Saeed Shakuri



Oct. 2021 - Expected summer 2024

Advisor: Dr. Alireza Rezavanian

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 "Multimedia Tools and Application (Springer)" and 'Scalable real-time emotion recognition using EfficientNetV2 and resolution scaling.' which is published in "ICWR 10th (IEEE)".

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

Education

University of Science and Culture, Tehran, Iran

M.S., Data Science (GPA 4/4 or 19.05/20)

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

Technical and Vocational University, Tehran, Iran

B.E., Electronics engineering (Shamsipour college)

Project: An electronic device and a mobile application for remotely managing household keys

and monitoring environmental conditions via WiFi.

Technical and Vocational University, Karaj, Iran

A.S., Electronics engineering (Beheshti College)

2018 - 2021

2016 - 2018

Publications

(<u>Published</u>) Ghadami, Omid, Alireza Rezvanian, and **Saeed Shakuri**. "Scalable Real-time Emotion Recognition using EfficientNetV2 and Resolution Scaling." 2024 10th International Conference on Web Research (ICWR). IEEE, 2024.

(Submitted) Omid Ghadami, Alireza Rezvanian, Saeed Shakuri, and Mohammad Hojjat Shamami. "Real-time facial emotion recognition in smartphones using EfficientNetV2 and quantization-aware training." Multimedia Tools and Application, Springer.

(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 class

University of Science and Culture

Dr. Azadeh Tabatabaei

Teaching Assistant, Graduate Machine Learning class

University of Science and Culture

Dr. Alireza Rezvanian

Fall 2023

Fall 2022

Notable Academic Projects

Object detection with Detectron2

Language: Python, Environment: Google Colaboratory
Link: https://github.com/SaeedShakuri/Detectron2

Measuring sentence similarity with a TF-IDF approach

Language: Python, Environment: Google Colaboratory

<u>Link</u>: 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

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

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 using the Flutter framework

PergasTeb, remotely May. 2020 - Oct. 2020

Software Developer

• Developing a medical android application using 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

Natural Language Processing GPA: 4 / 4	Spring 2023
Computer Vision GPA: 4 / 4	Fall 2022
Computational social network GPA: 4 / 4	Fall 2022
Artificial Neural Networks GPA: 4 / 4	Spring 2022
Machine Learning GPA: 4 / 4	Spring 2022
Seminar GPA: 4 / 4	Spring 2022
Data Science Mathematics GPA: 4 / 4	Fall 2021
Advanced Algorithms GPA: 4 / 4	Fall 2021
Applied Data Analysis GPA: 4 / 4	Fall 2021

References available upon request.

References