





# Saeed Shakuri

 [saeed.shakuri@stu.usc.ac.ir](mailto:saeed.shakuri@stu.usc.ac.ir)  
 [Google Scholar](#)  
 [ResearchGate](#)  
 [HomePage](#)  
Last updated: Dec. 2024

## Overview

My research interests broadly lie in **Deep Learning**, with some emphasis on **Multimodal Learning** and **Computer Vision**, including but not limited to the medical and healthcare domains. I'm also greatly passionate about expanding my skills to **Explainable/Interpretable AI**. My current research focuses on Computer Vision methods (Object detection) in detecting lung nodules for lung cancer in CT scan images. Moreover, I have authored a paper in this field and collaborated on two other papers in the context of real-time facial 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 object 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

<b>(Submitted)</b> Mohammad Saleh and <b>Saeed Shakuri</b> . "Towards Trustworthy Multimodal AI: Review of Fairness, Transparency, and Ethical Implications in Vision-Language Tasks." 8th International Conference on Computers, information technology and applications of artificial intelligence (CITAAI), 2025.
<b>(Accepted)</b> Saeed Shakuri and Alireza Rezvanian. "An Efficient Approach in Detecting Lung Nodules Using Swin Transformer." 19th Iranian Conference on Intelligent Systems (ICIS), IEEE, 2024.
<b>(Published)</b> Omid Ghadami, Alireza Rezvanian, and <b>Saeed Shakuri</b> . "Scalable Real-time Emotion Recognition using EfficientNetV2 and Resolution Scaling." 10th International Conference on Web Research (ICWR), IEEE, 2024.
<b>(Under Review)</b> Omid Ghadami, Alireza Rezvanian, <b>Saeed Shakuri</b> , and Mohammad Shamami. "Real-time facial emotion recognition in smartphones using EfficientNetV2 and quantization-aware training." Multimedia Tools and Application, Springer.
<b>(In preparation)</b> 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

<b>Traffic Sign Detection Using Faster R-CNN, FPN, and Transfer Learning.</b> <b>Link:</b> <a href="https://github.com/SaeedShakuri/Computer-Vision/blob/main/PyTorch_Object_Detection_Transfer_Learning_Traffic_Sign.ipynb">https://github.com/SaeedShakuri/Computer-Vision/blob/main/PyTorch_Object_Detection_Transfer_Learning_Traffic_Sign.ipynb</a>
<b>Object detection with Detectron2.</b> <b>Link:</b> <a href="https://github.com/SaeedShakuri/Detectron2">https://github.com/SaeedShakuri/Detectron2</a>
<b>Measuring sentence similarity with a TF-IDF approach.</b> <b>Link:</b> <a href="https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/NLP">https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/NLP</a>
<b>Image classification using Transfer Learning, regularization terms, and SGD optimizer with PyTorch.</b> <b>Link:</b> <a href="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>
<b>A classification project using Ensemble Learning with the Abalone dataset.</b> <b>Link:</b> <a href="https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/Ensemble%20Learning">https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/Ensemble%20Learning</a>

# 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>	

# Work Experience

<b>BlazingFallApps, remotely</b>	Mar. 2020 - Nov. 2021
Software Developer	
• Developing various mobile applications using the Flutter framework and Dart programming language	

# 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.	
--	--