Majid Zarharan

• My Website • +98 935 927 5815 • last update: May 2022
• Google Scholar Profile
• Academic Mail • Gmail • Linkedin

Education

Nov 2021 Sep 2018

Iran University of Science and Technology (IUST)

Tehran, Iran

- Ranked 4th among all Iranian Universities (Based on the OS World University Rankings 2022)
- · Master's degree in Artificial Intelligence
- · Supervisor: Dr. Sauleh Eetemadi and Dr. Mohammad Taher Pilehvar
- . GPA: 3.65 (Ranked 6th among 28 students)

2011 2009

Raja University

Qazvin, Iran

- BSc. Computer Engineering
- . GPA: 3.84
- Supervisor: Dr. Hooshang Azizi

2009 2007

Vocational Technical University
It is called Professor Hessabi

Shirvan, North Khorasan, Iran

- Associate of Computer Software
- . GPA: 3.82

Honors and Awards

- Ranked 150th in the National Universities Entrance Exam in M.Sc Degree, in Artificial intelligence discipline among near 30,000 Participants.
- Member of <u>Iran's National Elites Foundation</u> since 2019.
- . Ranked 6th among 28 graduate students of AI in the Department of Computer Engineering with a 3.65 GPA.
- . Ranked 3rd among 120 undergraduate students in the Department of Computer Engineering with a 3.84 GPA.
- Ranked 1st among 30 students in the Vocational Technical University with a 3.82 GPA.

Research Interests

- · Natural Language Processing
- Deep Learning
- Machine Learning (Lifelong learning, Few-shot learning, ...)
- Transfer Learning
- · Multimodal AI

- . Explainable AI
- Neural Net Interpretability
- Fake News Detection and Fact-checking
- Question Answering and Open Domain Chat bot
- · Computer Vision

Publications

Persian Stance Classification Data Set. [pdf] (TTO 2019)

M. Zarharan, S. Ahangar, F. Rezvaninejad, M. Lotfi Bidhendi, Sh. Jalali , M. Pilevar, B. Minaei and S. Eetemadi

ParsFEVER: a Dataset for Farsi Fact Extraction and Verification. [link] (*SEM 2021)

M. Zarharan, M. Ghaderan, A. Pourdabiri, Z. Sayedi, B. Minaei-Bidgoli, S. Eetemadi and M. Pilehvar.

Persian Fake News Detection Using Stance Classification. (In Prep)

Claim Extraction and Explainable Fact-checking. (In Prep)

Automatic Construction of a Large-scale Dialogue Dataset Based On Movie Subtitles. (In Prep)

Developing an Open-Domain Dialogue System, Considering Text and Voice of Movie Dialogues. (In Prep)

Academic Projects

Persian Fake News Detection

In this project, I use Persian stance detection in order to detect fake news. In addition, this is my Master's dissertation.

Oct 2020 - Nov 2022

Persian Stance Detection [get data]

The final project of the deep learning and natural language processing courses. My "Persian stance classification data set" paper is the result of this project.

Aug 2019 - Jun 2020

Educational Data Mining [get data]

The final project of the data mining course. In this project, I examined students' information and obtaining reasons for academic growth, academic failure, and dropout.

Jan 2020 - Jun 2020

Movie Sentiment Analysis

The final project of the machine learning course.

Jan 2020 - Jun 2020

Improving the Prediction of the Minority Class

One of the pattern recognition course projects. Performing different methods of classifying imbalanced data in order to have realistic accuracy.

Jul 2019 - Sep 2019

Online Education Website

The final project of the Bachelor's degree.

2011

Research Experience

Pioneered The First Persian Fake News Detection by Using Stance. Devised Robot User Detection Systems

- $\bullet \quad \textit{NLP and ML Engineer and Researcher at } \underline{\textit{Dadmatech company}} \quad \textit{(Jun 2021-Present)}$
- Tech stack: Python | Tensorflow (Keras) | Pytorch | Django | MySQL | Gunicorn | Nginx | Scikit-Learn |
 Matplotlib | Pandas | Numpy | Seaborn | NLTK | FastText | Transformers | Docker | FastAPI | Hugging Face

Established The First Persian Chit-Chat Dialogue System

- NLP and ML Engineer and Researcher at <u>Dadmatech company</u> (Jul 2020 Jun 2021)
- Tech stack: Python | Tensorflow (Keras) | Pytorch | Django | MySQL | Gunicorn | Nginx | Scikit-Learn |
 Matplotlib | Pandas | Numpy | Seaborn | NLTK | FastText | Transformers | Docker | FastAPI | Hugging Face

