Poorya MohammadiNasab

M. Sc. student in Artificial Intelligence,

Iran University of Science and Technology

Contact

Research Profile	Social Media	Website	Email
Google Scholar	LinkedIn	Pooryamn.github.io	Pooryamohammadinasab@gmail.com
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Research Interests

Computer Vision	Medical Image Analysis	Image Processing
Deep Learning	Machine Learning	Feature Selection

Education

M. Sc. in Artificial Intelligence

Sep. 2021 – Present | Tehran, Iran

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

CGPA: **17.56 / 20 (3.75 / 4)**

Selected Courses

Computer Vision (20 / 20)	Medical Image Analysis (18.2 / 20)	Deep Learning (18.48 / 20)
Machine Learning (17 / 20)	Image Processing (17.9 / 20)	Artificial Neural Networks (18.5 / 20)

Master's Thesis

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

Supervisor: Dr. Mohsen Soryani

B. Sc. in Computer engineering

Sep. 2017 – Sep. 2021 | Kashan, Iran

University of Kashan [U.S. News ranking]

CGPA: 17.33 / 20 (3.55 / 4)

Selected Courses

Artificial Intelligence (20 / 20)	Data Mining (20 / 20)	Computational Intelligence (20 / 20)
Signals and Systems (18.4 / 20)	Internet of Things (19.5 / 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. Kangavari, "**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 171**th among nearly 10,000 participants, September 2021

2. Top **10%**, Achieving one of the highest GPAs among all university Computer Engineering **undergraduate** students, **Ranked 4**th among 45 undergraduate students, February 2021

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
Machine Learning	PyTorch / Keras	OpenCV	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

View Project

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

View Project

Augmented reality (aligning an image in a video)
Apr. 2022 - Jun. 2022

View Project