

HASSAN FARSI

Contact Information

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Education

Ph.D. in Communication Engineering, University of Surrey, Guildford, UK, Aug. 2003.

M.Sc. in Communication Engineering, Sharif University of Technology, Tehran, Iran, Sep. 1995.

B.Sc. in Communication Engineering, Sharif University of Technology, Tehran, Iran, Jan. 1993.

Academic Professions

- **Professor**, Electrical & Computer Eng. Department, University of Birjand, Birjand, Iran, Jan. 2016.
- **Associate Professor**, Electrical & Computer Eng. Department, University of Birjand, Birjand, Iran, Jan. 2013.
- **Director of Research**, Electrical & Computer Eng. Department, University of Birjand, Birjand, Iran, Aug. 2012 up to now.
- **Head of Electronics and Communication Group**: Electrical & Computer Eng. Department, University of Birjand, Birjand, Iran, Sept. 2005-July 2012.
- **Director of Information Technology & Communication**: University of Birjand, Birjand, Iran, Jan. 2003- Sept. 2005.
- **Invited Professor**, Islamic Azad University of Birjand, Birjand, Iran, April 2003 up to now.

Technical Professions

- **Test Engineer**, Center for Communication Research of Iran, Tehran, Iran, Jan. 1993- Sep. 1993.

Reviewer

- IET image processing
- IET Signal processing
- IET Computer Vision

- International Journal of Speech Technology, Springer
- Sensing and Imaging, An international Journal, Springer
- Computers & Electrical Engineering, Elsevier
- Multimedia tools and application, springer
- Signal and Data Processing
- Journal of Soft Computing and Information Technology
- Journal of Information Systems and Telecommunication (JIST)
- Iranian Journal of Electrical and Computer Engineering (IJECE)

Courses

A) Undergraduate Courses

- Electric Circuits I, II
- Electronics I, II, III
- Signals & Systems
- Filter & Sythesis
- Communications Systems

B) Postgraduate Courses

- DSP
- Stochastic Random Process
- Speech Processing
- Image & Video Processing

Key Projects

1. Design and implementation of adaptive synthesis filter for quality improvement of coded speech by 2400 bps MELP coder, University of Birjand, Birjand, Iran.
2. Robust speech recognition based on mixed histogram transform and asymmetric noise cancellation, University of Birjand, Birjand, Iran.
3. Joint source and channel coding in MPEG-4 by hiding channel information in transmitted video frames, University of Birjand, Birjand, Iran.

Publications

A) Books

1. **H. Farsi**, P. Etezadifar, "*Time variable PDF presented by neural network for data compression*", Lambert Academic Publishing, March 2013 (in English).
2. **H. Farsi**, "*Still image and video compression with MATLAB*", translated to Persian language, Jahad Daneshgahi Mashhad, Nov. 2015 (in Persian).