Engineered The First Persian Fact-checking System

- NLP and ML Engineer and Researcher at <u>Iran's National Elites Foundation</u> (Nov 2019 Sep 2020)
- Tech stack: Python | Tensorflow (Keras) | Transformers | Django | MySQL | Scikit-Learn | Matplotlib | Pandas | Numpy | NLTK | Gensim | Word2vec | FastText | BERT | ParsBERT | Pytest | Hugging Face

Industry Experience

AI Engineer and Senior .Net Developer at Pajouhesh Co (Oct 2017 – Jul 2020)

- · Discovered educational data mining by using machine learning methods and employing Scikit-Learn
- Produced the first Persian educational data mining on the information of whole Iranian students by ML
- · Forecasted the critical levels of dropping out of school, being expelled from school, and GPA
- Boosted the HR office automation system features by 15 and cut down paperwork by 40%
- Tech stack: Python | Scikit-Learn | Matplotlib | Pandas | Numpy | Seaborn | C# | SQL Server | Asp.net MVC | Entity Framework | RabbitMQ | Jquery | Angularjs | Bootstrap | Git | CSS | Html

Industry Experience

Full Stack .Net Developer at <u>Ican Engineering Group</u> (Feb 2016 – Oct 2017)

- Added features and applications to an online HR office automation system which is called Farzin with ASP.Net and SQL Server
- Tech stack: Ado.net | C# | SQL | Asp.net | JQuery | Javascript | Bootstrap | JQuery UI | SignalR | TFS | Css | Html

Full Stack .Net Developer at Mahan Anbouh Payam (Jan 2013 – Feb 2016)

- · Undertook web and windows applications development using C#, C#.Net, and SQL
- Tech stack: Ado.net | C# | SQL Server | Asp.net | MVC | Windows Application | JQuery | Javascript | Entity Framework | Bootstrap | Umbraco (asp.net cms) | FastReport | jQuery UI | My SQL | Facebook API | Google API | Unit test | Integration test | Design Patterns | MVP | Jira | Scrum | CSS | Html

Full Stack .Net Developer (Freelancer) (Jan 2012 – Jan 2013)

- During this period, I deployed different websites for the private sector.
- · Tech stack: Ado.net | C# | SQL Server | Asp.net | JQuery | Javascript | CSS | Html

Teaching Experience

<u>Natural Language Processing</u>, Computer Engineering Department of Iran University of Science and Technology, Tehran, Iran (Feb 2021 – Aug 2021)

· Working as a teacher assistant.

Data Mining, Computer Engineering Department of Iran University of Science and Technology, Tehran, Iran (Feb 2021 – Aug 2021)

· Working as a teacher assistant.

<u>Fundamentals of Computer Programming</u>, Computer Engineering Department of Iran University of Science and Technology, Tehran, Iran (Sep 2019 – Feb 2020)

· Working as a teacher assistant.

Computer Skills

Programming

 Python, TensorFlow (Keras), Pytorch, (MS/My) SQL, MongoDB, CNN, Transformers, Pandas, Scikit-Learn, Numpy, Pytest, Gensim, Jupyter, REST APIs, FastAPI, Django, Docker, Git, Windows, Linux, and familiar with R, RStudio, and Clouds

Application

· PyCharm, Visual Studio, MS SQL Server, Microsoft Office

Platforms

. Windows, Linux

Certificates

The Data Scientist's Toolbox [link] (2022) From coursera.org

Neural Networks and Deep Learning [link] (2020) From coursera.org

Deep Learning in Machine Vision and Image Processing Course [link] (2020)

From Iranian Machine Vision and Image Processing Association.

Languages

Persian (Native Language)

English (Overall 6.5. speaking:7, reading: 6.5, listening and writing: 6)

· I faced a problem during the Written exam. I could get a higher score if necessary.

Other Interests

Almost all team sports (like Soccer and Volleyball), Ping Pong, Badminton, Bodybuilding and Camping

Reference Professors

- Behrouz Minaei Bidgoli, Associate Professor, Department of Computer Engineering, Iran University of Science and Technology, Tehran, Iran; <u>b minaei@iust.ac.ir</u>
- Mohammad Taher Pilehvar, Assistant Professor, Department of Computer Engineering, Iran University of Science and Technology, Tehran, Iran; mp792@cam.ac.uk
- . <u>Sauleh Eetemadi</u>, Assistant Professor, Department of Computer Engineering, Iran University of Science and Technology, Tehran, Iran; sauleh@gmail.com