

Overview

My research interests lie broadly 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 lung nodule detection for my master's thesis.
- 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 M.S., Data Science (GPA 4/4 or 19.05/20) Thesis: Few-shot lung nodule detection.	Oct. 2021 - Expected Feb. 2025 Advisor: Dr. Alireza Rezvanian
Technical and Vocational University, Tehran, Iran B.E., Electronics engineering (Shamsipour college) Project: An electronic device and a mobile application for monitoring environmental conditions via WiFi.	2018 - 2021
Technical and Vocational University, Karaj, Iran A.S., Electronics engineering (Beheshti College)	2016 - 2018

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.
(Submitted) 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".

Teaching Experience

Teaching Assistant, Undergraduate Artificial Intelligence class University of Science and Culture	Fall 2023
Teaching Assistant, Graduate Machine Learning class University of Science and Culture	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 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 Elsevier - Data in Brief Journal	Aug. 2023 Mar. 2023 - Apr. 2023
Judge University of Science and Culture • Conducting assessment for computer science bachelor students' final projects, followed by assigning grades.	Jul. 2023 & Jan. 2024
Presenter University of Science and Culture • Presentation title: An Introduction to Few-Shot Learning	Dec. 2022

Work Experience

BlazingFallApps, remotely Software Developer • Developing various mobile applications using the Flutter framework	Mar. 2020 - Nov. 2021
PergasTeb, remotely Software Developer • Developing a medical android application using the Flutter framework	May. 2020 - Oct. 2020

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

References are available upon request.