B) Journal Papers

1. **H. Farsi**, "A pre-processing method for pitch smoothing", *IEE Electronics Letters*, vol. 37, no. 21, pp. 1314-1316, Oct. 2001.
2. **H. Farsi**, "Speech pre-processing for pitch and pitch-cycle evolutions smoothing," *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 14, no. 2, pp. 225-240, May 2006.
3. **H. Farsi**, "Adaptive synthesis filter factorisation for postfiltering," *Journal of Digital signal processing, Elsevier*, vol. 17, iss. 1, pp. 97-113, Jan. 2007.
4. **H. Farsi**, M. A. Mozaffarian, H. Rahmani, "Adaptive correction factors in probability distribution function for VAD improvement," *NAUN International Journal of Circuits, Systems, and Signal Processing*, vol. 3, iss. 1, pp. 28-37, April 2009.
5. **H. Farsi**, M. A. Mozaffarian, H. Rahmani, "A novel method to modify VAD used in ITU-T G.729B for low SNRs," *International Journal of Computers and Communications, University press*, vol.2, iss. 1, pp. 20-29, May 2008.
6. S. M. Hosseini, **H. Farsi**, H. Sadoughi, "Best clustering around the color images," *International Journal of Computer and Electrical Engineering (IJCEE)*, vol.1, iss. 1, pp. 20-24, April 2009.
7. **H. Farsi**, "Improvement of minimum tracking in Minimum Statistics noise estimation method," *Signal Processing: An International Journal (SPIJ)*, vol. 4, iss. 1, pp. 17-22, Jan. 2010.
8. S. Eshaghi, **H. Farsi**, "An enhanced rate control based on mode decision and early motion estimation for H.264/AVC," *NAUN International Journal of Circuits, Systems, and Signal Processing*, vol. 4, iss. 2, pp. 25-34, May 2010.
9. S. M. Hosseini, **H. Farsi**, "A Robust Method Applied to Human Detection," *International Journal of Computer Theory and Engineering (IJCTE)*, vol.2, no. 5, pp. 692-695, Oct. 2010.
10. S. M. Hosseini, H. Farsi, "Face Detection Based on Fuzzy Adjusted Filter," *International Review on Computers and Software (IRECOS)*, vol. 5, no.5, pp. 25-29, Sep. 2010.
11. S. M. Hosseini, A. Nasrabadi, P. Touri, **H. Farsi**, "A novel human gait recognition system," *International Journal of Computer and Electrical Engineering (IJCEE)*, vol.2, no.6, pp.37-42, Dec. 2010.
12. **H. Farsi**, S. Amjadi, "Text Independent Speaker Recognition Using Mixed MFCC and WOCOR Methods in Persian Language," *International Journal of Computer and Electrical Engineering (IJCEE)*, vol. 3, no.3, pp. 47-52, June 2011.
13. **H. Farsi**, M. A. Mozaffarian, "Improvement of ITU-T G.729B VAD Using WDWf and Dynamic Preprocessing," *International Review on Computers and Software (IRECOS)*, vol.6, no.5, pp. 652-660, Sept. 2011.
14. **H. Farsi**, S. Mohamadzadeh, "Image Retrieval Using Neural Network and Texture Feature," *American Journal of Scientific Research*, vol. 76, pp.44-49, Sep. 2012.

15. **H. Farsi**, P. Etezadifar," Compression Information with Generalized Huffman Coding using Artificial Neural Network," *American Journal of Scientific Research*, vol. 74, pp.66-78, Sep. 2012.
16. **H. Farsi**, S. Kuhimoghadam," A new method for extraction of speech features using spectral delta characteristics and invariant integration," *Turkish Journal of Electrical Engineering and Computer Sciences*, vol. 24, iss. 2, pp. 451-464, Feb. 2014.
17. **H. Farsi**, A. Shahi," Steganalysis of images based on adjacent and non-adjacent pixel differences," *Journal of soft computing and information technology*, vol. 1, no.4, pp.55-63, Dec. 2012.
18. **H. Farsi**, S. Mohammadzadeh," Color and texture feature-based image retrieval by using Hadamard matrix in discrete wavelet transform," *IET image processing*, vol.7, iss. 3, pp. 212-218, April 2013.
19. **H. Farsi**, S. Kuhimoghada," Robust speech recognition by using non-linear and asymmetric filter and delta spectral features," *Iranian Journal of Electrical and Computer Engineering (IJECE)*, vol. 11, no.1, pp. 43-50, spring 2016.(In Persian)
20. **H. Farsi**, P. etezadifar," Compression of time variable information by Huffman coding," *Journal of Signal and Data Processing*, vol. 4, no.2, pp. 61-74, Winter 2012. (In Persian).
21. **H. Farsi**, F. Jafarian," Video transmission using new adaptive modulation and coding scheme in OFDM based cognitive radio," *Journal of information systems and telecommunication (JIST)*, vol.1, no.4, pp.239-249, Oct.-Dec. 2013.
22. S. Mohammadzadeh, **H. Farsi**," Image retrieval using color-texture features extracted from Gabor-Walsh wavelet pyramid," *Journal of information systems and telecommunication (JIST)*, vol.2, no.1, pp.31-40, Jan.-March 2014.
23. **H. Farsi**, S. M. Nourian," Node to Node watermarking in wireless sensor networks for authentication of self nodes," *Journal of information systems and telecommunication (JIST)*, vol.2, no.2, pp.127-136, April-June 2014.
24. **H. Farsi**, A. Shahi," Steganalysis of images based on spatial domain and two-dimensional JPEG array," *Journal of the Chinese institute of engineers*, vol.73, no.8, pp.55-63, July 2014.
25. **H. Farsi**, M. Hasheminejad," Fast automatic face recognition from single image per person using GAW-KNN," *Journal of information systems and telecommunication (JIST)*, vol.2, no.3, pp.188-195, July-Sep. 2014.
26. F. jafarian, **H. Farsi**," Joint source and channel analysis for scalable video coding using vector quantization over OFDM system," *Journal of information systems and telecommunication (JIST)*, vol.2, no.4, pp.258-268, Oct.-Dec. 2014.
27. A. M. Ahamadzade, **H. Farsi**," Video summarization by innovative method in shot detection," *Electronic letters on computer vision and image analysis*, vol. 14, iss. 1, pp.21-37, May 2015.
28. **H. Farsi**, P. Etezadifar," A novel method to specify the numbers of neighbours intelligently in KNN algorithm by using genetic algorithm," *Journal of soft computing and information technology*, vol. 4, no.2, pp.34-43, Summer 2015.(In Persian)

