

# Zahra Habibzadeh

GRADUATE STUDENT · RESEARCH ASSISTANT

School of Electrical and Computer Engineering, Collage of Engineering, University of Tehran, Tehran, Iran

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“Be the change that you want to see in the world.”

## Education

### University of Tehran

M.SC. IN ARTIFICIAL INTELLIGENCE AND ROBOTICS

- Overall GPA: 18.64/20 (4/4)

Tehran, Iran

2020 - present

### University of Mazandaran

B.S. IN COMPUTER ENGINEERING

- Thesis: Desining new Article site by using PHP and SQL
- Overall GPA (Last two years): 4/4 last two years
- 2nd Rank among Graduated Bachelor Students based on Overall GPA among 70 students

Babolsar, Iran

2012 - 2016

## Research Interests

**Social Networks** Behavioral Analysis

**Machine Learning** Predictive Analysis

**Data science** Exploratory Data Analysis

**Deep Learning** RNNs in Finance ML

## Research Experience

### Research Assistant

SOCIAL NETWORKS LAB, UNIVERSITY OF TEHRAN

- Compared different methods of Influence Maximization Problem in Social Networks in a systematic review. (Link)
- Working on predicting social indexes from twitter.

Tehran, Iran

2021 - present

## Teaching Experience

### Mentor

UNIVERSITY OF TEHRAN, TEHRAN, IRAN

- Data Analytics and Machine Learning
- Group collaboration with 7 other mentors for educating 80 students during 14 workshops on Data Analytics and Machine Learning.

HooshBuz Summer School

2022

### Statistical Inference Teaching Assistant

SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING, COLLEGE OF ENGINEERING, UNIVERSITY OF TEHRAN, TEHRAN, IRAN

- Defining an advanced project for more than 70 students.

Dr. Behnam Bahrak

2022

### Machine Learning Teaching Assistant

SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING, COLLEGE OF ENGINEERING, UNIVERSITY OF TEHRAN, TEHRAN, IRAN

- Defining an advanced project for more than 100 students.

Dr. Mohammad Reza Abolghasemi

2022

### Data Analysis Teaching Assistant

SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING, COLLEGE OF ENGINEERING, UNIVERSITY OF TEHRAN, TEHRAN, IRAN

- Defining 3 advanced projects and 3 quizzes for more than 70 students.

Dr. Mohammad Amin Sadeghi

2021-2022

## Projects

### Big Data and Data Analytics Projects

- Launching a real time Big Data system for analysis of online Persian Twitter data
- Using Apache Spark for NLP, Log mining, Graph mining and Stock Market tasks
- Analyzing a real dataset with R programming language
- Investigating the main reason for sales decline in a wood industry factory

2020-2021

## Social Networks Projects

2021-2022

- Examining the effect of the combination of economic and social analysis on the prediction of stock price fluctuations
- An analysis of Telegram channels related to the dollar and its price

## Deep Learning & Machine Learning Projects

2020-2022

- Deep Reinforcement Learning for Cartpole Environment
- Generating music using LSTMs
- Classifying images using Convolutional Neural Networks
- Detecting Parkinson disease using signals of speech data with ensemble learning

## Bio Inspired Computing Projects

2022

- Developing L-System Grammar
- Implementing Bio-Inspired Optimization methods

## Skills

### Theoretical Experience

Machine learning, Data Analytics, Deep learning, Design of Algorithms, Big Data, Data structures and Databases

### Programming Languages

Python, R, HTML, CSS, JavaScript and C++

### Libraries and Frameworks

PyTorch, Tensorflow, Keras, Numpy, Scipy, Scikit-learn, Pandas, BeautifulSoup and NetworkX

### Databases, Datastores, and Tools

MongoDB, Apache Cassandra, Elasticsearch, ClickHouse, Neo4j, SERVERSQL

### Big Data Platforms and Tools

Apache Spark, Apache Superset, Apache Hadoop, Apache Kafka, Apache hive, Kibana, DBeaver

### Visualization Tools

Matplotlib, Seaborn, Plotly, Gephi, Geoplotlib and Houdini

### CI/CD Tools

Git

### Container Platforms

Docker

### Other Tools and Skills

LATEX, MS Office and Adobe Photoshop

## Languages

English

Fluent

Persian

Native

## Academic Courses

Bio Inspired Computing, 19.4/20

2022

Advanced Robotics, 18.77/20

2022

Social Networks, 18/20

2021

Neural Networks and Deep Learning, 18.06/20

2021

Massive Data Analysis and Systems (Big Data), 19.5/20

2021

Statistical Inference, 17.8/20

2021

Machine Learning, 19.3/20

2020

Data Analysis, 17.75/20

2020