# **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 Sep. 2018 - Feb. 2023 B.Sc. IN COMPUTER ENGINEERING • 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\_ Gifted Student Award Entrance exam waiver for graduate program, Sharif University of Technology 2018-2023 Membership In Iran's National Elites Foundation Rank 51st In Mathematics and Physics B.Sc. entrance exam among more than 144,000 participants 2018 2017 **Accepted** In the First Exam of Mathematics Olympiad Research Interests **Large Language Models Multi-Modal Models Machine Translation Natural Language Processing Deep Learning Machine Learning 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**022 **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 Google **2**2021 **Natural Language Processing in TensorFlow,** Laurence Moroney DeepLearning.Al **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

FEBRUARY 13, 2024 MAHSA AMANI · RÉSUMÉ

Sep. 2023

M. Amani, M. Nouri, R. Zohrabi, E. Asgari

• In Proceedings of AACL 2023 (Asia-Pacific ACL), Published

### Linguistic Resources and Transformer-based Models for the Machine Translations between Luri and Yazdi Dialects versus Standard Persian

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

Oct. 2022

## Skills

Programming 
Python, R, C/C++, JAVA, SQL, LTFX

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

# Research Experience \_

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

Dec. 2023 - Jan. 2024

SEMEVAL2024

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

**Pipelines for low-resource Iranian Languages** 

RESEARCH ASSISTANT

Sep. 2022 - Now

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

A Large Language Model for Persian

Iran Oct. 2023

RESEARCH ASSISTANT

• 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** Tehran, Iran

ZAREBIN Oct. 2022 - Apr. 2023

• Developing a Shopping Information Retrieval System using Deep Learning Methods

**Teaching Assistant** Tehran, Iran

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** Tehran, Iran

VIVETENNIS

Jun. 2022 - Aug. 2022

· Developing and Analysing Robot Monitoring System

**Undergraduate Student Internship** 

AIMEDIC Jul. 2021 - Sep. 2021

• Eye Disease Diagnosis using Artificial Intelligence

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

#### Iranian Azerbaijani NLP Pipeline

**Azerbaijani to Farsi Translation** 

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

BACHELOR'S THESIS ON 3D MRI BRAIN TUMOR SEGMENTATION

Jan. 2022 - Jan. 2023

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

Jun. 2022

Iran

2

**Persian NER and Spell Corrector** FINE TUNING BERT MODEL FOR NAME ENTITY RECOGNITION AND LANGUAGE SPELL CORRECTION

May. 2022 - Jun. 2022

Mahsa Amani · Résumé FEBRUARY 13, 2024

Persian QA Extractor	Iran
EXTRACTING QUESTIONS AND RESPECTIVE ANSWERS FROM A TEXT USING REGULAR EXPRESSIONS	April 2022
Turkish Preprocessing Pipeline	Iran
DEVELOPING A PREPROCESSING PIPELINE FOR TURKISH LANGUAGE	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