





# Saeed Shakuri

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 [Google Scholar](#)  
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## 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

**University of Science and Culture**, Tehran, Iran

M.S., Data Science

**Thesis:** Few-shot object detection.

**GPA:** 4 out of 4 (19.05 out of 20)

Oct. 2021 - Expected Feb. 2025

Advisor: [Dr. Alireza Rezvanian](#)

**Technical and Vocational University**, Tehran, Iran

B.E., Electronics engineering (Shamsipour College)

**Project:** A smart house remote control using Arduino.

2018 - 2021

Advisor: [Dr. Mahdiyar Nouri Rezaie](#)

**Technical and Vocational University**, Karaj, Iran

AS, Electronics engineering (Beheshti College)

2016 - 2018

## Publications

**(Submitted)** Mohammad Saleh, Azadeh Tabatabaei, and **Saeed Shakuri**. "Towards Trustworthy Multimodal AI: Review of Fairness, Transparency, and Ethical Implications in Vision-Language Tasks." 3rd International Conference on Computers, information technology and applications of artificial intelligence (CITAAI), 2025.

**(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

**Information Retrieval on the Web (Graduate class)**

University of Science and Culture

Fall 2024

**Artificial Intelligence (Undergraduate class)**

University of Science and Culture

Fall 2023

**Machine Learning (Graduate class)**

University of Science and Culture

Fall 2022

## Notable Academic Projects

<b>Traffic Sign Detection Using Faster R-CNN, FPN, and Transfer Learning.</b>	
Link: <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>	
Link: <a href="https://github.com/SaeedShakuri/Detectron2">https://github.com/SaeedShakuri/Detectron2</a>	
<b>Measuring sentence similarity with a TF-IDF approach.</b>	
Link: <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>	
Link: <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>	
Link: <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 4 out of 4:</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.