

Curriculum Vitae

Hossein Ebrahimnezhad, PhD

Professor of Electrical Engineering & Computer Science

Computer Vision Research Lab. , Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran

Personal:

Hossein Ebrahimnezhad Sadigh

Tel.: (+9841) 3345 9343

Fax: (+9841) 3344 4322

Email: ebrahimnezhad@sut.ac.ir

Professional Experience:

1. [1996- Now] Member of academic staff, Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.
2. [1996- 2007] Lecturer, Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.
3. [2007- 2013] Assistant Professor, Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.
4. [2013- 2017] Associate Professor, Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.
5. [2017- Now] Full Professor, Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.

Education:

1. [1989-1993] B.Sc.: Faculty of Engineering, University of Tabriz, Electronics Eng.
2. [1993-1995] M.Sc.: Faculty of Electrical Engineering, K.N.Toosi Univ. of Tech., Tele-Communication Systems Eng.
3. [2003-2007] Ph.D.: Dept. of Electrical and Computer Engineering, School of Engineering, Tarbiat Modares University, Tele-Communication Systems Eng., Thesis title: "3D Model Reconstruction by Silhouette, Stereo and Motion Features Fusion", Supervisor: Professor H. Ghassemian.

Professional Membership:

1. Member of IEEE
2. Member of Iranian Society of Machine Vision and Image Processing (ISMVIP)

Areas of Interests:

1. Computer Vision and It Applications in other fields like: Agriculture, Medical Engineering, Food Engineering, Autonomous Vehicles and Intelligent Traffic Systems, Sport, Animals, Security, Health Care, Education, Faison, Manufacturing, Inspection, Forensic, Biology, Environment, Forestry, and ...
 2. Computer Graphics and 3D Geometry Processing
 3. 3D Model Reconstruction, Processing, Retrieval, Animation, Compression, Deformation
 4. Deep Learning, Machine Learning, Soft Computing
 5. Signal, Speech, Image and Video Processing
 6. Pattern Analysis and Machine Intelligence
 7. Human Computer Interaction
 8. 2D and 3D Shape Analysis, Classification, Retrieval
 9. Multimedia Processing
 10. Image Understanding and Scene Analysis
 11. Object Detection and Categorization
 12. Image and Video Communication, Coding, Retrieval
 13. Human Pose Detection and Tracking
 14. Hand Gesture Recognition and Pose Tracking
 15. Computer Vision Applications in Agriculture, Medical Engineering, Food Engineering, Autonomous Vehicles, Sport, Animals, Security, Health Care, Education, Faison, Manufacturing, Inspection, and ...
-

Teaching Experience:

1. Under Graduate: Computer Vision Fundamentals, Computer graphics, Computer gaming basics, Computer Networks, Communication Systems, Electrical circuits-II, Physics of Electronics, Microprocessor Systems, Pulse Technique.
 2. Graduate: Computer Vision, Advanced Topics on 3D Computer Vision, Soft computing, Advanced Topics on Artificial Intelligence, Machine Learning, Multimedia Networks, Video Processing and Coding, Speech Processing, 3D Geometry Processing, Computational Geometry, Image and Video Understanding, Advanced Digital Communication.
-

Journal Publications:

1. A.R. Yeganehmehr, H. Ebrahimnezhad, A.R. Ardeshiri, "FastViT-Based Vision Transformer for Thyroid Nodule Classification", Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Accepted, 2026 (ISI-JCR).
2. H. Rasi, H. Ebrahimnezhad, M.H. Sedaaghi, "Attention-DenseUNet for Breast Cancer Segmentation in Histopathological Images", Journal of Medical Signals & Sensors, Accepted, 2026 (ISI-JCR).
3. A. Asgari, H. Ebrahimnezhad, M.H. Sedaaghi, "A hybrid convolutional vision transformer and quantum graph framework for medicinal plant classification", Quantum Machine Intelligence, Vol. 8, Article 77, July 2026, (ISI-JCR).
4. A.R. Yeganehmehr, H. Ebrahimnezhad, L. Shamir, "Galaxy morphology classification from telescope images using the mountain gazelle optimizer", New Astronomy, Vol. 127, Oct. 2026, 102565. (ISI-JCR).
5. J. Ranjbar, H. Ebrahimnezhad, M.H. Sedaaghi, "SWUFlood: Segmentation of flood-affected regions in UAV imagery using an enhanced hybrid approach integrating shifted window transformers with U-net", Remote Sensing Applications: Society and Environment, Volume 42, Apr. 2026, 102018. (ISI-JCR).
6. A. Amirfathiyan, H. Ebrahimnezhad, "TransLAP: Non-Isometric Shape Matching using Transformer based Linear Assignment Problem", IET Image Processing, Wiley, Vol. 20, Dec. 2026, First online published: 10 April 2026, (ISI-JCR).
7. M. Zavvar, H. Ebrahimnezhad, "Accurate Detection of Kidney Stones Using Attention-based Graph Models", Engineering Research Express, IOPScience, Vol. 8, No. 3, Feb. 2026 (ISI-JCR).
8. N. Rahmani, H. Ebrahimnezhad, "Improving Skin Lesion Diagnosis: A Hybrid Approach Using Orthogonal Combination Local Binary Pattern Features and Ensemble Learning", Journal of Medical Signals & Sensors, Vol. 16, No. 2, Feb. 2026, (ISI-JCR).
9. N. Kaveh, H. Ebrahimnezhad, A. Yeganehmehr, "Detection of Abnormal Driver Behaviors Using Local Binary Patterns and Histogram of Oriented Gradients", Journal of Nonlinear Systems in Electrical Engineering (JNSE), Vol. 11, No. 1, pp. 36-56, 2025, (printed in Persian) (ISC).
10. A. Amirfathiyan, H. Ebrahimnezhad, "An efficient method for 3D shapes matching using geometric features", Journal of Nonlinear Systems in Electrical Engineering (JNSE), Vol. 11, No. 1, pp. 5-35, 2025, (printed in Persian) (ISC).
11. H. Merrikhi, H. Ebrahimnezhad, "Object Handle Segmentation in 3D Point Cloud for Robot Grasping Using Scale Invariant Heat Kernel Signature with Optimized XGBoost Classifier", IET Image Processing, Wiley, Vol. 19, Dec. 2025, First online published: 06 October 2025, (ISI-JCR).
12. A. Yeganehmehr, H. Ebrahimnezhad, "Classification of galaxies from image features using best parameter selection by horse herd optimization algorithm (HOA)", Astronomy and Computing, Elsevier, Vol. 50, pp. 100898, Jan. 2025 (ISI-JCR).
13. J. Ranjbar, H. Ebrahimnezhad, M.H. Sedaaghi, "Enhancing Colonoscopy-Images Segmentation using Laplacian-Former as Efficient Transformer Block", AUT Journal of Electrical Engineering, Vol. 57, No. 2, pp. 369-384, 2025.
14. A. Asgari, H. Ebrahimnezhad, M.H. Sedaaghi, "Kidney Stones CT Images Classification using Graph Convolutional Network", AUT Journal of Electrical Engineering, Vol. 57, No. 2, pp. 355-368, 2025.
15. S. Dehghani, H. Ebrahimnezhad, N. Rahmani, "Diabetic Retinopathy Detection from Retinal Images Using the Pyramid Vision Transformer Method", AUT Journal of Electrical Engineering, Vol. 57, No. 2, pp. 399-408, 2025.

