Saeed Shakuri



Overview

I am a master's student in Data Science major at the University of Science and Culture, Tehran, Iran. I am truly enthusiastic about doing research at the forefront of Deep Learning methods within real-world applications in general, which leads to high-quality research in real-world challenges. I recognize the importance and my passion for this field, and I am committed to performing continuous and comprehensive research in my field of study.

Highlight of my research experience:

- I am currently working on object detection in images for my master's thesis, utilizing a method that integrates Few-Shot Learning and Vision Transformers on medical images.
- I recently collaborated on two articles titled 'Real-time facial emotion recognition in smartphones using EfficientNetV2 and quantization-aware training' which is submitted to "Journal of Real-Time Image Processing (Springer)" and 'Scalable real-time emotion recognition using EfficientNetV2 and resolution scaling.' which is accepted and presented in "ICWR 10th (IEEE)".

Research interests: Machine learning, Deep Learning, Computer Vision, Transformers

Education

University of Science and Culture, Tehran, Iran

Oct. 2021 - Expected summer 2024

M.S., Data Science

Advisor: Dr. Alireza Rezavanian

Thesis: Object detection with Few-Shot Learning and Vision Transformers on medical Images.

Technical and Vocational University, Tehran, Iran 2018 - 2021

B.E., Electronics engineering (Shamsipour college)

Technical and Vocational University, Karaj, Iran 2016 - 2018

A.S., Electronics engineering (Beheshti College)

Publications

(Submitted) Omid Ghadami, Alireza Rezvanian, Saeed Shakuri, and Mohammad Hojjat Shamami. "Real-time facial emotion recognition in smartphones using EfficientNetV2 and quantization-aware training." In Journal of Real-Time Image Processing, Springer.

(Accepted & Presented) Omid Ghadami, Alireza Rezvanian, and Saeed Shakuri. "Scalable real-time emotion recognition using EfficientNetV2 and resolution scaling." In 2024 10th International Conference on Web Research (ICWR), IEEE.

(In preparation) Saeed Shakuri, Alireza Rezvanian, "Object detection with Few-Shot Learning and Vision Transformers on medical images".

Teaching Experience

Teaching Assistant, Undergraduate Artificial Intelligence course Fall 2023

University of Science and Culture

Dr. Azadeh Tabatabaei

Teaching Assistant, Graduate Machine Learning course

University of Science and Culture

Dr. Alireza Rezvanian

Fall 2022

Notable Academic Projects

Object detection with Detectron2

<u>Link</u>: Python, <u>Environment</u>: Google Colaboratory

<u>Link</u>: https://github.com/SaeedShakuri/Detectron2

Measuring sentence similarity with a TF-IDF approach

Language: Python, Environment: Google Colaboratory

 $\underline{\textbf{Link}}: \texttt{https://github.com/SaeedShakuri/Projects/tree/main/NLP}$

Using PyTorch in Deep Learning tasks (Computer Vision)

Language: Python, Environment: Google Colaboratory
Link: https://github.com/SaeedShakuri/PyTorch.git

A classification project using Ensemble Learning with the Abalone dataset

Language: Python, **Environment**: Google Colaboratory

 $\underline{\textbf{Link}}\text{: https://github.com/SaeedShakuri/Projects/tree/main/Ensemble%20Learning}$

An Image classification project using Transfer Learning with ResNet50

Language: Python, Environment: Google Colaboratory

Link: https://github.com/SaeedShakuri/Projects/tree/main/Convolutional-Neural-Network/Transfer%20Learning

Professional Services

Reviewer

Wiley - The Journal of Engineering Aug. 2023

Elsevier - Data in Brief Journal Mar. 2023 - Apr. 2023

udge Jul. 2023 & Jan. 2024

University of Science and Culture

· Conducting assessments of computer science bachelor students' final projects, followed by assigning grades

Presenter Dec. 2022

University of Science and Culture

• Presentation title: An Introduction to Few-Shot Learning

Work Experience

BlazingFallApps, remotely

Mar. 2020 - Nov. 2021

Software Developer

• Developing various mobile applications with the Flutter framework

PergasTeb, remotely

May. 2020 - Oct. 2020

Software Developer

• Developing a medical android application with the Flutter framework

Skills

Programming Languages

Python, Dart, C

Softwares and Tools

Google Colaboratory, EndNote, LaTex, MiniTab, VSCode, Android Studio

Technological Proficiencies

PyTorch, Detectron2, OpenCV, NumPy, Matplotlib, Flutter

IELTS Academic (Taken in Sep. 2023)

Overall: 7, Speaking: 7.5, Listening: 7, Writing: 6.5, Reading: 7

Masters Courses

N	Natural Language Processing	Spring 2023
G	GPA: 4	

Computer Vision Fall 2022

GPA: 3.93

Computational social network Fall 2022

GPA: 3.73

Artificial Neural Networks Spring 2022

GPA: 3.97

Machine Learning Spring 2022

GPA: 3.91

Data Science Mathematics Fall 2021

GPA: 4

Advanced Algorithms Fall 2021

GPA: 3.73

Applied Data Analysis Fall 2021

GPA: 3.76

Seminar Spring 2022

GPA: 3.8

References

References available upon request.