

# Poorya MohammadiNasab

M. Sc. student in Artificial Intelligence,

Iran University of Science and Technology

Research Profile Google Scholar Orcid ID

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Research Interests ·

Computer Vision Deep Learning

Medical Image Analysis Machine Learning

**Image Processing** Feature Selection

- Education -

M. Sc. in Artificial Intelligence

Iran University of Science and Technology (IUST) [QS ranking]

CGPA: 17.56 / 20 (3.75 / 4)

**Selected Courses** 

Computer Vision (20 / 20) Machine Learning (17 / 20)

Medical Image Analysis (18.2 / 20) Image Processing (17.9 / 20)

Deep Learning (18.48 / 20)

Artificial Neural Networks (18.5 / 20)

Sep. 2021 – Present | Tehran, Iran

Sep. 2017 – Sep. 2021 | Kashan, Iran

Master's Thesis

A self-supervised method for tumor detection in 3D automated breast ultrasound (ABUS) images

Supervisor: Dr. Mohsen Soryani

B. Sc. in Computer engineering

University of Kashan [U.S. News ranking]

CGPA: 17.33 / 20 (3.55 / 4)

**Selected Courses** 

Artificial Intelligence (20 / 20) Signals and Systems (18.4 / 20)

Data Mining (20 / 20) Internet of Things (19.5 / 20) Computational Intelligence (20 / 20)

Design of Algorithms (17.5 / 20)

Bachelor's Thesis

Medical image analysis: An overview of techniques and improvements in brain tumor segmentation using image processing algorithms - University of Kashan (2021) - dx.doi.org/10.13140/RG.2.2.16553.52324

Supervisor: Dr. Hossein Ebrahimpour

### Publications

- 1. B. Samieiyan, P. MohammadiNasab, M. A. Mollaei, F. Hajizadeh, and M. Kangavari, "Novel optimized crow search algorithm for feature selection," Expert Systems with Applications, vol. 204, p. 117486, Oct. 2022, doi.org/10.1016/j.eswa.2022.117486.
- 2. B. Samieiyan, P. MohammadiNasab, M. A. Mollaei, F. Hajizadeh, and M. Kangayari, "Solving dimension reduction problems for classification using Promoted Crow Search Algorithm (PCSA)," Computing, vol. 104, no.6, pp.1255-1284, Jan. 2022, doi.org/10.1007/s00607-021-01037-2
- 3. T. Tan, C. Lu, L. Yu, T. Zhang, P. MohammadiNasab, H. Zhang, M. Soryani, R. Mann, E. Kozegar, L. Bao, "Charting the Path Forward: AI's Impact on Breast Imaging—An In-Depth Review of Reader Studies and Future Insights," Artificial Intelligence Review (Under review)

#### - Honors -

- 1. Top 2%, Iranian university entrance exam for master's degree in Computer Engineering Artificial Intelligence, Ranked 171th among nearly 10,000 participants, September 2021
- 2. Top 10%, Achieving one of the highest GPAs among all university Computer Engineering undergraduate students, Ranked 4th among 45 undergraduate students, February 2021

- Languages **-**

Persian: Native

English: Proficient (The IELTS exam will be taken by January 2024)

- Research Experience -Reviewer at Expert Systems with Applications journal May 2022 – Present | United Kingdom (remote) View Certificate Reviewer at Medical Image Analysis journal May 2023 – Present | Netherlands (remote) View Certificate Reviewer at Computer Methods and Programs in Biomedicine journal Mar. 2023 – Present | Ireland (remote) View Certificate Reviewer at Applied Soft computing journal Aug. 2023 – Present | Netherlands (remote) View Certificate Work Experience Research Assistant Sep. 2021 – Present | Tehran, Iran Image Processing Lab (IPL), Iran University of Science and Technology (IUST) Supervisor: Dr. Mohsen Soryani **Teaching Assistant** Sep. 2022 - Jan. 2023 | Tehran, Iran Iran University of Science and Technology (IUST) Courses 1.Pattern Recognition (Dr. Mohammad Reza Daliri) 2. Computer Vision (Dr. Mohsen Soryani) 3. Artificial Neural Network (Dr. Nasser Mozayani) **Teaching Assistant** Feb. 2018 – Jun. 2021 | Kashan, Iran University of Kashan Courses 1. FPGA and ASIC (Dr. Hossein Karimiyan) 2. Artificial Intelligence (Dr. Hossein Ebrahimpour) 3. Microprocessors (Dr. Hosein Sabaghian) 4. Computer Architecture (Dr. Salman Goli) 5. Logic Circuits (Dr. Salman Goli) 6. Advanced programming (Dr. Mahsa Shamaee) Skills -**Concept and Technology** Computer Vision Medical Image Analysis **Image Processing** Deep Learning OpenCV Machine Learning PyTorch / Keras Feature Selection Git / GitHub Linux **Data Mining FPGA** Language and Software Python C/C++**MATLAB** R LaTex Verilog QT framework Arduino - Projects -Pneumonia Detection Using Deep Convolutional Neural Networks Aug. 2023 - Sep. 2023 Breast Tumor Segmentation and Shape Classification in Mammograms Feb 2022 - Jul. 2022 View Project **Brain Tumor Segmentation** May 2021 - Sep. 2021 View Project Novel Optimized Crow Search Algorithm (NOCSA) Mar. 2020 - Apr. 2022

## 110,000

Augmented reality (aligning an image in a video)

Apr. 2022 - Jun. 2022

View Project

#### - Certificates

<sup>1.</sup> Introduction to Machine learning (Duke University, Apr. 2021)

<sup>3.</sup> Image and Video Processing (Duke University, May 2021)

<sup>2.</sup> Computer Vision Basics (University at Buffalo, Apr. 2021)