

## Education

### School of Electrical and Computer Engineering, University of Tehran

B.Sc. IN COMPUTER ENGINEERING(SOFTWARE ENGINEERING MAJOR)

- **Cum. GPA: 17.13/20 (3.65/4)**, Faculty Average: 15.1/20 (3.02/4)

Tehran, Iran

Sep. 2019 - Aug. 2024

### Shahid Ezheie 2 High School

DIPLOMA IN MATHEMATICS AND PHYSICS

- **GPA: 19.29/20**
- As a part of the National Organization for Development of Exceptional Talents (NODET)

Tehran, Iran

2016 - 2019

## Research Interests

- Natural Language Processing
- Machine Learning
- Data Mining

## Publications

### Bias mitigation in Persian offensive language detection

In Preparation

AZADEH SHAKERY, ALI HUMAYOUNI, EMAD KEBRAIEI, ALI RANJBARI

In this paper, we employ a novel approach to mitigate bias in Persian language models, particularly ParsBert. We utilize reweighting techniques to address bias, and modify the loss function accordingly. Additionally, we leverage LMI (Lexical Mutual Information) score for word ranking, and evaluate bias using ROC (Receiver Operating Characteristic) analysis and AUC (Area Under the Curve) metrics.

## Research Experience

### University of Tehran

INTELLIGENT INFORMATION SYSTEM LABORATORY

- Under the supervision of Professor **Azadeh Shakeri**
- Researching applying different methods of bias mitigation in Persian offensive language detection

Tehran, Iran

Jun. 2023 - Present

### Sharif University of Technology

SPEECH AND LANGUAGE PROCESSING LABORATORY

- Under the supervision of Professor **Hossein Sameti**
- Optimizing various language models, including BERT and MD5, through fine-tuning for tasks like sentiment analysis
- Participating in **Parsi Azma** Contest at emotion recognition section

Tehran, Iran

Jun. 2023 - Dec. 2023

## Teaching Experience

### University Of Tehran

INTERNET ENGINEERING

- Under the supervision of Prof. **Ehsan KhamesPanah**
- Design Projects with Java and Tomcat and Spring Boot

Tehran, Iran

Feb. 2024 - Present

### University Of Tehran

INTRODUCTION TO COMPUTING SYSTEMS AND PROGRAMMING

- Under the supervision of Prof. **Mahmoud Reza Hashemi**
- Teaching three distinct classes on basic programming in C. The classes cover programming fundamentals, including logic, data types, control structures, functions, and more. Through interactive lessons, exercises, and projects, students gain a solid understanding of C programming and the ability to develop basic programs.

Tehran, Iran

Oct. 2021 - Jan. 2022

## Professional Experience

## Asr Gooyesh Pardaz

SOFTWARE ENGINEER

Tehran, Iran

May. 2023 - Feb. 2024

- Design base architecture of LexemeAI (the AI platform of asr Gooyesh ) which contains accounting and different AI models
- Developing a comprehensive voice-to-voice chatbot system called DANA(Telegram bot, Bale bot), which includes an accounting and packaging system for online payments. The system utilizes ChatGPT for AI functionality, along with a TextToSpeech model (ARIANA) and a SpeechToText model (NEVISA). The backend framework employed is Django, and the database of choice is PostgreSQL. Docker is utilized for efficient containerization during the development process.
- Developing an advertisement service for publishing Ads on different platforms
- Deploy AI models in server and maintain them
- Debug and Maintain different services

## Vira Afzar Adan

SUMMER INTERNSHIP

Tehran, Iran

Aug. 2022 - Oct. 2022

- Under the supervision of Professor **Heshaam Faili**
- Working on a summer internship project, I focused on utilizing the Transformers library and the ParsBERT model. The objective was to develop an application that calculates the probability of specific words appearing in masked positions within a given sentence. To achieve this, I researched natural language processing (NLP) and BERT models, while also studying PyTorch and the Transformers library. Throughout the project, I prioritized optimizing the application's efficiency and minimizing processing time.

## Honors & Awards

- 2019 **Ranked in the top 1%,** National Organization of Educational Testing (NOET)
- 2016 **3rd place in the Technology section,** Kharazmi Youth Festival
- 2010 **Silver Medal,** Isfahan Province Taekwondo Championship

Tehran, Iran

Isfahan, Iran

Isfahan, Iran

## Academic Project Highlights

### Neural Network Implementation

IMPLEMENTATING MODELS OF RESEARCH PAPERS

Neural Network and Deep Learning

Python, Pytorch, Tensorflow

Implementing over 10 research papers with PyTorch across various contexts, including CNNs, RNNs, Transformers, Transfer Learning and ...

### Movie Type Detection

AN MOVIE GENRE CLASSIFIER WITH DECISION TREE

Artificial Intelligence

Python, Scikit-Learn, TensorFlow

Classifying movies and TV shows genre using Decision Tree model and random Forrest

### Baloot Online shopping site

AN ALL-INCLUSIVE ONLINE SHOPPING PLATFORM

Internet Engineering

Java, Spring Boot, React, Docker, MySQL

A robust website was developed, utilizing Java Spring Boot for the backend and Node.js React for the frontend and MySQL database for the Database. The implementation incorporates various security technologies, alongside Docker and Git, to ensure a secure and reliable platform.

### XV6 Kernel

XV6 KERNEL WITH ADDITIONAL FEATURES

Operating System

C and C++

Improving and adding new features to xv6 kernel like new system calls, synchronization, scheduling and ...

### Sudoku Solver

SOLVING SUDOKU GAME USING GENERIC ALGORITHM

Artificial Intelligence

Python, Matplotlib

The Sudoku game is tackled using a genetic algorithm, harnessing its capacity to optimize solutions. The algorithm initially initializes the puzzle with random numbers and progressively enhances them by generating offspring and introducing mutations.

## Licenses

- Mar. 2023 **Machine Learning,** DeepLearning.ai
- Oct. 2022 **Natural Language Processing with Attention Models,** DeepLearning.ai
- Sep. 2022 **Natural Language Processing with Sequence Models,** DeepLearning.ai

Coursera.org

Coursera.org

Coursera.org

## Skills

<b>Programming Languages</b>	Python, JAVA, C++, C, Node.js
<b>Data Science</b>	Pandas, NumPy, Pytorch, Tensorflow, Scikit-Learn
<b>Front-end</b>	React, HTML5, CSS
<b>Back-end</b>	Django, Fastapi, REST API, Postgre SQL
<b>DevOps</b>	Docker, Docker Compose

# Languages

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**Persian**    Native  
**English**    Fluent (TOEFL score 93)

# Selected Course Scores

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- Artificial Intelligence**, 19/20(4/4)
- Neural Networks and Deep Learning**, 17.9/20(4/4)
- Advance Programming**, 17.79/20(4/4)
- Algorithm Design**, 17/20 (4/4)
- Data Structures**, 19.2/20(4/4)
- Internet Engineering**, 18.7/20 (4/4)
- Database Design**, 17.9/20(4/4)
- Engineering Probability and Statistics**, 14.5/20 (3/4)