Saeed Shakuri

✉ saeed.shakuri@stu.usc.ac.ir
🎓 Google Scholar
ᴿᴳ ResearchGate
in LinkedIn
🌐 Website

Overview

My research interests broadly lie in Deep Learning methodologies within real-world applications and challenges. My current research focuses on Computer Vision methods in detecting lung nodules associated with lung cancer. The highlight of my research is as follows:

- I have authored a paper titled '**An Efficient Approach in Detecting Lung Nodules Using Swin Transformer'** which has been accepted at the 10th ICSIE, 2024 (IEEE).

- I am currently working on employing Few-shot Learning methods in object detection for detecting lung nodules from CT scan images.

- I have also collaborated on two papers focused on the Image Classification task (More info in the Publications section).

Research interests: Deep Learning, Computer Vision, Transformers, Medical Image Processing

Education

University of Science and Culture, Tehran, Iran	Oct. 2021 - Expected Feb. 2025
M.S., Data Science	Advisor: Dr. Alireza Rezvanian
Thesis: Few-shot lung nodule detection.	
GPA: 4 of 4 (19.05 of 20)	

Technical and Vocational University, Tehran, Iran	2018 - 2021
B.E., Electronics engineering (Shamsipour college)	
Project: A smart house project with monitoring and controlling household environmental conditions and switches using Arduino.	

Technical and Vocational University, Karaj, Iran	2016 - 2018
A.S., Electronics engineering (Beheshti College)	
Project: A smart house project with a digital lock and an automatic light switch.	

Publications

(Accepted) Saeed Shakuri and Alireza Rezvanian. "An Efficient Approach in Detecting Lung Nodules Using Swin Transformer." 10th International Conference on Industrial and Systems Engineering (ICISE), IEEE, 2024.

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

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

(In preparation) Saeed Shakuri and Alireza Rezvanian, "Few-shot Lung Nodule Detection Using Vision Transformers".

Teaching Experience

Teaching Assistant, Undergraduate Artificial Intelligence class	Fall 2023
University of Science and Culture	

Teaching Assistant, Graduate Machine Learning class	Fall 2022
University of Science and Culture	

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

Deep Learning projects using PyTorch (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

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 assessment for 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
Spring 2023
GPA: 4 / 4

Computer Vision
Fall 2022
GPA: 4 / 4

Computational social network
Fall 2022
GPA: 4 / 4

Artificial Neural Networks
Spring 2022
GPA: 4 / 4

Machine Learning
Spring 2022
GPA: 4 / 4

Data Science Mathematics
Fall 2021
GPA: 4 / 4

Advanced Algorithms
Fall 2021
GPA: 4 / 4

Applied Data Analysis
Fall 2021
GPA: 4 / 4

References

References are available upon request.