29. H. Komari, **H. Farsi**, "A novel algorithm to tackle eyeglasses and beard issues in facial IR recognition," *Electronic letters on computer vision and image analysis*, vol. 14, iss. 1, pp.74-87, May 2015.
30. P. Etezadifar, **H. Farsi**, "Quality improvement of synthesised video by robustness of motion vector against channel distortion," *Journal of Signal and Data Processing*, vol. 23, no.1, pp. 57-78, Summer 2015. (In Persian).
31. M. Gholampour, **H. Farsi**, S. Mohammadzadeh, "Fusion infrared and visible images using optimal weights," *Journal of information systems and telecommunication (JIST)*, vol.3, no.3, pp.173-181, July-Sep. 2015.
32. S. Mohammadzadeh, **H. Farsi**, "Content-based image retrieval system via sparse representation," *IET Computer vision*, vol. 10, iss. 1, pp.95-102, Jan.-Feb. 2016.
33. **H. Farsi**, A. Bozorgian, "Improvement of wavelet-based image watermarking system by using fuzzy logic," *Journal of soft computing and information technology*, vol. 4, no.3, pp.3-15, Autumn 2015.(In Persian)
34. H. Zamanian, **H. Farsi**, "Improved multichannel ECG signal compression based on discrete wavelet transform and a scanning method," *International journal of natural and engineering sciences*, vol.9, iss. 1, pp.27-33, May 2015.
35. **H. Farsi**, S. Kuhimoghadam, "Robust speech recognition based on mixed histogram transform and asymmetric noise suppression," *Majlesi journal of electrical engineering*, vol.7, no.2, pp.1-11, June 2013.
36. **H. Farsi**, P. Etezadifar, "Joint source and channel coding for MPEG-4 using steganography of channel coding information," *Majlesi journal of electrical engineering*, vol.7, no.4, pp.1-10, Dec. 2013.
37. **H. Farsi**, S. Mohammadzadeh, "Combining Hadamard matrix, discrete wavelet and DCT features based on PCA and KNN for image retrieval," *Majlesi journal of electrical engineering*, vol.7, no.1, pp.9-15, March 2013.
38. P. Etezadifar, **H. Farsi**, A. Naseri, "Robustness of Compressed Video in H.264 Against Channel Using Neural Network with Huffman Coding," *The scientific journal of advanced defence science and technology*, vol. 6, no.4, pp.221-234, Winter 2016.(In Persian)
39. P. Etezadifar, **H. Farsi**, A. Naseri, "Quality enhancement of received video using secondary channel encoding in Joint Source and Channel Coding (JSCC)," *Journal of Electronical & Cyber Defence*, vol. 3, no.2, pp.29-48, Summer 2015. (In Persian)
40. R. Nasiripour, **H. Farsi**, S. Mohammadzadeh, "Object matching and retrieval by using speeded up robust features with free-training," *Journal of Computing and Security*, vol.2, no.2, pp.141-153, May 2016.
41. P. Etezadifar, **H. Farsi**, "Scalable video summarization via sparse dictionary learning and selection simultaneously," *Multimedia tools and applications, springer*, vol. 76, iss. 6, pp. 7947-71, March 2017.
42. S. Mohammadzadeh, **H. Farsi**, "Content based video retrieval based on HDWT and sparse representation," *Image analysis and stereology*, vol. 35, no.2, pp. 67-80, 2016.

