





# Saeed Shakuri

 saeed.shakuri@stu.usc.ac.ir  
 Google Scholar  
 ResearchGate  
 HomePage  
Last updated: Oct. 2024

## Overview

My research interests broadly lie in Deep Learning, with some emphasis on Multimodal Learning and Computer Vision, particularly within real-world applications and challenges, such as in the medical and healthcare domains. My current research focuses on Computer Vision methods (Object detection) in detecting lung nodules for lung cancer in CT scan images. Also, I have authored a paper in this field and collaborated on a few other papers in the context of real-time emotion recognition (Image classification).

**Research interests:** Deep Learning, Multimodal Learning, Computer Vision, Medical Applications in Deep Learning

## Education

<b>University of Science and Culture</b> , Tehran, Iran M.S., Data Science <b>Thesis:</b> Few-shot lung nodule detection. <b>GPA:</b> 4 out of 4 (19.05 out of 20)	Oct. 2021 - Expected Feb. 2025 Advisor: <a href="#">Dr. Alireza Rezvanian</a>
<b>Technical and Vocational University</b> , Tehran, Iran B.E., Electronics engineering (Shamsipour College) <b>Project:</b> A smart house remote control using Arduino.	2018 - 2021 Advisor: <a href="#">Dr. Mahdiyar Nouri Rezaie</a>
<b>Technical and Vocational University</b> , Karaj, Iran AS, Electronics engineering (Beheshti College)	2016 - 2018

## Publications

- (Accepted)** Saeed Shakuri and Alireza Rezvanian. "An Efficient Approach in Detecting Lung Nodules Using Swin Transformer." 19th Iranian Conference on Intelligent Systems (ICIS), 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, "Lung Nodule Detection Using Few-shot Learning and Swin Transformer." to be submitted to Computerized Medical Imaging and Graphics.

## Teaching Assistant

<b>Information Retrieval on the Web (Graduate class)</b> University of Science and Culture	Fall 2024
<b>Artificial Intelligence (Undergraduate class)</b> University of Science and Culture	Fall 2023
<b>Machine Learning (Graduate class)</b> University of Science and Culture	Fall 2022

## Notable Academic Projects

- Object detection with Detectron2.**  
[Link: https://github.com/SaeedShakuri/Detectron2](https://github.com/SaeedShakuri/Detectron2)
- Measuring sentence similarity with a TF-IDF approach.**  
[Link: https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/NLP](https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/NLP)
- Image classification using Transfer Learning, regularization terms, and SGD optimizer with PyTorch.**  
[Link: https://github.com/SaeedShakuri/Computer-Vision/blob/main/Pytorch\\_Transfer\\_Learning.ipynb](https://github.com/SaeedShakuri/Computer-Vision/blob/main/Pytorch_Transfer_Learning.ipynb)
- A classification project using Ensemble Learning with the Abalone dataset.**  
[Link: https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/Ensemble%20Learning](https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/Ensemble%20Learning)

## Professional Services

<b>Reviewer</b>	
Elsevier - International Journal of Electrical and Computer Engineering	Oct. 2024
Wiley - The Journal of Engineering	Aug. 2023
Elsevier - Data in Brief Journal	Mar. 2023 - Apr. 2023
<b>Judge</b>	Jul. 2023 & Jan. 2024
University of Science and Culture	
• Judging the final projects of computer science undergraduate students.	
<b>Invited Presenter</b>	Dec. 2022
University of Science and Culture	
• Presentation title: <a href="#">An Introduction to Few-Shot Learning</a>	

## Skills

<b>Programming Languages</b>	
Python, Dart, C	
<b>Softwares and Tools</b>	
Google Colaboratory, EndNote, LaTeX, MiniTab, VSCode	
<b>Technological Proficiencies</b>	
PyTorch, Detectron2, OpenCV, NumPy, Matplotlib, Flutter	
<b>IELTS Academic (Taken in Sep. 2023)</b>	
Overall: 7, Speaking: 7.5, Listening: 7, Writing: 6.5, Reading: 7	

## Master’s Courses

<b>All of the courses received a grade of <u>4 out of 4</u>:</b>	
• Natural Language Processing	Spring 2023
• Computer Vision	Fall 2022
• Computational Social Network	Fall 2022
• Artificial Neural Networks	Spring 2022
• Machine Learning	Spring 2022
• Seminar	Spring 2022
• Data Science Mathematics	Fall 2021
• Advanced Algorithms	Fall 2021
• Applied Data Analysis	Fall 2021

## References

References are available upon request.