16. N. Rahmani, H Ebrahimnezhad, E. Ahmadi, "Enhancing Agricultural Diagnostics: Tomato Leaf Disease Detection Using Quantum Vision Transformer AUT Journal of Electrical Engineering, Vol. 57, No. 2, pp. 343-354, 2025.
17. A. Yeganehmehr, H Ebrahimnezhad, "Classification of galaxy images using vision transformers", AUT Journal of Electrical Engineering, Vol. 57, No. 2, pp. 385-398, 2025.
18. B. Namadian, H. Ebrahimnezhad, "Estimating scouring of combined spillway-valve structure due to contraction using numerical model and neural networks", Iranian Journal of Marine technology, Vol. 12, No. 1, pp. 38-52, spring. 2025.
19. H. Merrikhi, H. Ebrahimnezhad, "Grasp Area Detection for 3D Object using Enhanced Dynamic Graph Convolutional Neural Network", Iranian Journal of Electrical and Electronic Engineering (IJEET), Vol. 20, No. 4, pp. 134-146, Dec. 2024.
20. A. Amirfathiyan, H. Ebrahimnezhad, "Efficient 3D Shape Matching: Dense Correspondence for non-isometric Deformation", Iranian Journal of Electrical and Electronic Engineering (IJEET), Vol. 20, No. 4, pp. 162-172, Dec. 2024.
21. Kh. Mahdikhanelou, H. Ebrahimnezhad, "Integration of Leap Motion sensor with camera for better performance in hand tracking", Metaverse 2024, Vol.5, No. 2, Dec. 2024.
22. AM Taheri, H Ebrahimnezhad, M Sedaaghi, "Ensemble deep learning for high-precision classification of 90 rice seed varieties from hyperspectral images", Journal of Ambient Intelligence and Humanized Computing, Vol. 15, No. 6, pp. 2883-2899, June 2024.
23. R. Kheyrolahi, F. Hoorali, M.H. Sedaaghi, H.Ebrahimnezhad, "Pupil Detection for Automatic Diagnosis of Eye Diseases Using Optimized Color Mapping", Journal of Health and Biomedical Informatics, Vol.10, No.1, June 2023.
24. F. Gholipour, H. Ebrahimnezhad, "Content-Based Natural Images Retrieval using Curvature Histogram Shape Feature", COJ Electronics & Communications, Vol. 2, No. 5, pp. 1-8, Sep. 2023.
25. L. Asgharian, H. Ebrahimnezhad, "3D Model Representation Using Space Curves: An Efficient Mesh Simplification Method by Exchanging Triangulated Mesh to Space Curves", Multimedia Tools and Applications, Springer, Vol. 82, No. 20, pp. 30965-31000, Aug. 2023 (ISI-JCR).
26. Kh. Mahdikhanelou, H. Ebrahimnezhad, "Object Manipulation and Deformation using Hand Gestures", Journal of Ambient Intelligence and Humanized Computing, Springer, Vol. 14, No. 7, pp. 8115-8133, July. 2023 (ISI-JCR).
27. Kh. Mahdikhanelou, H. Ebrahimnezhad, "3D Hand Pose Estimation from a Single RGB Image by Weighting the Occlusion and Classification", Pattern Recognition, Elsevier, Vol. 136, 109217, Apr. 2023 (ISI-JCR).
28. A.M.Taheri, H. Ebrahimnezhad, M.H. Sedaaghi, "Prediction of the Critical Temperature of Superconducting Materials Using Image Regression and Ensemble Deep Learning", Materials Today Communications , Elsevier, Vol. 33, Dec. 2022 (ISI-JCR).
29. Kh. Mahdikhanelou, H. Ebrahimnezhad, "3D object deforming and manipulating through dynamic hand gestures", Entertainment Computing, Elsevier, Vol. 43, Aug. 2022 (ISI-JCR).
30. J. Ranjbar, H. Ebrahimnezhad, "Matching of same family objects by searching for similar components based on both color and wavelet features", Journal of Machine Vision and Image Processing, (JMVIP), Vol. 9, No. 4, pp. 43-54, Dec. 2022, (printed in Persian) (ISC).
31. L. Asgharian, H. Ebrahimnezhad, "Feature Preserving Mesh Simplification through Anisotropic Nyquist based Adaptive Sampling of Points Inside the Segmented Regions", Journal of Visualization, Springer, Vol. 25, No. 4, pp. 807-817, Aug. 2022 (ISI-JCR).
32. A. Asghari, H. Ebrahimnezhad, "Facial Landmark Localization by Initializing the Landmark Points through Training of Local Binary Properties and Histogram of Oriented Gradient ", Journal of Nonlinear Systems in Electrical Engineering (JNSE), Vol. 8, No. 2, pp. , Autumn and Winter 2021 (printed in Persian) (ISC).
33. L. Asgharian, H. Ebrahimnezhad, "Anisotropic Re-meshing of 3D Models Based on Adaptive Sampling", Journal of Nonlinear Systems in Electrical Engineering (JNSE), Vol. 8, No. 1, pp. 4-34, spring and Summer 2021 (printed in Persian) (ISC).
34. F. Shamsafar, H. Ebrahimnezhad, "Uniting Holistic and Part-based Attitudes for Accurate and Robust Deep Human Pose Estimation", Journal of Ambient Intelligence and Humanized Computing, Springer, Vol. 12, No. 2, pp. 2339–2353, Feb. 2021 (ISI-JCR).
35. L. Asgharian, H. Ebrahimnezhad, "How Many Sample Points Are Sufficient for 3D Model Surface Representation and Accurate Mesh Simplification?", Multimedia Tools and Applications, Springer, Vol. 79, No. 39-40, pp. 29595–29620, Oct. 2020 (ISI-JCR).