43. M. Hasheminejad, **H. Farsi**, "Instance based sparse classifier fusion for speaker verification," *Journal of information systems and telecommunication (JIST)*, vol. 3, no.4, pp. 191-199, summer 2016.
44. M. Hasheminejad, **H. Farsi**, N. Mehrshad "Adaptive ensemble classification for speaker verification," *Tabriz Journal of Electrical Engineering*, vol. 47, no.1, pp. 354-345, spring 2017. (In Persian)
45. P. Etezadifar, **H. Farsi**, "Scalable videos summarization using sparse dictionary selection," *The scientific journal of advanced defence science and technology*, vol. 7, no.4, pp.315-326, Winter 2017.(In Persian)
46. R. Saleh, **H. Farsi**, S. H. Zahiri, "Ensemble classification of polarimetric images of synthetic aperture radar using mixed sparse-based representation classifier and multi-objective heuristic combination rule," *Electronics Industries Quarterly*, vol. 7, no. 3, pp. 5-20, Autumn 2016. (In Persian)
47. M. Hasheminejad, **H. Farsi**, "Frame level sparse representation classification for speaker verification," *Multimedia tools and applications, springer*, vol. 76, iss. 20, pp. 21211-21224, Oct. 2016.
48. R. Nasiripour, **H. Farsi**, S. Mohammadzadeh, "Improved Generic Object Retrieval In Large Scale Databases By SURF Descriptor," *Journal of information systems and telecommunication (JIST)*, vol. 5, no.2, pp. 128-137, Spring 2018.
49. M. Hasheminejad, **H. Farsi**, "Sample-specific late classifier fusion for speaker verification," *Multimedia tools and applications, springer*, vol. 77, iss. 12, pp. 15273-15289, June 2018.
50. A. Jalali, **H. Farsi**, S. Ghaemmaghami, "A Universal Image Steganalysis System Based On Double Sparse Representation Classification (DSRC)," *Multimedia tools and applications, springer*, vol. 77, iss. 13, pp. 16347-16366, July 2018.
51. H. Zamanian, **H. Farsi**, "A New feature extraction method to Improve Emotion Detection Using EEG Signals," *Electronic letters on computer vision and image analysis, Scopus*, vol. 17, no. 1, pp. 29-44, September 2018.
52. R. Nasiripour, **H. Farsi**, S. Mohammadzadeh, "Eye Gaze Detection Based on Learning Automata by Using SURF Descriptor," *Journal of information systems and telecommunication (JIST)*, vol. 6, no.1, pp. 41-49, Winter 2018.
53. **H. Farsi**, S. Behmadi, "Video Quality Improvement Using Local Channel Encoder and Mixed Predictor by Wavelet, Neural Network and Genetic Algorithm," *The scientific journal of advanced defence science and technology (ADST)*, vol. 9, no.4, pp. 449-459, winter 2018. (In Persian).
54. H. Komari, **H. Farsi**, "Passive Sonar Target Detection Using Statistical Classifier and Adaptive Threshold," *Applied sciences-basel journal*, vol.8, no.1, pp. 1-17, January 2018.
55. E. Sahragard, **H. Farsi**, S. Mohammadzadeh, "Image Restoration by Variable Splitting based on Total Variant Regularizer," *Journal of AI and data mining (JAIDM)*, vol. 6, no. 1, pp. 13-33, winter 2018.
56. R. Saleh, **H. Farsi**, "Optimum Ensemble Classification for Fully Polarimetric Synthetic Aperture Radar Data Using Global-local Classification Approach," *International journal of engineering transaction B: Applications*, vol. 31, no. 2, pp. 331-338, Feb. 2018.

