

# Mazyar Ghezelji

Department of Computer Engineering, K.N.Toosi university of technology, Tehran, Iran

☎ (+98) 901 571 4055 | ✉ maz.ghezelji@gmail.com | 📄 github.com/mazyar-ghezelji | 🔗 linkedin.com/in/mazyar-ghezelji

## Education

### K.N.Toosi University of technology, Department of Computer Engineering

Tehran, Iran

M.Sc. IN ARTIFICIAL INTELLIGENCE

September 2019 - current

### Urmia University, Department of Computer Engineering

Urmia, Iran

B.Sc. IN SOFTWARE ENGINEERING

September 2015 - June 2019

- Overall GPA: 16.74/20
- Specialized GPA: 18.14/20
- Last two semesters GPA: 17.87/20

## Publications

### Personality-Boosted Matrix Factorization for Recommender Systems (Submitted)

Journal of Applied Intelligence

MAZYAR GHEZELJI & CHITRA DADKHAH

July 2020

- **Abstract:** Recommender systems are one of the extensively used Knowledge Discovery in Database techniques which have gained a lot of attention recently. These systems have been applied in many internet-based communities and businesses to make personalized recommendations and eventually gain a higher profit. The core entity in these systems is ratings from users to items but there are many auxiliary pieces of information that can be used to get better performance. The personality of users is one of the most useful information that helps the system to produce more accurate and personalized recommendations. It has been proved that the characteristics of a person can directly affect her behavior. In this paper, We exploit the personality of users and propose a mathematical and algorithmic approach to utilize this information. the base model that we use is matrix factorization which is one of the most powerful methods in recommender systems. Experimental results on realworld datasets demonstrate the positive impact of personality information on the matrix factorization technique and also reveals better performance compared to state-of-the-art algorithms.

## Academic Achievements

2015-2019 **Ranked 2<sup>nd</sup>**, among 50 CE Students, Urmia University

Urmia, Iran

2019 **Winner**, AI Contest of Digikala Company

Tehran, Iran

2019 **Within the top 1%**, Among approximately 130,000 participants in National master's exam (konkoor)

Tehran, Iran

2018 **Ranked 1<sup>st</sup>**, in Urmia University pre-ACM ICPC problem solving contest, Urmia University

Urmia, Iran

2018 **Accepted**, in regional ACM Programming contest, Sharif University of Technology

Tehran, Iran

2017 **Accepted**, in regional ACM Programming contest, Sharif University of Technology

Tehran, Iran

## Teaching Experience

### Software Engineering, Version Control(Git and Github)

Urmia University

TEACHING ASSISTANT

Winter 2018

- Instructor: Dr. Parviz Rashidi

### English Language

Fattahi Institute

TEACHING ASSISTANT

2010-2012

- Instructor: Maryam Fattahi

## Work Experience

### Digikala Company

Tehran, Iran

ARTIFICIAL INTELLIGENCE INTERN

November 2019 - January 2020

- 3 moth internship at Digikala Next AI center. I was working on Dynamic pricing as my project for the internship program.

### Doodkani IT Company

Urmia, Iran

ANDROID DEVELOPER

June 2018, August 2018

- On-site internship under this Technology company. Implemented an android application for students and teachers of a foreign language Institute .

## Notable Projects

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### Improving Matrix Factorization technique in Machine Learning

*K.N.Toosi University of Technology*

2020

- Implementing Matrix Factorization and using auxiliary information with the goal of improving it. The result of this experiment was the paper which was published in the Journal of Applied Intelligence.

### An information retrieval system implementation using python on Hamshahri corpus (Persian Language)

*Urmia University*

2019

- This project was done for information retrieval system undergraduate course. it aims at building information retrieval systems for persian language (which there is small number of works done).

### Implementing an item based recommender system in python

*K.N.Toosi University of Technology*

2019

- it was a recommender system on 130.000 fashion items and i was trying to find out the difference between recommenders that use pictures and the ones that use attributes.

### Training neural networks with evolutionary algorithms

*K.N.Toosi University of Technology*

2019

- training neural network with algorithms like PSO, GA and grasshopper optimization.

### Predicting items that a user will buy in the next month

*Digikala Company*

2019

- it was a part of the contest for Digikala company winter AI camp(largest online retail company in Iran and Middle East). I used Neural Networks and Random forest to solve the problem.

### A study on the influence of text classification on text prediction using Markov chains (Undergraduate Thesis)

*Urmia University*

2019

- this project was my undergraduate's final project. the goal of this project was to increase text prediction accuracy by building models on grouped data, then predicting text based on the group of user's previous written text.

### Arduino voice control

*Urmia University*

2019

- sending and receiving data between Android (voice commands and text-to-speech) and Arduino using Bluetooth connection.

### A study on the influence of text classification on text prediction using Markov chains

*Urmia University*

2019

- this project was my undergraduate's final project. the goal of this project was to increase text prediction accuracy by building models on grouped data, then predicting text based on the group of user's previous written text.

## Skills

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<b>Programming</b>	Python, Java, C++, C#
<b>Scientific Libraries</b>	Numpy, Matplotlib, seaborn, Pandas, ScikitLearn, Surpriselib, Tensorflow, Keras, Nltk, PyTorch
<b>Operating Systems</b>	Linux, Windows, Mac Os, Android
<b>Databases</b>	SQL database, MySql

## Languages

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<b>English</b>	TOEFL:101 (Reading=26 - Listening=29 - Speaking=24 - Writing=22 )
<b>Kurdish</b>	Mother Tongue
<b>Persian</b>	Native
<b>French</b>	Amateur
<b>Azeri</b>	Amateur