36. Kh. Mahdikhanelou, H. Ebrahimnezhad, "Sign Language Recognition by Combining Leap Motion Controller and Hand Image Information", *Journal of Nonlinear Systems in Electrical Engineering (JNSEE)*, Vol. 7, No. 1, pp. 4-32, spring-summer 2020 (printed in Persian) (ISC).
37. Kh. Mahdikhanelou, H. Ebrahimnezhad, "Multimodal 3D American sign language recognition for static alphabet and numbers using hand joints and shape coding", *Multimedia Tools and Applications*, Springer, Vol. 79, No. 31-32, pp. 22235–22259, Aug. 2020 (ISI-JCR).
38. A. Sadeghzadeh, H. Ebrahimnezhad, "Pose-Invariant Face Recognition Based on Matching the Occlusion Free Regions Aligned by 3D Generic Model", *IET Computer Vision*, Vol. 14, No. 5, pp. 268-277, Aug. 2020 (ISI-JCR).
39. A. Amirfathiyan, H. Ebrahimnezhad, "A Nonlinear Grayscale Morphological and Unsupervised Method for Human Facial Synthesis Based on an Example Image", *Journal of Nonlinear Systems in Electrical Engineering (JNSEE)*, Vol. 6, No. 1, pp. 66-84, Winter 2020, (printed in Persian) (ISC).
40. M. Hajizadeh, H. Ebrahimnezhad, "NLME: A Nonlinear Motion Estimation-Based Compression Method For Animated Mesh Sequence", *The Visual Computer*, Springer, Vol. 36, No. 3, pp. 649-665, March 2020, (ISI-JCR).
41. A. Amirfathiyan, H. Ebrahimnezhad, "Face Sketch Generation of Example Image by Encoding Local Binary Pattern", *Journal of Machine Vision and Image Processing*, Vol. 6, No. 2, pp. 133-146, Winter & Spring 2020, (printed in Persian) (ISC).
42. N. Mostaghim Bakhshayesh, M. Shamsi, M.H. Sedaaghi, H. Ebrahimnezhad, "Alignment of Noncoding Ribonucleic Acids with Pseudoknots Using Context-Sensitive Hidden Markov Model", *Journal of Medical Signals and Sensors (JSDP)*, Vol. 9, No. 4, pp. 252-258, 2019 (printed in Persian) (ISC).
43. F. Behbahani, V. Mehrdad, H. Ebrahimnezhad, "3D Models Recognition in Fourier Domain Using Compression of the Spherical Mesh up to the Models Surface", *Journal of Signal and Data Processing (JSDP)*, Vol. 16, No. 2, Serial 40, pp. 91-104, Sep. 2019 (printed in Persian) (ISC).
44. H. Merrikhi, H. Ebrahimnezhad, "Synthesis of Human Facial Expressions based on the Distribution of Elastic Force Applied by Control Points", *Journal of Signal and Data Processing (JSDP)*, Vol. 16, No. 2, Serial 40, pp. 91-104, Sep. 2019 (printed in Persian) (ISC).
45. F. Shamsafar, H. Ebrahimnezhad, "Three-Dimensional Human Pose Estimation from a Single Image Using Non-linear Convolutional Neural Network Based on Shape Information", *Journal of Nonlinear Systems in Electrical Engineering (JNSEE)*, Vol. 5, No. 1, pp. 83-103, spring-summer 2018 (printed in Persian) (ISC).
46. F. Shamsafar, H. Ebrahimnezhad, "Understanding Holistic Human Pose Using Class-Specific Convolutional Neural Network", *Multimedia Tools and Applications*, Springer, Vol. 77, No. 18, pp. 23193-23225, Sep. 2018 (ISI-JCR).
47. M. Hajizadeh, H. Ebrahimnezhad, "Eigenspace Compression: Dynamic 3D Mesh Compression by Restoring Fine Geometry to Deformed Coarse Models", *Multimedia Tools and Applications*, Springer, Vol. 77, No. 15, pp. 19347-19375, Aug. 2018 (ISI-JCR).
48. M. Mirloo, H. Ebrahimnezhad, "Salient Point Detection in Protrusion Parts of 3D Object Robust to Isometric Variations", *3D Research*, Springer, Vol. 9, No. 1, Article 2, pp. 1-18, March. 2018 (ISI).
49. M. Mirloo, H. Ebrahimnezhad, "Non-rigid 3D Object Retrieval using Directional Graph Representation of Wave Kernel Signature", *Multimedia Tools and Applications*, Springer, Vol. 77, No. 6, pp. 6987-7011, March 2018 (ISI-JCR).
50. S. Nikzad, H. Ebrahimnezhad, "Two-Person Interaction Recognition from Bilateral Silhouette of Key Poses", *Journal of Ambient Intelligence and Smart Environments*, IOS Press, Vol. 9, No. 4, pp. 483-499, July/Aug. 2017 (ISI-JCR).
51. A.M. Molaei, M.H. Sedaaghi, H. Ebrahimnezhad, "Steganography Scheme Based on Reed-Muller Code with Improving Payload and Ability to Retrieval of Destroyed Data for Digital Images", *Amirkabir International Journal of Science & Research Electrical and Electronics Engineering (AIJ-EEE)*, Vol. 49, No. 1, pp. 61-70, Spring 2017 (ISC).
52. M. Hajizadeh, H. Ebrahimnezhad, "Predictive Compression of Animated 3D Models by Optimized Weighted Blending of Key-Frames", *Computer Animation and Virtual Worlds*, Wiley, Vol. 27, No. 6, pp. 556–576, Nov./Dec. 2016 (ISI-JCR).
53. F. Amini, H. Ebrahimnezhad, "Skeleton based Non rigid Shape Matching", *Bulletin de la Société Royale des Sciences de Liège*, Vol. 85, pp. 1188 - 1194, Oct 2016 (ISI).
54. P. Salehpour, H. Balazadeh Bahar, G. Karimian, H. Ebrahimnezhad, "Adaptive Bit-Plane Probability and Wavelet Based Ucler Detection in Wireless Capsule Endoscopy Images", *Biomedical Engineering: Applications, Basis and Communications*, Worldscientific, Vol. 28, No. 4, pp. 1650029-1:10, Aug. 2016 (ISI).

55. Kh. Mahdikhanelou, H. Ebrahimnezhad, "Shape based Object Retrieval using Descriptors Extracted from Growing Contour Process", Journal of Signal and Data Processing (JSDP), Vol. 13, No. 3, Serial 29, pp. , Autumn 2016 (printed in Persian) (ISC).
56. L. Asgharian, H. Ebrahimnezhad, "Animating of Carton Characters by Skeleton based Articular Motion Transferring of Other Objects", Journal of Signal and Data Processing (JSDP), Vol.13, No. 2, Serial 28, pp. 71-89, Summer 2016 (printed in Persian) (ISC).
57. S. Mansouri, H. Ebrahimnezhad, "Efficient Axial Symmetry Aware Mesh Approximation with Application to 3D Pottery Models", Multimedia Tools and Applications, Springer, Vol. 75, No.14, pp. 8347-8379, July 2016 (ISI-JCR).
58. A.M. Molaei, H. Ebrahimnezhad, M.H. Sedaaghi, "A Robust and Blind 3D Mesh Watermarking in Spatial Domain Based on Faces Categorization and Sorting", 3D Research, Springer, Vol. 7, No. 2, pp. 1-18, June 2016 (ISI)
59. Kh.Mahdikhanelou, H.Ebrahimnezhad, "Shape Classification Based on Geometric Features of Evolution Points via Sparse Representation", International Journal on Artificial Intelligence Tools, Worldscientific, Vol. 25, No. 3, pp. 1650010-1:23 , June 2016 (ISI-JCR)
60. S. Mansouri, H. Ebrahimnezhad, "Segmentation Based Semi-Regular Remeshing of 3D Models Using Curvature Adapted Subdivision Surface Fitting", Journal of Visualization, Springer, Vol. 19, No. 1, pp. 141-155, Feb. 2016 (ISI-JCR).
61. V. Mehrdad, H. Ebrahimnezhad, "3D Object Retrieval Based on Histogram of Local Orientation using One-Shot Score Support Vector Machine", Frontiers of Computer Science, Springer, Vol. 9, No. 6, pp. 990-1005, Dec. 2015 (ISI-JCR).
62. B. Maleki, H. Ebrahimnezhad, "Intelligent Visual Mouse System Based on Hand Pose Trajectory Recognition in Video Sequences", Multimedia Systems, Springer, Vol. 21, No. 6, pp 581-601, Nov. 2015 (ISI-JCR).
63. M. Anvaripour, H. Ebrahimnezhad, "Accurate Object Detection Using Local Shape Descriptors", Pattern Analysis and Applications , Springer, Vol. 18, No. 2, pp 277-295, May 2015 (ISI-JCR).
64. G. Malekshahi, H. Ebrahimnezhad, "Detection and Removal of Rain from Video Using Predominant Direction of Gabor Filters", Journal of Information Systems and Telecommunication (JIST), Vol. 3, No. 1, pp. 41-49, Winter 2015 (ISC).
65. V. Mehrdad, H. Ebrahimnezhad, "3D Model Retrieval Based on Linear Prediction Coding in Cylindrical and Spherical Projections using SVM-OSS", Multimedia Tools and Applications, Springer, Vol. 74, No. 4, pp. 1511-1535, Feb. 2015 (ISI-JCR).
66. S. Mansouri, H. Ebrahimnezhad, "3D Model Compression using Non-Linear System based on Curvature Feature", Journal of Nonlinear Systems in Electrical Engineering (JNSEE), Vol. 2, No. 2, pp. 72-87, Fall 2014 (printed in Persian) (ISC).
67. M. Mirloo, H. Ebrahimnezhad, "Semantic Segmentation of 3D Model Objects based on Salient Points and Core Extraction", Journal of Signal and Data Processing (JSDP), Vol.11, No.1, Serial 21, pp. 59-72, Summer 2014 (printed in Persian) (ISC).
68. A. Momennezhad, H. Ebrahimnezhad, M.Shamsi, L.Asgharian, "Brain Activity EEG-P300 Signal Categorization from LPC based Estimation of Signal using Fisher Linear Discriminant Analysis", International Journal of Intelligent Computing in Medical Sciences & Image Processing (IC-MED), Taylor & Fransis, Vol. 6, No.1, pp. 17-26, Aug. 2014.
69. A. Momennezhad, M. Shamsi, H. Ebrahimnezhad, H.Saberkari, "Classification of EEG-P300 Signals Extracted from Brain Activities in BCI Systems using v-SVM and BLDA Algorithms", Applied Medical Informatics, Vol. 34, No. 2, pp. 23-35, 2014.
70. V. Mehrdad, H. Ebrahimnezhad, "Retrieving of 3D Models using Linear Prediction Coefficients in Cylindrical Projections by Generalizing the Projection to three Perpendicular Cylinders", Journal of Machine Vision and Image Processing, Vol. 1, No. 2, pp. 27-38, Winter 2014, (printed in Persian).
71. Z. Mousavian, H. Ebrahimnezhad, "Persian Static Sign Language Recognition using a New Shape Descriptor", Journal of Machine Vision and Image Processing, Vol. 1, No. 2, pp. 57-66, Winter 2014, (printed in Persian).
72. M. Ramezani, H. Ebrahimnezhad, "3D Model Pose Estimation and Alignment by Error Minimization in Silhouette Images", Journal of Machine Vision and Image Processing, (JMVIP), Vol. 1, No. 1, pp. 28-43, Summer 2013, (printed in Persian).
73. M. Ghaseri, H. Ebrahimnezhad, "Facial Image Retrieval by Combining Gradient Histogram and Local Binary Pattern", Journal of Machine Vision and Image Processing, (JMVIP), Vol. 1, No. 1, pp. 58-68, Summer 2013, (printed in Persian).

