARE AND NURSING IMPLEMENTED USING PYTHON DJANGO, POSTGRESQL, AND DOCKER	Nov. 2022
Eye Disease Recognition	Iran
RECOGNITION OF 7 EYE DISEASES USING TRANSFER LEARNING IMPLEMENTED AS MY INTERNSHIP PROJECT	Sep. 2021