Babak Behkamkia

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Personal Website 🪪
Github
LinkedIn in

Education

IUST University (among the top 4 universities in Iran)   Tehran, Iran
B.Sc. in Computer Science at Iran University of Science & Technology   2019 - 2023

- GPA: 3.79/4.0 (17.9/20.0 in Iranian Scale)
- Selected Courses: NLP(A+), Deep Learning(A+), Artificial Intelligence(A+), Computational Intelligence(A+), Computer Vision(A), Database Design(A+), Graph Theory(A+), Statistics(A+)

Research Interests

● **Machine Learning**   ● **NLP**   ● **Data Engineering**   ● **GANs**   ● **Generative Models**

Research Experience

Image manipulating of a person based on detected personality from text   IUST University
Bachelor Thesis - Supervisor: Dr. Sauleh Eetemadi   Jun 2023 - present

- Data Collection
- Data Generation by LLMs
- GAN Inversion

Interpretable Fact Checking   IUST NLP Lab
This work is a continuation of the Claim Extraction   Jul 2023 - present

- Extracting Atomic-Facts
- Developing a new evaluation metric

GPT-Stance Detection   IUST NLP Lab
Supervisor: Dr. Sauleh Eetemadi - GitHub   Apr 2023 - Aug 2023

- Generating text with GPT-3
- Proposing a new dataset
- Proposing a new pipeline for Stance Detection

Adversarial Stance Detection   IUST NLP Lab
The full report of the VQA project is here   Feb 2022 - Sep 2022

- Adversarial Networks
- Topic invariant models
- Cross-target adaptation

Claim Extraction   IUST NLP Lab
I helped a senior student with her bachelor's Thesis in this project - proposal   Feb 2022 - Jun 2022

- Sub-claim extraction from a complex claim
- Preparing a data set for this task
- Working with Large Language Models

Multimodal Fake News   IUST NLP Lab
We searched for ways to evaluate the realness of news in which visual content was available.   Fall 2021

Publications

Improving Few-Shot Stance Detection Performance with Contextual Data Generation   **Submitted**
WiNLP - GitHub
Authors: G. Mahmoudi, **B. Behkamkia**, S. Eetemadi

Work Experience

NLP and Machine Learning Intern   DADMATECH
Robot User Detection - Supervisor: Dr. Sauleh Eetemadi   Dec 2021 – Aug 2022

- – Working with BERT & BigBird
- – Crawling Twitter
- – Feature Extraction

Course Projects

Personality Detection and Data Generation   IUST University
Natural Language Processing Course - GitHub   Spring 2023

- – Fine-tuning Large Language Models
- – Working with Transformers

Crack Detection   IUST University
Computer Vision Course - GitHub   Fall 2022

- – Image Preprocessing
- – Matching Key Points
- – Morphology
- – Using Pretrained U-net

Covid-19 Prediction   IUST University
Deep Learning Course - GitHub   Fall 2022

- – Image Preprocessing
- – Data Augmentation
- – Squeeze-Net

Awards

Ranked Within the Top 0.3% in Iranian University Entrance Exam   July 2019
Mathematics and Physics majors

- – Ranked 500 among 164000 students

Olympiads   2017 & 2018
Computer & Mathematics

- – reaching the second stage

Skills

- • **Programming Languages:** Python, C#, Dart
- • **Libraries and Frameworks:** Pytorch, TensorFlow, Scikit-Learn, OpenCV, Flutter, Django
- • **Environments and Tools:** Git, Trello, Taskulu, Mendeley, LaTeX

Teaching Experience

Teaching Assistant   IUST University
School of Computer Engineering   Sep 2020 - present

- **Graph Theory** - Instructor: Dr. Farzaneh Ghayour Baghbani - Fall 2023
- **Computational Intelligence** - Instructor: Dr. Nasser Mozayani - Fall 2022
- **Fundamentals of Database Design** - Instructor: Dr. Hossain Rahmani - Spring 2022 & Spring 2023
- **Algorithms Design** - Instructor: Dr. Sauleh Eetemadi - Spring 2022
- **Theory of Languages Automata** - Instructor: Dr. Reza Entezari-Maleki - Spring 2022
- **Data Communication** - Instructor: Dr. Ahmad Akbari Azirani - Spring 2022
- **Data Structures** - Instructor: Dr. Sauleh Eetemadi - Fall 2021
- **Advanced Programming** - Instructor: Dr. Sauleh Eetemadi - Spring 2021
- **Fundamentals of Programming** - Instructor: Dr. Sauleh Eetemadi - Fall 2020

Instructor   IUST University
School of Computer Engineering   Summer 2023

- **Machine Learning**

Selected Online Courses

- **GANs Specialization** - Certificate
- **Deep Learning Specialization** - Certificate

Hobbies

- **Football**   - **YouTube**   - **GYM**   - **Chess**

Languages

- **Persian:** Native
- **Turkish:** Native
- **English:**
  - IELTS: **Overall: 7.5**
    Listening: **8.5**, Reading: **7.5**, Writing: **6.5**, Speaking: **6.5**

References

Dr. Sauleh Eetemadi   Iran University of Science & Technology
Assistant Professor at Department of Computer Engineering
sauleh@iust.ac.ir

Dr. Naser Mozayani   Iran University of Science & Technology
Associate Professor at Department of Computer Engineering
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