74. A.M. Molaei, M.H. Sedaaghi, H. Ebrahimnezhad, "A Blind Steganography based on Reed-Solomon Codes and Optimal Substitution Table with Improving Payload and Robustness", *Tabriz Journal of Electrical Engineering (TJEE)*, Vol.43, No.2, pp.43-59, Winter 2013.
75. A.M. Molaei, H. Ebrahimnezhad, M.H. Sedaaghi, "A Blind Fragile Watermarking Method for 3D Models based on Geometric Properties of Triangles", *3D Research*, Springer, Vol. 4, No. 4, Dec. 2013 (ISI).
76. S. Khoshnoud, H. Ebrahimnezhad, "Classification of Arrhythmias Using Linear Predictive Coefficients and Probabilistic Neural Network", *Applied Medical Informatics*, Vol. 33, No. 3, pp. 56-63, 2013.
77. A. Goshvarpour, H. Ebrahimnezhad, A. Goshvarpour, "Shape Classification Based on Normalized Distance and Angle Histograms Using PNN", *International Journal of Information Technology and Computer Science(IJITCS)*, Vol. 5, No. 9, pp. 65-72, Aug. 2013.
78. A. Goshvarpour, H. Ebrahimnezhad, A. Goshvarpour, "Classification of Epileptic EEG Signals using Time-Delay Neural Networks and Probabilistic Neural Networks", *International Journal of Information Engineering and Electronic Business*, (IJIEEB), Vol.5, No.1, pp.59-67, May. 2013.
79. S.R. Banimahd, H. Ebrahimnezhad, "Segmentation and tracking of lips using parallel surfaces based on shape receptivity and its application in speaker identity recognition", *Karagah*, Vol.4, No.16, pp.141-157, Autumn 2012 (printed in Persian)(ISC).
80. G. Khademi, H. Ebrahimnezhad, "Multi-view based 3D Human Pose Estimation by Fitting the Projection of 3D Articular Skeleton Model in Silhouette Images", *Journal of Signal and Data Processing (JS DP)*, Vol.9, No.1, Serial 17, pp.3-18, Spring-Summer 2012 (printed in Persian) (ISC).
81. N. Alijanpour, H. Ebrahimnezhad, A. Ebrahimi, "Hand static gesture recognition using HMM based on curvature gradient of occluding contour", *Journal of Intelligent Procedures in Electrical Technology (JIPET)*, Vol.3, No.10, pp.33-42, Summer 2012 (printed in Persian).
82. M. Ramezani, H. Ebrahimnezhad, "A Novel 3D Object Categorization and Retrieval System Using Geometric Features", *International Journal of Information and Communication Technology Research (IJICTR)*, Vol.4, No.1, pp.9-20, Dec. 2011 (ISC).
83. S. Zare, A. Ghaffarpour Rahbar, H. Ebrahimnezhad, "A 2-level FEC mechanism joint with cross-layer superposition coded multicast for robust IPTV service over WiMAX", *Wireless Networks*, Springer, Vol. 17, No. 5, pp. 1203-1216, Jul. 2011 (ISI-JCR).
84. M. Emambakhsh, H. Ebrahimnezhad, M.H. Sedaaghi, "Integrated Region-Based Segmentation Using Color Components and Texture Features with Prior Shape Knowledge", *International Journal of Applied Mathematics and Computer Science*, Vol. 20, No. 4, pp. 711-726, Dec. 2010 (ISI-JCR).
85. H. Ebrahimnezhad, H. Ghassemian, "Robust Motion from Space Curves and 3D Reconstruction from Multiviews Using Perpendicular Double Stereo Rigs", *Journal of Image and Vision Computing*, Elsevier, Vol 26, No.10, pp. 1397-1420, Oct. 2008 (ISI-JCR).
86. H. Ebrahimnezhad, H. Ghassemian, "3D Model Reconstruction by Silhouette, Stereo and Motion Features Fusion", *Iranian Journal of Electrical and Computer Engineering*, Vol.3, No.1, pp.18-28, Summer 2005, (printed in Persian) (ISC).

Conference Publications:

1. F. Amini, H. Ebrahimnezhad and A. Yeganehmehr, "Deformable shape matching and point correspondence based on local, global, and geometric features of objects and their application to image retrieval," 2025 11th International Conference on Signal Processing and Intelligent Systems (ICSPIS), IEEE, Babol, Iran, Islamic Republic of, 2025, pp. 460-467, doi: 10.1109/ICSPIS68676.2025.11551725.
2. A. Norouzi, H. Ebrahimnezhad and A. Yeganehmehr, "Skin Cancer Classification Using Vision Transformers Based on Practical Optimizers," 2025 11th International Conference on Signal Processing and Intelligent Systems (ICSPIS), IEEE, Babol, Iran, Islamic Republic of, 2025, pp. 636-643, doi: 10.1109/ICSPIS68676.2025.11551747.
3. N. Rahmani, H. Ebrahimnezhad, "Hair removal from dermoscopic images by combining Gaussian mixture model and geometric features", *The ninth international Conference on Knowledge and Technology of Mechanical, Electrical Engineering*, 2023 (printed in Persian).
4. K. Mohamadian, H. Ebrahimnezhad, "Human Sport Movement Recognition using Key Points and Manifold Matching", 5th Iranian Conference on Communication Engineering (ICCE 2021), Shahrood, Iran, Sep. 2021 (printed in Persian).

