





# 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

<b>University of Science and Culture, Tehran, Iran</b> 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 Apr. 2025 Advisor: <a href="#">Dr. Alireza Rezvanian</a>
<b>Technical and Vocational University, Tehran, Iran</b> 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, Karaj, Iran</b> AS, Electronics engineering (Beheshti College)	2016 - 2018

## Publications

- (Submitted)** Mohammad Saleh, Saeed Masoudnia, **Saeed Shakuri**, and Azadeh Tabatabaei. "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.
- (Published)** **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

- Traffic Sign Detection Using Faster R-CNN, FPN, and Transfer Learning.**  
[Link: 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)
- 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>Posters Presented</b> 2nd Symposium on Frontiers in Computer and Data Sciences <ul style="list-style-type: none"><li>An Efficient Approach in Detecting Lung Nodules Using Swin Transformer.</li></ul>	Feb. 2025
<b>Reviewer</b> Elsevier - International Journal of Electrical and Computer Engineering Wiley - The Journal of Engineering Elsevier - Data in Brief Journal	Oct. 2024 Aug. 2023 Mar. 2023 - Apr. 2023
<b>Judge</b> University of Science and Culture <ul style="list-style-type: none"><li>Judging the final projects of computer science undergraduate students.</li></ul>	Jul. 2023 & Jan. 2024
<b>Invited Presenter</b> University of Science and Culture <ul style="list-style-type: none"><li>Presentation title: <a href="#">An Introduction to Few-Shot Learning</a></li></ul>	Dec. 2022

## Work Experience

<b>BlazingFallApps, remotely</b> Software Developer <ul style="list-style-type: none"><li>Developing various mobile applications using the Flutter framework and Dart programming language</li></ul>	Mar. 2020 - Nov. 2021
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## 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> <ul style="list-style-type: none"><li>Natural Language Processing</li><li>Computer Vision</li><li>Computational Social Network</li><li>Artificial Neural Networks</li><li>Machine Learning</li><li>Seminar</li><li>Data Science Mathematics</li><li>Advanced Algorithms</li><li>Applied Data Analysis</li></ul>	Spring 2023 Fall 2022 Fall 2022 Spring 2022 Spring 2022 Spring 2022 Fall 2021 Fall 2021 Fall 2021
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## References

References are available upon request.