# Saeed Shakuri

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 Google Scholar
 ResearchGate
 HomePage
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#### 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

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)

Technical and Vocational University, Tehran, Iran

B.E., Electronics engineering (Shamsipour College) **Project:** A smart house remote control using Arduino.

Technical and Vocational University, Karaj, Iran

AS, Electronics engineering (Beheshti College)

Oct. 2021 - Expected Feb. 2025

Advisor: Dr. Alireza Rezvanian

Advisor: Dr. Mahdiyar Nouri Rezaie

2018 - 2021

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.

(<u>Published</u>) Omid Ghadami, Alireza Rezvanian, and <u>Saeed Shakuri</u>. "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)	

Fall 2024

University of Science and Culture

Artificial Intelligence (Undergraduate class)

Fall 2023

University of Science and Culture

Fall 2022

Machine Learning (Graduate class)
University of Science and Culture

# **Notable Academic Projects**

Object detection with Detectron2.

Link: https://github.com/SaeedShakuri/Detectron2

Measuring sentence similarity with a TF-IDF approach.

<u>Link</u>: https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/NLP

Image classification using Transfer Learning, regularization terms, and SGD optimizer with PyTorch.

 $\underline{\textbf{Link}}: \texttt{https://github.com/SaeedShakuri/Computer-Vision/blob/main/Pytorch\_Transfer\_Learning.ipynb}$ 

A classification project using Ensemble Learning with the Abalone dataset.

Link: https://github.com/SaeedShakuri/ML-DL-Projects/tree/main/Ensemble%20Learning

# **Professional Services**

# Reviewer

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

Jul. 2023 & Jan. 2024

University of Science and Culture

· Judging the final projects of computer science undergraduate students.

Invited Presenter Dec. 2022

University of Science and Culture

• Presentation title: An Introduction to Few-Shot Learning

## **Skills**

## **Programming Languages**

Python, Dart, C

#### **Softwares and Tools**

Google Colaboratory, EndNote, LaTex, MiniTab, VSCode

#### **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

## Master's Courses

#### All of the courses received a grade of 4 out of 4:

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.