# Ali Najafi

## Research Area

Natural Language Processing, Computer Vision, Machine Learning, Deep Learning MultiModal Learning, Text Mining, MultiTask Learning

## Education

2017–2021 Bachelor's Degree (Computer Engineering), University of Tabriz, Tabriz, Iran,

**CGPA**: 3.3/4

Bachelor's Project Grade: 19/20 - 4/4

Last two years GPA : 3.59/4.00 Related Courses GPA: 4/4

- Data Mining
- Artificial Intelligence
- Computational Intelligence
- Algorithm Design
- Data Structure

- Database Design
- Software Engineering
- Advanced Programming
- Foundations of Programming

2014–2017 H.S. Diploma (Mathematics), High School of Ferdowsi, Tabriz, Iran, CGPA: 18.68/20

## **Publications**

A Najafi, A Gholipour-Shilabin, R Dehkharghani, A Mohammadpur-Fard,
M Asgari-Chenaghlu ComStreamClust: A communicative multi-agent approach to text clustering in streaming data, Annals of Data Science, 2021(Under Review)

#### Standardized Test Scores

July 2021 IELTS (Academic)

Score: 7

○ Listening 8 ○ Speaking 7.5 ○ Writing 6.5 ○ Reading 6

# **Projects**

#### 2021 Movie Recommender System

- Implemented a movie recommender system using item-based and user-based collaborative filtering
- The classifier predicts the score a user might give to a movie on a 1-5 scale.
- The model is trained on the Movielens dataset

#### 2020 Language Translation

- Al model for translating English to Italian
- o Implementing Transformer-based Model from scratch using Tensorflow v2
- Deploying the Translator with Django

#### 2020 Sentiment Analysis Ausing Bert Tokenizer and CNN

• Analyzing the sentiment of sentences using Bert Tokenizer And cnn models

#### 2020 Shahname (POEM) Character Based Text Generation

- Generating poem using LSTM model
- Using AI for fun and generating poem similar to Shahname's poems

#### 2020 Kaggle Competition (SIIM-ISIC Melanoma Classification)

- Handling extremely unbalanced data
- Constructing MultiModal system
- Stacking and ensembling different models such as Random Forest and XGBoost to achieve better results
- Using transfer learning on pretrained models such as VGG19 and Xception

#### 2020 Music Genre Classification

Classifying music genres based on their MFCC spectrogram

#### 2019 Simulated Self Driving Car

- Developed using DQN (Reinforcement Learning based model)
- o Gaining the experience of using KIVI for building user experience

#### 2019 Landmark Detection on Dental Images

- Detecting special landmarks On dental images
- VGG-face model used as pretrained model for solving this Task

#### 2018–2019 Persian News Stream Clustering

- Constructed a fully-customized Al system in a team of 6 engineers
- o Implemented a news clustering system that did online topic modeling on streaming data

#### 2018 Silk Road Graph Analyzer

- Solving Travelling Salesman Problem using Dynamic Programming
- Solving Travelling Salesman Problem using AntColony

# **Teaching**

November **Git Workshop**, Department of Computer Engineering, University of Tabriz, Tabriz 2020 Iran

Teaching Git and Github to Junior Developers

#### Skills

### **Programming Languages**

Python, C#, Java, Scala, C , C++, JavaScript

#### **Programming Frameworks**

Tensorflow, Keras, Pytorch, Django, ReactNative

## Programming Libraries

Numpy, Pandas, Scikit learn, Matplotlib, Seaborn, Tableau

DataBase Tools

MySQL

Other

Git, LaTEX, Linux

# Languages

Azerbaijani Native

Persian Proficient

English Proficient

Turkish Intermediate

Arabic Beginner

# Academic References

- Associate Prof. Mohammad Ali Balafar Department of Computer Engineering, University of Tabriz, Tabriz, Iran: balafarila@tabrizu.ac.ir
- Associate Prof. Rahim Dehkharghani Department of Computer Engineering, Isik University, Şile, Turkey: rahim.dehkharghani@isikun.edu.tr
- Dr. Meysam Asgari-Chenaghlu Department of Computer Engineering, University of Tabriz, Tabriz, Iran: m.asgari@tabrizu.ac.ir