5. F. Farzampour, H. Ebrahimnezhad, "Pain Recognition from Facial Expressions in Video using Histogram of Oriented Gradients", 5th Iranian Conference on Communication Engineering (ICCE 2021), Shahrood, Iran, Sep. 2021 (printed in Persian).
6. G. Malekshahi, H. Ebrahimnezhad, "Detection and Removing of Fog in the Image by Estimating Fog Depth and Atmospheric Brightness", 4th International Conference on Electrical, Computer and Mechanical Engineering (ICCE 2021), Tehran, Iran, June 2021 (printed in Persian).
7. J. Ranjbar, H. Ebrahimnezhad, "Matching the Corresponding Components in Two Real Images by Measuring the Edge based Best Body Similarity (EBBS)", 4th International Conference on Electrical, Computer and Mechanical Engineering (ICCE 2021), Tehran, Iran, June 2021 (printed in Persian).
8. P. Akhoundzadeh, H. Ebrahimnezhad, G. Mirjalili, "Palmpoint Recognition Using Modified Local Features based on Sparse Classifier", 27th Iranian Conference on Electrical Engineering (ICEE2019), Yazd, Iran, May 2019.
9. P. Akhoundzadeh, H. Ebrahimnezhad, "Palmpoint Recognition based on Local Image Features", 2nd International Conference on Signal Processing and Intelligent Systems (ICSPIS2016), Amirkabir University of Technology, Tehran, Dec. 2016 (printed in Persian).
10. A. Sadeghzadeh, H. Ebrahimnezhad, "Head Pose Estimation based on Fuzzy Systems using Facial Geometric Features", 8th International Symposium on Telecommunication (IST2016), IEEE, ITRC, Tehran, Sep. 2016.
11. A. Sadeghzadeh, H. Ebrahimnezhad, "Neural Network based Head Pose Estimation using Facial Geometry", 1st International Conference on New Research Achievements in Electrical Engineering & Computer Engineering (CBconf2016), Tehran, Iran, May. 2016.
12. M. Bordbar, H. Ebrahimnezhad, "Segmentation of Informative and Uninformative Frames of Endoscopy Capsule's Video Based on Color Texture", 2nd International Congress of Electrical Engineering, Computer Science and Information Technology (IT2015), Tehran, Iran, Aug. 2015.
13. B. Maleki, H. Ebrahimnezhad, Min Xu, Xiangjian He, "Hand Gesture Recognition for A Virtual Mouse Application Using Geometric Feature of Finger's Trajectories", 7th International Conference on Internet Multimedia Computing and Service (ICIMCS 2015), Zhangjiajie, China, Aug. 2015 (Selected as Best Paper).
14. B. Saadat, H. Ebrahimnezhad, "Automatic Recognition of Different Tree Leaves Based on the Histogram of Poisson Equation Solution Feature", 7th International Conference on Information and Knowledge Technology (IKT2015), Urmia, Iran, May 2015 (printed in Persian).
15. M. Mirloo, H. Ebrahimnezhad, "3D Model Retrieval based on Geodesic Distance of its Components", 7th International Conference on Information and Knowledge Technology (IKT2015), Urmia, Iran, May 2015 (printed in Persian).
16. S. Razavi, H. Ebrahimnezhad, "Content-Based Video Retrieval by Fusing Color, Texture and Edge Features", 2nd International Conference on Pattern Recognition and Image Analysis (IPRIA2015), Gilan, Iran, March 2015.
17. M. Hajzadeh, H. Ebrahimnezhad, "Dynamic 3D Model Predictive Coding and Compression using Time Correlation Among Similar Frames", 2nd International Conference on Pattern Recognition and Image Analysis (IPRIA2015), Gilan, Iran, March 2015 (printed in Persian).
18. F. Shamsafar, H. Ebrahimnezhad, "Human 3D Pose Detection from Still Image using Fuzzy Clustering", 2nd International Conference on Pattern Recognition and Image Analysis (IPRIA2015), Gilan, Iran, March 2015 (printed in Persian).
19. H. Ahmadi, S. Valli, H. Ebrahimnezhad, "Automatic vehicle plate recognition using a combinational algorithm in HSV color space based on SVM classifier", The First Congress on Intelligent Transportation Systems (ITS2015), Tehran, Iran, Jan. 2015.
20. L. Asgharian, H. Ebrahimnezhad, "Human articulated body parts bending motion classification based on Dictionary-Learning Sparse Representation", 4th International eConference on Computer and Knowledge Engineering (ICCKE2014), Mashhad, Iran, Oct. 2014.
21. S. Nikzaad, H. Ebrahimnezhad, "Human Interaction Recognition from Distance Signature of Body Centers During Time", 7th International Symposium on Telecommunication (IST2014), Tehran, Iran, Sep. 2014.
22. S. Nikzaad, H. Ebrahimnezhad, "Interaction Recognition Between Two Human in Video Frames using Neuro-Fuzzy System", 14th Iranian Conference on Fuzzy System (ICFS2014), Sahand, Tabriz, Iran, Aug. 2014 (printed in Persian).
23. L. Asgharian, H. Ebrahimnezhad, "Articular Motion Synthesis Based on Neuro-Fuzzy System", 14th Iranian Conference on Fuzzy System (ICFS2014), Sahand, Tabriz, Iran, Aug. 2014 (printed in Persian).

24. P.Akhoundzadeh, H.Ebrahimnezhad, M.H.Sedaaghi, "Palm Recognition Based on Oriented Gradient Histogram using Neuro-Fuzzy Classifier", 14th Iranian Conference on Fuzzy System (ICFS2014), Sahand, Tabriz, Iran, Aug. 2014 (printed in Persian).
25. L.Asgharian, H.Ebrahimnezhad, "Non-Rigid Motion Synthesis in Articular Shape Models Based on Skletonizing", 6th Conference on Information and Knowledge (IKT2014), Shahrood, Iran, May 2014 (printed in Persian).
26. F.Gholipour, H.Ebrahimnezhad, "An Efficient Content Based Image Retrieval Using Edge Orientation Co-occurrence Matrix", 6th Conference on Information and Knowledge (IKT2014), Shahrood, Iran, May 2014.
27. Kh.Mahdikhanlou, H.Ebrahimnezhad, "Shape Recognition Based on the Length of Ellipse Diameters Passed from Shape Center and Shape Contour", 6th Conference on Information and Knowledge (IKT2014), Shahrood, Iran, May 2014 (printed in Persian).
28. Kh.Mahdikhanlou, H.Ebrahimnezhad, "Plant Leaf Classification Using Centroid Distance and Axis of Least Inertia Method", 22th Iranian Conference on Electrical Engineering (ICEE2014), Tehran, Iran, May 2014.
29. Kh.Mahdikhanlou, H.Ebrahimnezhad, "Segmentation based Shape Recognition using the Local Orientation Feature of the Inner points of Each Segment Extracted by Poisson Equation", 19th Iranian CSI Computer Conference (CSICC2014), Tehran, Iran, March 2014 (printed in Persian).
30. S.Mansouri, H.Ebrahimnezhad, "3D Model Segmentation based on Curvature Feature in Triangular Meshes", 8th Iranian Conference on Machine Vision and Image Processing (MVIP2013), Iran, Zanjan, Sep. 2013 (printed in Persian).
31. H.Heravi, H.Ebrahimnezhad, R. Aghaeifard, "Real Time Eye Gaze Estimation from monocular image", 8th Iranian Conference on Machine Vision and Image Processing (MVIP2013), Iran, Zanjan, Sep. 2013 (printed in Persian).
32. B.Maleki, H.Ebrahimnezhad, "Hand Motion Gesture Recognition from Shape Context Descriptor for Virtual Mouse Application", 8th Iranian Conference on Machine Vision and Image Processing (MVIP2013), Iran, Zanjan, Sep. 2013 (printed in Persian).
33. M.Mirloo, H.Ebrahimnezhad, "3D model Decomposition Based on Geodesic Distanse", 8th Iranian Conference on Machine Vision and Image Processing (MVIP2013), Iran, Zanjan, Sep. 2013 (printed in Persian).
34. A.M. Molaei, H.Ebrahimnezhad, "Blind steganography based on Reed-Muller codes with improved embedding payload and error correction capacity", 21th Iranian Conference on Electrical Engineering (ICEE2013), Mashhad, Iran, May 2013 (printed in Persian).
35. A.M. Molaei, H.Ebrahimnezhad, "Fragile 3D model watermarking based on geometric properties of triangles maintaining the quantization steps", 21th Iranian Conference on Electrical Engineering (ICEE2013), Mashhad, Iran, May 2013 (printed in Persian).
36. M.Mirloo, H.Ebrahimnezhad, "3D Models Segmentation using Area Feature of Cutting Planes", 21th Iranian Conference on Electrical Engineering (ICEE2013), Mashhad, Iran, May 2013 (printed in Persian).
37. G.Malekshahi, H.Ebrahimnezhad, "Rain Detection and Removal in Video using Gabor Filter", 21th Iranian Conference on Electrical Engineering (ICEE2013), Mashhad, Iran, May 2013 (printed in Persian).
38. M.Ramezani, H.Ebrahimnezhad, "3D Models' Retrieval System Design Based on Poisson's Histogram of 2D Selective Views", 21th Iranian Conference on Electrical Engineering (ICEE2013), Mashhad, Iran, May 2013.
39. M. Mirloo, H.Ebrahimnezhad, "Intelligent segmentation of 3D models using salient points feature", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).
40. N. Soltanieh, H.Ebrahimnezhad, "Automatic 3D model surface reconstruction from point clouds using Gaussian functions", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).
41. H.R. Emamjome, H.Ebrahimnezhad, "Human gaze estimation from geometric features of two eyes using Probabilistic Neural Network", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).
42. A.M. Molaei, H.Ebrahimnezhad, M.H. Sedaghi, "Fragile watermarking for 3D models with low distortion and high accuracy localization of suspected to damage regions", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).
43. N. Mostaghim, M. Shamsi, H.Ebrahimnezhad, M.H. Sedaghi, "RNA structures alignment using Hidden Markov Models", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).
44. M. Joroughi, M. Shamsi, H.Ebrahimnezhad, M.H. Sedaghi, H.R.Saberkari, "Gene selection and micro array data categorization using correlation analysis, binary particle swarm optimization algorithm and probabilistic

neural network", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).

