Ali Najafi

Research Area

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

Education

2017–2021 Bachelor's Degree (Computer Engineering), University of Tabriz, Tabriz Iran, CGPA - 3.3/4.

Thesis Grade: 19/20 - 4/4

GPA of the last two years: 3.59/4.00

Related Courses GPA - 4/4:

 Data Mining: A+ Artificial Intelligence: Α Computational Intelligence: A+ Algorithm Design: A+ Data Structure: **A**+ Database Design: A+ Software Engineering 1: A+ Advanced Programming: **A**+ Basics of Programming: **A+**

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, Under Review, 2021

Standardized Test Scores

July 2021 **IELTS (Academic)**.

Score: 7:

Listening 8 Writing 6.5 Speaking 7.5 Reading 6

Projects

2021 Movie Recommender System.

Contributions:

- 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.

Contributions:

- Implementing Transformer-based Model from scratch using Tensorflow v2
- Deploying the Translator with Django

2020 Sentiment analysis using bert Tokenizer and CNN.

Contributions:

o Analyzing the sentiment of sentences using Bert Tokenizer and cnn models

2020 Shahname (poem) Character Based Text Generation.

Generating poem using LSTM model

Contributions:

Using AI for fun and generating poem similar to Shahname's poems

2020 Kaggle Competition (SIIM-ISIC Melanoma Classification).

Contributions:

- 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.

Contributions:

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

2019 Landmark Detection on Dental Images.

Contributions:

- Detecting special landmarks on dental images
- VGG-face model used as pretrained model for solving this Task
- Multiple image augmentation applied on images

2018–2019 Persian News Stream Clustering.

We implemented a news stream clustering algorithm and did topic modeling Contributions:

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

2018 Silk Road Graph Analyzer.

Contributions:

- Solving TSP (Travelling Salesman Problem) using (Dynamic Programming)
- Solving TSP (Travelling Salesman Problem) using (AntColony)

Teaching

November Git Workshop, University of Tabriz, Tabriz Iran.

2020 Contributions:

• Teaching Git and Github to freshmen

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

Azeri Native

Persian Native

English Fluent

Arabic Intermediate

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
- o Dr. Meysam Asgari-Chenaghlu Department of Computer Engineering, University of Tabriz, Tabriz, Iran: m.asgari@tabrizu.ac.ir