57. S. Fouladi, **H. Farsi**, S. Mohammadzadeh," Detection and classification of skin cancer by using deep learning ," *Journal of Birjand University of Medical Science* , vol. 26, no. 1, pp. 44-53, 2019 (In Persian).
58. A. Sezavar, **H. Farsi**, S. Mohammadzadeh," Content-Based Image Retrieval using Deep Convolutional Neural Networks," *Tabriz Journal of Electrical Engineering*, vol. 48, no. 4, pp. 1595-1603, winter 2019 (In Persian).
59. A. Sezavar, **H. Farsi**, F. Farsi," Prostate cancer grading and classification by combining deep features and stochastic tissue features of pathological prostate images," *Iranian Journal of Biomedical Engineering*, vol. 12, no. 4, pp. 301-310, 2019 (In Persian).
60. H. Zamanian, **H. Farsi**, S. Mohammadzadeh," Improvement in accuracy and speed of image semantic segmentation via convolution neural network encoder-decoder," *Journal of information systems and telecommunication (JIST)*, vol. 6, no.3, pp. 128-136, Summer 2018.
61. R. Saleh, **H. Farsi**," Adaptive Ensemble Classification for Land Cover Classification Using Polarimetric Radar Images and Proposed Combination Rule," *Journal of Radar*, vol. 6, no. 1, pp. 49-60, Spring-Summer 2018, (In Persian).
62. A. Sezavar, **H. Farsi**, S. Mohammadzadeh," Content-based image retrieval by combining convolutional neural networks and sparse representation," *Multimedia tools and applications, springer*, vol. 78, no. 15, pp. 20895-20912, March 2019.
63. A. Sezavar, **H. Farsi**, S. Mohammadzadeh," A Modified Grasshopper Optimization Algorithm Combined with CNN for Content Based Image Retrieval," *International journal of engineering transaction A: Basics*, vol. 32, no. 7, pp. 924-930, July 2019.
64. S. Fooladi, **H. Farsi**, S. Mohammadzadeh," Detection of Malignancy Degree in Prostate and Breast Cancers by Using Deep Neural Network," *Medical Journal of Mashhad University of Medical Sciences*, Vol. 61, No.5, pp.: 7711-7711, June 2019 (In Persian).
65. A. Akbari, **H. Farsi**, S. Mohammadzadeh," Social Groups Detection by Using Support Vector Machine in Video," *Journal of soft computing and information technology*, vol. 8, no. 3, pp.1-9, Fall 2019 (In Persian).
66. R. Nasiripour, **H. Farsi**, S. Mohammadzadeh," Visual saliency object detection using sparse learning," *IET image processing*, vol.13, no. 13, pp. 2436-2447, Nov. 2019.
67. P. Etezadifar, **H. Farsi**," A New Sample Consensus based on Sparse Coding (SCSC) for Improved Matching of SIFT Features on Remote Sensing Images," *IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING*, vol. 58, no. 8, pp. 5254-5263, August 2020.
68. A. Jalali, **H. Farsi**, "A new steganography algorithm based on video sparse representation", *Multimedia Tools and Applications*, vol. 72, no.2, pp.1821-1846, Jan. 2020.
69. A. Gheitasi, **H. Farsi**, S. Mohamadzadeh," Estimation of hand skeletal postures by using deep convolutional networks", *International journal of engineering transaction A: Basics*, vol. 33, no. 4, pp. 552-559, April 2020.
70. H. Zamanian, **H. Farsi**, S. Mohamadzadeh," Estimation of Optical Flow using Semantic Segmentation and AES Deep Neural Network," *Scientific Journal of Advanced Defense Science and Technology*, vol. 11, no. 1, pp.51-59, Spring 2020 (In Persian).
71. R. Nasiripour, **H. Farsi**, S. Mohamadzadeh," Saliency Detection in Eye Gaze Prediction by Using Deep Learning," *Journal of soft computing and information technology*, vol. 9, no. 3, pp.93-108, Fall 2020 (In Persian).
72. S. Fooladi, **H. Farsi**, F. Farsi," Adaptive Filtering Strategy to Remove Noise from ECG Signals Using Wavelet Transform and Deep Learning," *Journal of Health and Biomedical Informatics*, vol. 7, no. 3, pp. 318-325, Nov. 2020 (In Persian).