45. A. Momennezhad, M. Shamsi, H.Ebrahimnezhad, H.R.Saberkari, "Presenting an optimized algorithm for designing BCI systems based on P300 excitation potential", 11th Iranian Conference on Intelligent Systems (ICIS2013), Tehran, Iran, Feb. 2013 (printed in Persian).
46. M.Ramezani, H.Ebrahimnezhad, "3D Object Retrieval Using Elliptical Descriptor of Different 2D Views", 1st Iranian Conference on Pattern Recognition and Image Analysis (PRIA2013), Birjand, Iran, March 2013.
47. M.Ghaseri, H.Ebrahimnezhad, "Face retrieval using histogram of oriented gradients in single model state", 20th Iranian Conference on Electrical Engineering (ICEE2012), Tehran, Iran, May 2012 (printed in Persian).
48. Z.Mousavian, H.Ebrahimnezhad, "Persian sign language recognition based on histogram of oriented gradients and probabilistic neural networks", 20th Iranian Conference on Electrical Engineering (ICEE2012), Tehran, Iran, May 2012 (printed in Persian).
49. V.Mehrdad, H.Ebrahimnezhad, "3D Model Retrieval Using Linear Prediction Coding Descriptor", 20th Iranian Conference on Electrical Engineering (ICEE2012), IEEE, Tehran, Iran, May 2012.
50. M.Ramezani, H.Ebrahimnezhad, "View-Based 3D Objects Retrieval Using Geometric Features of Silhouette in Different Canonical Characterization", 20th Iranian Conference on Electrical Engineering (ICEE2012), IEEE, Tehran, Iran, May 2012.
51. A.Gholipour, H.Ebrahimnezhad, "Shape Recognition Based on Combined Spatial Distance and Normal angles of Contour Points", 7th Iranian Conference on Machine Vision and Image Processing (MVIP2011), Tehran, Iran, Nov. 2011 (printed in Persian).
52. M.Ramezani, H.Ebrahimnezhad, "3D Object Categorization Based on Histogram of Distance and Normal Vector Angles on Surface Points", 7th Iranian Conference on Machine Vision and Image Processing (MVIP2011), IEEE, Tehran, Iran, Nov. 2011 (Selected As Best Paper).
53. M.A..Hajizadeh, H.Ebrahimnezhad, "Classification of Age Groups from Facial Image Using Histograms of Oriented Gradients", 7th Iranian Conference on Machine Vision and Image Processing (MVIP2011), IEEE, Tehran, Iran, Nov. 2011.
54. N.Forouzanfar, H.Ebrahimnezhad, A. Ebrahimi, "Dynamic Texture Segmentation Using Linear Predictive Coding", 7th Iranian Conference on Machine Vision and Image Processing (MVIP2011), IEEE, Tehran, Iran, Nov. 2011.
55. M.Anvaripour, H.Ebrahimnezhad, "Object Detection with Novel Shape Representation Using Bounding Edge Fragments", International Symposium on Telecommunication (IST2010), pp. 846-851, IEEE, Tehran, Iran, Dec. 2010.
56. S.Soltanpour, H.Ebrahimnezhad, "Learning Novel Object Parts Model for Object Categorization", International Symposium on Telecommunication (IST2010), pp. 796-800, IEEE, Tehran, Iran, Dec. 2010.
57. H.Soleymani, H.Ebrahimnezhad, "Human Detection with Three Dimensional Parts", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), IEEE, Isfahan, Iran, Oct. 2010.
58. M. Ziaeeafard, H.Ebrahimnezhad, "Human Action Recognition by RANSAC Based Salient Features of Skeleton History Image Using ANFIS", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), IEEE, Isfahan, Iran, Oct. 2010.
59. Z.Imani, H.Ebrahimnezhad, "Shape Recognition Based on Curvature, Distance from Center of Gravity and Area Features using SVM Classifier", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, Oct. 2010 (printed in Persian).
60. S.Soltanpour, H.Ebrahimnezhad, "Object Categorization in Images by Extracting Fundamental Parts and Using Their Grammar", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, Oct. 2010 (printed in Persian).
61. H.Arab, H.Ebrahimnezhad, "Traffic Sign Detection and Recognition in Image Based on the Angle between Centers of Border Chain Codes Using SVM", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, Oct. 2010 (printed in Persian).
62. M.hajizadeh, H.Ebrahimnezhad, "Face Recognition by Fusing the Output of Modular Neural Networks using Choquet Fuzzy Integral", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, Oct. 2010 (printed in Persian).
63. M.Anvaripour, H.Ebrahimnezhad, "Object Detection by Edge Fragments Features extracted from Poisson Equation", 6th Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, Oct. 2010 (printed in Persian).

