HOSSEIN HAGHIGHAT

SIENTIFIC INFORMATION

ORCID
Google Scholar
ResearchGate

CONTACT

Iran

+98 (51) 55258801 (417)

hossien.haghighat@gmail.com

linkedin.com/in/hossien-haghighat-b41b4989

LANGUAGES

English – Very good command

Persian – Native Speaker

Turkish – Very good command

EDUCATION

PhD in Artificial intelligence

M.Sc. in Artificial intelligence

B.Sc. in Computer Engineering

PUBLICATION

Refereed Journal Papers

1. **Haghighat, H**., Mirzarezaee, M., Araabi, B. N., & Khadem, A. (2021). Functional Networks Abnormalities in Autism Spectrum Disorder: Age-Related Hypo and Hyper Connectivity. *Brain Topography, 34*, 306–322. Retrieved from https://doi.org/10.1007/s10548-021-00831-7

2. **Haghighat, H**., Mirzarezaee, M., Nadjar Araabi, B., & Khadem, A. (2022). An age-dependent Connectivity-based computer aided diagnosis system for Autism Spectrum Disorder using Resting-state fMRI. *Biomedical Signal Processing and Control, 71*. Retrieved from https://doi.org/10.1016/j.bspc.2021.103108

3. **Haghighat, H**., Mirzarezaee, M., Nadjar Araabi, B., & Khadem, A. (2022). A Sex-dependent Connectivity-based computer aided diagnosis system for Autism Spectrum Disorder using Resting-state fMRI. Journal of Neural Engineering , *19*. Retrieved from https://doi.org/10.1088/1741-2552/ac86a4

4. **Haghighat, H.** (2023). A Sex-dependent Functional-Effective Connectivity Model for Diagnostic Classification of Autism Spectrum Disorder using Resting-state fMRI. *Biomedical Signal Processing and Control, 85*. Retrieved from https://doi.org/10.1016/j.bspc.2023.104837

5. **Haghighat, H.** (2023). Diagnostic classification of autism spectrum disorder in the frequency domain using resting-state fMRI (Preprint-Under-review) 10.21203/rs.3.rs-3427251/v1

TEACHING EXPERIENCE

Undergraduate Level:

Artificial intelligence

Data Mining

Graduate Level:

Machine Learning

TECHNICAL EXPERIENCE

Programming Languages:

C++

Python

Software:

MATLAB

WEKA

FSL (FMRI Software Library)

OS:

Windows

Linux

RESEARCH INTEREST

Artificial intelligence

Machine Learning

Deep Learning

Cognitive Science

Computational Neuroscience

Functional Neuroimaging

Brain Connectivity

6. **Haghighat, H.** (2023). A Machine Learning Techniques and Chi-square Feature Selection for Diagnostic Classification Model of Autism Spectrum Disorder Using fMRI Data (Preprint-Under-review) 10.21203/rs.3.rs-7132626/v1

Refereed Conference Papers

7. **Haghighat, Hossein**, Hojati, Yousef, Feature Selection based on Rough set and Firefly Algorithm in Face Recognition, The first conference of soft computing and cognitive sciences, July 9-10, 2020, Gonbad Kavous, Iran, https://conf.gonbad.ac.ir/sccs2020\.

8. **Haghighat, Hossein**, Hojati, Yousef, Feature Selection in Face Recognition System based on Rough set and Imperialist Competitive Algorithm and Cuckoo Optimization Algorithm, The first conference of soft computing and cognitive sciences, July 9-10, 2020, Gonbad Kavous, Iran, https://conf.gonbad.ac.ir/sccs2020\.

9. **Haghighat, Hossein**, Optimal Selection of Features in Face Recognition system based on Rough set and Cuckoo Optimization Algorithm, The second national conference on applied research in computer science and information technology, February 26, 2015 ,Tehran, Iran, https://civilica.com/doc/455056.

10. **Haghighat, Hossein**, Optimal Selection of Features in Face Recognition system based on Rough set and Imperialist Competitive Algorithm, The second national conference of electrical engineering of Iran, December 27, 2014 , Bandar Gaz, Iran, https://civilica.com/doc/365312.

11. Badkoobeh, Marzieh, **Haghighat, Hossein**, Naji, Hamidreza, Improving the Lifetime of Wireless Sensor Network using an Energy Efficient Clustering Method based on Imperialist Competitive Algorithm, National Conference of Computer Engineering and Information Technology Management, October 25, 2014, Tehran, Iran, https://civilica.com/doc/283071.

RESEARCH PROJECT

Functional Connectivity based Computer Aided Diagnosis System for Autism Spectrum Disorders using rs-fMRI, Supported by Cognitive Sciences and Technology Council, Iran, 2021-2023.

PROFESSIONAL SERVICE

Journal Reviewer

Journal of Computers in Biology and Medicine, ISSN: 0010-4825, Since 2021-Present. Journal of Neural Engineering, ISSN: 1741-2560, Since 2022-Present.
Biomedical physics & engineering express, ISSN: 2057-1976, Since 2024-Present.
Journal of physics, ISSN: 2632-072X, Since 2024-Present.
Machine learning: science and technology, ISSN: 2632-2153, Since 2023-Present.

EDUCATIONAL EXPERIENCE

Teacher in Department of Computer Engineering of Gonbad Kavous University, Since 2013-Present.

SELECTED TALKS AND PRESENTATIONS

1. Cognitive sciences, Gonbad Kavous Branch, Islamic Azad University, Gonbad Kavous, Iran (November 2015)
2. Deep Learning, Gonbad Kavous Branch, Islamic Azad University, Gonbad Kavous, Iran (March 2017)
3. Sharing economy in information technology, Technical and Vocational Training Organization, Iran (Sep 2017)
4. Artificial intelligence Approach in Neuroscience, Gonbad Kavous Branch, Islamic Azad University, Gonbad Kavous, Iran (December 2019)
5. Cognitive Data Mining, Gonbad Kavous Branch, Islamic Azad University, Gonbad Kavous, Iran (December 2022)
6. Application of information technology and artificial intelligence in water resources management, Ministry of Energy, Tehran, Iran (March 2023)
7. Governance in the age of data and artificial intelligence, Gonbad Kavous Branch, Islamic Azad University, Gonbad Kavous, Iran (December 2023)
8. Transformer learning : ChatGPT, Gonbad Kavous Branch, Islamic Azad University, Gonbad Kavous, Iran (December 2023)
9. Introduction to the history of artificial intelligence, Kashmar Higher Education Institution, Kashmar, Iran (May 2025)
10. Artificial Intelligence: Say hello to the future, Dr. Besky Scientific Foundation, Gonbad Kavous, Iran (August 2025)

DISSERTATION

PhD:
Identification of Biomarkers based on Functional and Effective Brain Connectivity to Detect Autism Spectrum Disorders in Different Age and Sex Groups Using rs-fMRI Data

Dr. Mitra Mirzarezaee mirzarezaee@gmail.com
Department of Computer Engineering, SRBIAU, Tehran, Iran.
Dr. Babak Nadjar Araabi araabi@ut.ac.ir
School of Electrical and Computer Eng, College of Eng, University of Tehran, Tehran, Iran.

M.Sc:
Selecting Optimum Features in Face Recognition using Population-based Search Methods.

OTHER

Scientific Secretary of Four National Programming Contests of Gonbad Kavous University.
Scientific secretary of the Face Recognition Methods internal conference, Islamic Azad University, Gonbad Kavous