73. Z. Dorrani, **H. Farsi**, S. Mohamadzadeh, "Image Edge Detection with Fuzzy Ant Colony Optimization Algorithm", *International journal of engineering transaction B: Applications*, vol. 33, no. 12, pp. 2464-2470, Dec. 2020.
74. M. Rohani, **H. Farsi**, S. M. Zahiri, "Moving object tracking in video by using fuzzy particle swarm optimization algorithm", *Journal of control*, vol. 14, no. 4, winter 2021 (In Persian).
75. M. Rohani, **H. Farsi**, S. Mohamadzadeh, "Object tracking in video with correlation filter and using histogram of gradient feature," *Journal of soft computing and information technology*, vol. 9, no. 4, pp.43-55, Fall 2021 (In Persian).
76. A. Akbari, **H. Farsi**, S. Mohammadzadeh, "Deep Neural Network with Extracted Features for Social Group Detection," *Journal of Electrical and Computer Engineering Innovations*, vol. 9, no.1, pp.47-56, April 2021.
77. M. Rohani, **H. Farsi**, S. M. Zahiri, "Statistical Analysis and Comparison of the Performance of Meta-Heuristic Methods According to their Application as well as Defining New Criteria," *Journal of information systems and telecommunication (JIST)*, vol. 10, no.1, pp. 1-10, Winter 2022.
78. Z. Dorrani, **H. Farsi**, S. Mohamadzadeh, "Edge detection and identification using deep learning to identify vehicles," *Journal of information systems and telecommunication (JIST)*, vol. 10, no.3, pp. 201-210, Summer 2022.
79. Z. Dorrani, **H. Farsi**, S. Mohamadzadeh, "Deep learning in vehicle detection using ResUNet-a Architecture," *jordan journal of electrical engineering*, vol. 8, no. 2, pp. 165-178, June 2022.
80. A. Sezavar, **H. Farsi**, S. Mohammadzadeh, "Multi-Depth Deep Similarity Learning for Person Re-Identification," *jordan journal of electrical engineering*, vol. 8, no. 3, pp. 279-287, September 2022.
81. S. M. Notghimoghadam, **H. Farsi**, S. Mohammadzadeh, "Object Detection by a Hybrid Of Feature Pyramid and Deep Neural Networks," *Journal of Electrical and Computer Engineering Innovations*, vol. 11, no.1, pp.173-182, January 2023.
82. Z. Dorrani, **H. Farsi**, S. Mohamadzadeh, "Shadow removal in vehicle detection using ResUNet-a," *Iranian journal of energy and environment*, vol. 14, No. 1, pp.87-95, Feb. 2023.
83. A. Sezavar, **H. Farsi**, S. Mohammadzadeh, "A new model for person re-identification using deep CNN and auto encoders," *Iranian journal of energy and environment*, vol. 14, No. 4, pp.314-320, Oct. 2023.
84. A. Barati, **H. Farsi**, S. Mohammadzadeh, "Integration of the Latent Variable Knowledge into Deep Image Captioning with Bayesian Modeling," *IET Image Processing*, vol. 17, No. 7, pp.2256-2271, May 2023.
85. S. Fooladi, **H. Farsi**, S. Mohammadzadeh, "Segmenting the lesion area of brain tumor using convolutional neural networks (CNN) and fuzzy K-Means clustering," *International journal of engineering transactions B: Applications*, Vo. 36, No. 8, pp. 1556-1568, Aug. 2023.
86. M. Rohani, **H. Farsi**, S. Mohamadzadeh, "Deep Multi-Task Convolutional Neural Networks for Efficient Classification of Face Attributes," *International journal of engineering transactions B: Applications*, Vo. 36, No. 11, pp. 2102-2111, Nov. 2023.
87. A. Sezavar, **H. Farsi**, S. Mohammadzadeh, P. Radeva, "A New Person Re-Identification method by Defining CNN-Based Feature Extractor and Sparse Representation," *Multimedia Tools and Applications*, Vol. 83, No. 1, pp. 11043-11059, January 2024.
88. A. Ghaitasi, **H. Farsi**, S. Mohammadzadeh, "Sketch-based Image Retrieval Using Convolutional Neural Network with Multi_step Training," *Journal of information systems and telecommunication (JIST)*, vol. 12, no.4, pp. 242-253, Winter 2024.