64. M. Ziaeefard, H.Ebrahimnezhad, "Hierarchical Human Action Recognition by Normalized-Polar Histogram", 20th International Conference on Pattern Recognition (ICPR2010), pp. 3720-3723, IEEE, Istanbul, Turkey, Aug. 2010.
65. S.R. Banimahd, H.Ebrahimnezhad, "Lip Segmentation Using Level Set Method: Fusing Landmark Edge Distance and Image Information", 20th International Conference on Pattern Recognition (ICPR2010), pp. 2432-2435, IEEE, Istanbul, Turkey, Aug. 2010.
66. H. Arabi, H.Ebrahimnezhad, "Traffic Sign Recognition Based on Histogram of Interior Points Minimum Distance from Boundary Using Neuro-Fuzzy System", 10th Iranian Conference on Fuzzy System (IFS2010), p. 116, Tehran, Iran, July 2010 (printed in Persian).
67. Z. Imaani, H.Ebrahimnezhad, "Object Categorization Based on Inner Distance Histogram Feature of Occluding Contour Using Neuro_fuzzy Classifier", 10th Iranian Conference on Fuzzy System (IFS2010), pp. 167-172, Tehran, Iran, July 2010 (printed in Persian).
68. Z. Gholizaadeh, H.Ebrahimnezhad, "Removing of Salt and Pepper Noise in Image Using Neuro-Fuzzy System", 10th Iranian Conference on Fuzzy System (IFS2010), pp. 242-246, Tehran, Iran, July 2010 (printed in Persian).
69. S. Gharebaghi, H.Ebrahimnezhad, "Shape Recognition Based on Distance and Curvature Features of Occluding Contour Using Neuro_fuzzy Classifier", 10th Iranian Conference on Fuzzy System (IFS2010), pp. 111-116, Tehran, Iran, July 2010 (printed in Persian).
70. H.Soleymani, H.Ebrahimnezhad, M.H.Sedaaghi, "A Model Based Object Detection Using Support Vector Machines with Hidden Variables", 18th Iranian Conference on Electrical Engineering (ICEE2010), Esfahan, Iran, May 2010 (printed in Persian).
71. M.Emambakhsh, H.Ebrahimnezhad, M.H.Sedaaghi, "A Hybrid Top-Down/Bottom-Up Approach for Image Segmentation Incorporating Colour and Texture with Prior Shape Knowledge", 18th Iranian Conference on Electrical Engineering (ICEE2010), pp. 270-275, IEEE, Esfahan, Iran, May 2010.
72. H.Arab, H.Ebrahimnezhad, "Traffic Sign Recognition in Image Through The Gabor filter Features Using Probabilistic Neural Network", 15th Iranian CSI Computer Conference (CSICC2010), Tehran, Iran, Feb. 2010 (printed in Persian).
73. M. Anvaripour, H. Ebrahimnezhad, "Object Recognition in Image Using Poisson Features of Object Parts", 15th Iranian CSI Computer Conference (CSICC2010), Tehran, Iran, Feb. 2010 (printed in Persian).
74. M. Emambakhsh, M.H.Sedaaghi, H. Ebrahimnezhad, "Locating Texture Boundaries Using a Fast Unsupervised Approach Based on Clustering Algorithms Fusion and Level Set", IEEE International Conference on Signal and Image Processing Applications (ICSIPA2009), pp. 129-134, Nov. 2009.
75. R.kheirolahy, H.Ebrahimnezhad, M.H.Sedaaghi, "Robust Pupil Boundary Detection by Optimized Color Mapping for Iris Recognition", International CSI Computer Conference (CSICC2009), IEEE, Oct. 2009.
76. N. Alijanpour, H. Ebrahimnezhad, A. Ebrahimi, "Hand Gesture Recognition by Combining the Features of Active Fingers, Differential Area and Hough Transform", Proceeding of 17th Iranian Conference on Electrical Engineering (ICEE2009), May 2009 (printed in Persian).
77. N. Alijanpour, H. Ebrahimnezhad, "Shape Recognition Using Combined Features of Crossing Circles", Proceeding of 17th Iranian Conference on Electrical Engineering (ICEE2009), May 2009.
78. R. Kheirolahy, H. Ebrahimnezhad, "Object Segmentation using Level sets Based on Fusion of Texture Information and Object Model", 14th Iranian CSI Computer Conference (CSICC2009), Tehran, Iran, Mar. 2009 (printed in Persian).
79. M. Emambakhsh, H. Ebrahimnezhad, "Texture Segmentation using Level sets based on Color, Oriented Differentials, and Nonlinear Diffusion", 14th Iranian CSI Computer Conference (CSICC2009), Tehran, Iran, Mar. 2009 (printed in Persian).
80. F. Hourali, H. Ebrahimnezhad, "Ear Recognition using Rotation and Translation Invariant Descriptors", 14th Iranian CSI Computer Conference (CSICC2009), Tehran, Iran, Mar. 2009 (printed in Persian).
81. H. Ranjzad, H. Ebrahimnezhad, A. Ebrahimi, "Design of a New Adaptive Filter for Accurate Iris Feature Extraction", 14th Iranian CSI Computer Conference (CSICC2009), Tehran, Iran, Mar. 2009 (printed in Persian).
82. P. Shavandy, H. Ebrahimnezhad, M. R. Alsharif, MD.Foissal Hossain, "An Adaptive Image Mosaicing Based on SIFT Features", The 8th International Conference on Applications and Principles of Information Science (APIS 2009), pp. 317-320, University of Ryukyus, Okinawa, Japan, Jan. 2009.
83. H. Ranjzad, H. Ebrahimnezhad, M. R. Alsharif, MD.Foissal Hossain, "Iris Feature Extraction using Geometrical Properties of Texture Lines", The 8th International Conference on Applications and Principles of Information Science (APIS 2009), pp. 259-262, University of Ryukyus, Okinawa, Japan, Jan. 2009.

84. F. Hourali, H. Ebrahimnezhad, M. R. Alsharif, MD.Foisal Hossain, "Ear Recognition Based on Rotation Invariant Transformed DCT", The 8th International Conference on Applications and Principles of Information Science (APIS 2009), pp. 19-22, University of Ryukyus, Okinawa, Japan, Jan. 2009.
85. N. Alijanpour, H. Ebrahimnezhad, A. Ebrahimi, "Hand Gesture Recognition by Combining the geometric and shape context features to control the wheelchair", 15th Iranian Conference on Biomedical Engineering (ICBME 2008), Mashhad, Iran, Feb. 2009 (printed in Persian).
86. N. Alijanpour, H. Ebrahimnezhad, A. Ebrahimi, "Inner Distance Based Hand Gesture Recognition for Device Control", International Conference on Innovations in Information Technology (Innovations 2008), IEEE, Al Ain, United Arab Emirates, Dec 2008.
87. S. Galamifard, H. Ebrahimnezhad, A. Ebrahimi, "Edge Detection in Blurry Images using Image Histogram Optimization", Fifth Iranian Conference on Machine Vision and Image Processing (MVIP2008), Tabriz, Iran, Nov. 2008.
88. S. Kamel, H. Ebrahimnezhad, A. Ebrahimi, "Removing the Fixed Object from Video Sequences and Restoring the Occluded Background and Moving Object", Fifth Iranian Conference on Machine Vision and Image Processing (MVIP2008), Tabriz, Iran, Nov. 2008.
89. H. Ranjzad, H. Ebrahimnezhad, A. Ebrahimi, "A Novel Compound Approach for Iris Segmentation", International Conference on Convergence and Hybrid Information Technology (ICCIT 2008), IEEE, pp. 657-661, Bousan, Korea, Nov. 2008.
90. H. Ranjzad, A. Ebrahimi, H. Ebrahimnezhad, "Improving Feature Vectors for Iris Recognition Through Design and Implementation of New Filter Bank and Locally Compound using of PCA and ICA", First International Symposium on Applied Science on Biomedical and Communication Technologies (ISABEL 2008), IEEE, pp.1-5, Aalborg, Denmark, Oct. 2008.
91. S. Kamel, H. Ebrahimnezhad, A. Ebrahimi, "Moving Object Removal in Video Sequence and Background Restoration using Kalman Filter", International Symposium on Telecommunication (IST2008), IEEE, pp.580-585, Tehran, Iran, Aug. 2008.
92. H. Ebrahimnezhad, H. Ghassemian, "Rigid Motion Estimation Using Two Rectangular Stereo Setup", Proceeding of 15th Iranian Conference on Electrical Engineering (ICEE2007), Communications (systems) Proceedings, pp 305-310, Tehran, Iran, May 2007 (printed in Persian).
93. H. Ebrahimnezhad, H. Ghassemian, "Robust Motion and 3D Structure from Space Curves", IEEE International Symposium on Signal Processing and its Applications (ISSPA2007), 1-4244-0779-6/07, Sharjah, United Arab Emirates, Feb. 2007.
94. H. Ebrahimnezhad, Gh. A. Montazer, N. Jafari, "Recognition of Persian Numeral Fonts by Combining the Entropy Minimized Fuzzifier and Fuzzy Grammar", Proceedings of the 6th WSEAS Int. Conf. on Artificial Intelligence, Knowledge Engineering and Data Bases, pp 22-27, Corfu Island, Greece, Feb. 2007.
95. H. Ebrahimnezhad, H. Ghassemian, "Shape Reconstruction from Space Curves through the Rigid Motion", 12th International CSI Computer Conference (CSICC2007), pp. 1452-1459, Tehran, Iran, Feb. 2007.
96. H. Ebrahimnezhad, H. Ghassemian, "3D Shape Reconstruction of Moving Object by Tracking the Sparse Singular Points", IEEE International workshop on Multimedia Signal Processing (MMSP2006), pp. 192-197, Victoria, Canada, Oct. 2006.
97. H. Ebrahimnezhad, H. Ghassemian, "Combining the Feature based Stereo Matching, Motion and Silhouette to Reconstruct Visual Hull", IEEE Workshop on Signal Processing Systems (SIPS2005), pp. 461-466, Athens, Greece, Nov. 2005.
98. H. Ebrahimnezhadi, H. Ghassemian, "A Volume Based 3D Visual Hull Reconstruction for Tele-Conferencing Application", Proceeding of 3rd Iranian Conference on Machine Vision and Image Processing MVIP2005, pp. 125-132, Tehran, Iran, Feb. 2005 (printed in Persian).
99. H. Ebrahimnezhad, H. Ghassemian, "3D Model reconstruction by multiple-views feature based matching and silhouette information during time", Proceeding of 13th Iranian Conference on Electrical Engineering (ICEE2005), vol. 1, pp. 459-464, Zanzan, Iran., May 2005.
100. H. Ebrahimnezhad, H. Ghassemian, "3D model reconstruction through a silhouette based hierarchical method", Proceeding of 10th CSI Computer Conference (CSICC2005), vol.2, pp. 40-47, Tehran, Iran, Feb. 2005.
101. H. Ebrahimnezhad, "A New Approach to Improving of Transmission Capacity in Electrical Transmission Line Using Super Conductive Magnetic Energy Storage", Energy, Ecology, Economy, Sixth Baku International Congress, pp.59-64, Baku, Azerbaijan, May-June 2001.
102. H. Ebrahimnezhad, F. Fattahi, "Design of SMES system for Azarbaijan Electrical network with Fuzzy controller and survey of its effect on damping of dynamic swing of power system", 15th International Power

