Curriculum Vitae

Name   Monire Sheikh Hosseini
Address   School of Advanced Technologies in Medicine, Isfahan University of Medical Science
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ORCID ID https://orcid.org/0000-0003-0280-913X

PERSONAL INFORMATION

- **Birth Date:** 03 Dec 1987
- **Marital status:** Single

EDUCATION

- **September 2014 – August 2021**   Ph.D. in biomedical engineering, Amirkabir University of Technology (AUT), Tehran, Iran
  Thesis Title: Group analysis of left ventricle motion in echocardiographic image based on fuzzy registration

- **2010-2012,**   M.Sc. in Electrical Engineering, Isfahan University of Technology (IUT), Isfahan, Iran,
  Thesis Title: "Automatic diagnosis of malaria based on complete circle-ellipse fitting search algorithm**"**

- **2006-2010**   B.Sc in Electrical Engineering, Isfahan University of Technology (IUT), Isfahan, Iran
  Thesis Title: Soil Impedance Measuring System

GRANTS AND FELLOWSHIPS
Date, Name, Significant info., Amount

RESEARCH EXPERIENCE

TEACHING EXPERIENCE

- **Teaching** " Quantitative Magnetic Resonance Imaging", School of Advanced Technologies in Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, Fall 2023
- **Teaching** " Functional Magnetic Resonance Imaging Analysis", School of Advanced Technologies in Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, Spring 2023
- **Teaching** " rehabilitation principles and devices", Biomedical Engineering Dept., Shahid Beheshti University, Tehran, Iran, Spring 2022.
- **Teaching** " biomedical instrumentation ", Biomedical Engineering Dept., Shahid Beheshti University, Tehran, Iran, Fall 2021.
- **Teaching Assistant** of A. Soltani in the course of "Electrical Circuit", Biomedical Engineering Dept., Amirkabir University of Technology, Tehran, Iran, 2018-2020.
- **Laboratory Director** in Amirkabir University of Technology, Tehran, Iran, 2017-2018
  Teaching Course: Electronic Labratory
- **Teaching** "Linear Control", Islamic Azad University Najafabad Branch (IAUN), 2013-1014

RELEVANT WORK EXPERIENCE

- **Research Assistant** at Medical Image & Signal Processing Research Center, 2022-present
  Research area: registration of fundus and OCT images
- **Article Reviewer** at Journal of Medical Signals and Sensors, 2022-present
- **Article Reviewer** at Iranian Journal of Science and Technology, 2023-present
- **Patent Scientist** at Hamian Fanavari Karafam, 2020-2022
- **Patent Examiner** at Amikabir University of Technology, 2017- present
- **Researcher** at Eyerik Company, Isfahan Science and Technology Town, 2013-2014.
  Research area: Human tracking, face recognition, image processing

UNIVERSITY SERVICE

- Vice Head of Biomedical Department, School of Advanced Technologies in Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, since 2023

PUBLICATIONS
Bibliographic format

Journal Papers

1. **Hosseini, Monire Sheikh**, and Mohammad Hassan Moradi. "A Modified Fuzzy Inference Rule-Based Model for 3D Speckle Tracking." International Journal of Fuzzy Systems (2022): 1-13.

2. **Hosseini, Monire Sheikh**, Mahammad Hassan Moradi, Mahdi Tabassian, and Jan D'hooge. "Non-rigid image registration using a modified fuzzy feature-based inference system for 3D cardiac motion estimation." Computer Methods and Programs in Biomedicine 205 (2021): 106085.

3. **Hosseini, Monire Sheikh**, and Mahammad Hassan Moradi. "Adaptive fuzzy-SIFT rule-based registration for 3D cardiac motion estimation." Applied Intelligence (2021): 1-15.

4. **Sheikhhosseini M**, Rabbani H, Zekri M, Talebi A., Automatic diagnosis of malaria based on complete circle-ellipse fitting search algorithm, J Microsc. 2013 Dec;252(3):189-203

5. **M.S. Hosseini**, M. Zekri, A Review of Medical Image Classification Using Adaptive Neuro-Fuzzy System (ANFIS), Journal of Medical Signals and Sensors(jmss), 2012, 2

Conference Papers

1. Khoubani, Sahar, Mohammad Hassan Moradi, and **Monireh Sheikhhosseini**. "Quaternion wavelet frame rate Up-Conversion." In 2017 24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME), pp. 1-5. IEEE, 2017.

PRESENTATIONS AND POSTER SESSIONS
Bibliographic format

PATENTS
Date, Item, number

1. 2010, "Soil Impedance Measuring System", 390020659

RESEARCH INTERESTS
Research area

- Medical image processing
- Deep Learning
- Neuroimaging
- Fuzzy Systems

- Principal Component Analysis (PCA)
- Biomedical Signal Processing (BSP)

TEACHING INTERESTS

Class title or subject

- Digital Image Processing
- Signal and Systems
- Medical Image Processing
- Biomedical Signal Processing

PROFESSIONAL MEMBERSHIPS

EXTRA CURRICULAR ACTIVITIES