89. E. Sahragard, **H. Farsi**, S. Mohammadzadeh, " Semantic Segmentation of Aerial Imagery: A Novel Approach Leveraging Hierarchical Multi-Scale Features and Channel-Based Attention for Drone Applications," *International journal of engineering transactions B: Applications*, Vol. 37, No. 5, pp. 1022-1035, May 2024.
90. M. Rohani, **H. Farsi**, S. Mohammadzadeh, " Facial Feature Recognition with Multi-Task Learning and Attention-based Enhancements," *Iranian journal of energy and environment*, vol. 16, No. 1, pp.136-144, January 2025.
91. S. Noursoleimani, **H. Farsi**, S. Mohammadzadeh, A. barati, " Multimodal Biomedical Image Segmentation by Using Multi-Path U-Net," *International journal of engineering transactions A: Basics*, Vol. 38, No. 1, pp. 179-193, January 2025.
92. **H. Farsi**, D. Ghermezi, S. Mohammadzadeh, A. barati, " Improving Deep Learning-based Saliency Detection Using Channel Attention Module," *International journal of engineering transactions B: Applications*, Vol. 37, No. 11, pp. 2367-2379, Nov. 2024.
93. A. Ghaitasi, **H. Farsi**, S. Mohammadzadeh, " Hybrid Convolutional Neural Network with Domain adaptation for Sketch based Image Retrieval," *Journal of Electrical and Computer Engineering Innovations*, vol. 12, no.2, pp.497-510, July 2024.
94. E. Sahragard, **H. Farsi**, S. Mohammadzadeh, " Advancing Semantic Segmentation: Enhanced UNet Algorithm with Attention Mechanism and Deformable Convolution," *Plos One*, vol. 20, no. 1, pp. 1-25, January 2025.
95. S. Fooladi, **H. Farsi**, S. Mohammadzadeh, " Segmentation of skin lesions in dermoscopic images using a combination of wavelet transform and modified U-Net architecture," *Journal of Electrical and Computer Engineering Innovations*, vol. 13, no.1, pp.151-168, January 2025.
96. A. Barati, **H. Farsi**, S. Mohammadzadeh, " Image Description Using Tags Latent Concepts in Convolutional Neural Networks," *Multimedia Tools and Applications*, Vol. 84, No. 2, pp. 22515-22538, June 2025.
97. M. Rohani, **H. Farsi**, S. Mohammadzadeh, " Advanced Multi-Task Learning with Lightweight Networks and Multi-Head Attention for Efficient Facial Attribute Estimation," *International journal of engineering transactions A: Basics*, Vol. 38, No. 10, pp. 2259-2272, Oct. 2025.
98. E. Sahragard, **H. Farsi**, S. Mohammadzadeh, " Semantic Segmentation Using an Improved ResNet Structure and Efficient Channel Attention Mechanism Applied to Atrous Spatial Pyramid Pooling in a Fully Convolutional Network," *International journal of engineering transactions B: Applications*, Vol. 38, No. 11, pp. 2511-2526, Nov. 2025.
99. M. Rohani, **H. Farsi**, S. Mohammadzadeh, " Advanced Race Classification Using Transfer Learning and Attention: Real-Time Metrics, Error Analysis, and Visualization in a Lightweight Deep Learning Model," *Journal of Electrical and Computer Engineering Innovations*, vol. 13, no.2, pp.341-352, July 2025.
100. M. A. Kazemi, **H. Farsi**, S. Mohammadzadeh, A. barati, " Segmentation of Brain Tumors from Magnetic Resonance Imaging with k-means Clustering and Morphological Local and Global Intensity Fitting," *International journal of engineering transactions B: Applications*, Vol. 39, No. 2, pp. 511-522, Feb. 2026.
101. E. Sahragard, **H. Farsi**, S. Mohammadzadeh, " A Deep Learning-Based Approach for Accurate Semantic Segmentation with Attention Modules," *Iranian journal of energy and environment*, vol. 16, No. 4, pp.692-705, Oct. 2025.
102. **H. Farsi**, S. M. Notghi Moghadam, A. Barati, S. Mohammadzadeh, " Development of a Deep Learning Model Inspired by Transformer Networks For Multi-class Skin Lesion Classification," *International journal of engineering transactions A: Basics*, Vol. 39, No. 1, pp. 135-147, January 2026.

103. **H. Farsi**, M. Shaikhi, S. Mohammadzadeh,” Federated Learning Combined Ensemble Aggregation for Brain Tumor Classification in Magnetic Resonance Imaging,” *Iranian journal of energy and environment*, vol. 17, No. 1, pp.1-9, January 2026.

C) Conferences

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