- System Conference (PCS2000), Niroo Research Center, pp.167-175, Tehran, Iran, Nov. 2000 (printed in Persian).
103. H. Ebrahimnezhad, H. Asjadi, "Image Reconstruction Using Third Order Spectrum", Proceeding of 5th Iranian Conference on Electrical Engineering (ICEE-97), vol. 5, pp. 286-293, Tehran, Iran., May 1997 (printed in Persian).
 104. H. Asjadi, H. Ebrahim Nezhad, "A New Algorithm for Signal Reconstruction from the Phase of Bispectrum and its Applications in Image Enhancement", Sixth International Conference on Image Processing and its Applications (IPA97), IEE, Dublin, Ireland, Vol.1, No443, pp. 298-302, 1997.

Technical Reports:

1. Design and Construct of Wireless Modem in FM Frequency Range, 1997
2. Design of SMES System for Azerbaijan Electrical Network, 1998
3. Segmentation of MS Lesions in MRI Images, 2001

MSc Thesis Supervision:

1. Object removal in video sequence, Saeed Kamel
2. Hand gesture recognition, Nasibeh Alijanpour
3. Iris segmentation and Recognition, Hamed Ranjzaad
4. Image segmentation by Integrating Color, Texture and Shape Information, Mehryar Emambakhsh
5. Pupil detection, Rasoul Kheirollahi.
6. Lip segmentation for audio Visual Speech Recognition, Reza Banimahd
7. Speaker change Detection, Ebrahim keramatizaadeh
8. Car detection in Image, Hossein Soleymani
9. Object detection in Image by Poisson equation feature, Mohamad Anvaripour
10. Obstacles detection in road using stereo vision for intelligent vehicle Navigation, Kaavous Abdolmaleki
11. Traffic sign detection and recognition in image, Haaleh Arabi
12. Shape recognition based on geometric and occluding contour features, Zeynab Imaani
13. Semantic-based image segmentation, Araz Sholehkerdaar
14. Object Categorizing in natural images by extracting its parts and using grammar between them, Sima Soltanpour
15. Human action recognition from silhouette image sequences, Maryam Ziaefard
16. Dynamic texture detection and segmentation in video sequence, Nima Frouzanfar
17. Human pose tracking in video sequence, Ghasem Khademi
18. Human age estimation from facial image, Mohamad Ali Hajizadeh
19. Image retrieval by fusing shape, texture and color information, Farnaz Gholipour
20. 3D objects retrieval from features of 2D views, Mohammad Ramezani
21. Sign language recognition from hand images, Zhila Mousavian
22. Face retrieval using semantic descriptors, Mohammad Ghaseri
23. 3D model segmentation based on geometric feature, Mahsa Mirloo
24. Dynamic hand gesture recognition for human computer interaction as a 3D mouse, Behnam Maleki
25. Classification of EEG-VEP signals using machine learning algorithms, Ali Momennezhad
26. Digital Watermarking for 3D mesh models, Amir Masoud Molaye
27. Rain and fog detection and removal in video sequences, Gelareh Malekshahi
28. 3D Model fitting and reconstruction from clouds of points, Naeimeh Soltanieh
29. Human Eye gaze estimation using appearance features of eye under natural head movements, Hamidreza Emamjome
30. Object Recognition Based on Sparse Representation of Shape Features, Khadije Mahdikhanlou
31. Palmprint Recognition using Directional Features, Pouya Akhoundzadeh
32. Human Interaction Recognition using Visual Features, Saman Nikzad
33. Synthesis of Articulated Object Motion Based on the Movement of Other Objectes, Lida Asgharian
34. Content Based Video Indexing, Salar Razavi.
35. Video Summarization of Wireless Endoscopy Capsule by Clustering, Mehrdokht Bordbar
36. Facial Video Compression for Visual Communication, Omid Abachian
37. Recognition of Plant Species based on their Leaf Image, Behnam Saadat.
38. Analysis of Metal Microstructures by Extracting Texture Features of Crystals in Metallographic Images, Taher Khaghani.

39. Endoscopy Wireless Capsule Video Summarization based on Clustering Method, Mehrdokht Bordbar
40. Face Recognition Robust to Pose variation, Arezo Sadeghzadeh.
41. Correspondence Finding in Non-Rigid 3D Models, Davoud Yadegari.
42. Object Recognition from Shape, Texture and Color Features to Categorize Butterfly Species, Behzad Mohammadpour.
43. Non-Rigid Shape Matching in Images, Fariba Amini.
44. Object Recognition in Image Robust to View Angle, Fahamieh Sobhani.
45. Recognition of Plant Species based on Their Leaf Images, Behnam Saadat.
46. Segmentation of Images Captured by Kinect Sensors by Fusing Color and Depth Information, Sina Saemi.
47. Human Facial Synthesis based on Example Image, Amirreza Amirfathiyan.
48. Part-Based Fine-Grained Object Recognition using Color and Texture Features, Farzaneh Javanshir.
49. Precoding MIMO Systems for Interference Reduction, Mehrdad Shokouhi.
50. Motor Imagery EEG Signals Analysis for a Brain Computer Interface System Application, Hamed Moradkhani.
51. Sketch based Image Retrieval, Elnaz Imani.
52. Facial Expression Transfer from Source to Target Person, Haniye Merrikhi.
53. Human Action Recognition in Sport Movement, Kazem Mohammadian
54. Matching the Corresponding Components between Objects in The Same Family in the two Images, Jabrael Ranjbar.

Ph.D. Thesis Supervision:

1. Vahid Mehrdad, 3D Object Retrieval from Geometric Features
2. Saeid Mansouri, 3D Model Compression using Surface Processing
3. Mohammad Ali Hajizadeh, Animated 3D Model Compression
4. Faranak Shamsafar, Human Pose Estimation Using Deep Learning
5. Mahsa Mirloo, Non-Rigid Deformable 3D Object Retrieval
6. Khadijeh Mahdikhanelou, 3D Hand Pose Estimation
7. Lida Asgharian, 3D Mesh Editing
8. Hanie Merrikhi, Robot Grasping using image and point cloud
9. Amirreza Amirfathiyan, 3D Shape Correspondence and Matching
10. Amir Masoud Taheri, Ensemble Deep Learning for Classification and Regression
11. Habib Rasi, Explainable Convolutional Neural Networks for Image Classification
12. Amin Asgari, Graph Neural Network for Classification
13. Jabrael Ranjbar, Vision Transformer for Image Segmentation

Datasets:

1. Sahand Dynamic Hand Gesture Database - This database contains 11 Dynamic gestures designed to convey the functions of mouse and touch screens to computers. (Behnam Maleki, Hossein Ebrahimnezhad). link:
2. Sahand LMC Sign Language Database - This database comprises of 32 class including 24 American letters (J and Z are excluded because they are dynamic gestures) and numbers from 0 to 9 (gesture for 6 and w, also gestures for 9 and F are same). Each class of database contains 2000 samples. The database is collected by a webcam and Leap Motion Controller (LMC). (Khadijeh Mahdikhanelou, Hossein Ebrahimnezhad).
links: <http://ee.sut.ac.ir/showcvmmain.aspx?id=5> <https://hadikhaneloo.wixsite.com/sahandsignlanguage>