Saeed Shakuri

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in Saeed Shakuri
🌐 Website

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 published 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
<u>Thesis:</u> 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)
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   2016 - 2018
A.S., Electronics engineering (Beheshti College)

Publications

(Published) 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." In Journal of Real-Time Image Processing, 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 course   Fall 2023
University of Science and Culture
Dr. Azadeh Tabatabaei

Teaching Assistant, Graduate Machine Learning course   Fall 2022
University of Science and Culture
Dr. Alireza Rezvanian

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*
Link: 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*
Link: 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

Judge   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

Natural Language Processing   Spring 2023
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
Seminar   Spring 2022
GPA: 3.8

Data Science Mathematics   Fall 2021
GPA: 4

Advanced Algorithms   Fall 2021
GPA: 3.73

Applied Data Analysis   Fall 2021
GPA: 3.76

References

References available upon request.