Curriculum Vitae

Personal Details

Name:	Mohammad Hossein Sedaaghi
Sex:	Male
Marital status:	Married
Date of birth:	07/06/1961
Place of birth:	Tehran, Iran
Nationality:	Iranian

Professional experience

Professor
Department of Electrical Engineering
Sahand University of Technology, Tabriz, Iran
Tel.: (+98 41) 33459370   Fax: (+98 41) 33224950   Mobile: (+98 914) 4149544
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Education

PhD

Date:	[Oct. 1994 - Aug. 1998]
Address:	Department of Electrical Engineering and Electronics, University of Liverpool, Liverpool, UK
Thesis title:	Morphological filtering in signal/image processing
Supervisor:	Professor Q. H. Wu

MSc(Eng)

Date:	[1986 - 1987]
Address:	Department of Electrical Engineering,
	Sharif University of Technology, Tehran, Iran
Field:	Electronics Engineering
Thesis title:	Plan-Position Indicator (PPI) for on-shore radar
GPA:	16.76 /20 (first class)

BSc(Eng)

Date:	[1982 - 1986]
Address:	Department of Electrical Engineering,
	Sharif University of Technology, Tehran, Iran
Field:	Communications Engineering
GPA:	16.32 /20 (first class)

Diploma

Date:	[1975 - 1979]
Address:	Safa High school, Tabriz, Iran
Field:	Physics and mathematics
GPA:	19.34/20 (first class)

Research interests

Morphological filtering, ECG waves (pre) processing, nonlinear filters, digital signal processing, image processing, M-D signal processing, genetic algorithms, wavelets and filter banks, Neural Networks, TMS320-based C and assembly design, pattern recognition, software package development in matlab and hardware realization.

Research projects

1. M. H. Sedaaghi, "Seven confidential research projects", to be announced upon request.

2. H. Hakimzadeh, M. H. Sedaaghi, "Study and investigation of the software program on stability, loading and unloading of ballast water tank and load on semi-submersible Amir Kabir Rig Platform together with presenting applicable and optimization methods", Sahand Univ. of

Tech.,
Sponsored by Research & Development of NIOC, Tehran, Iran, 2012.

3. A. Pilevar, M. H. Sedaaghi, "Sahand Accented Speech (SAS)", Sahand Univ. of Tech., 2009,
"http://ee.sut.ac.ir/info/SAS.pdf".

4. M. H. Sedaaghi, "Sahand Emotional Speech (SES)", Sahand Univ. of Tech., 2007,
"http://ee.sut.ac.ir/info/SES.pdf".

5. M.H. Sedaaghi, A Tabatabaeinejad, "Development of reservoir simulation software", Sahand Univ. of Tech., Sponsored by Research & Development of NIOC, Tehran, Iran, 2006.

6. M. Shamsi, H. Ebrahimnezhad, M. H. Sedaaghi, "Segmentation of MS Lesions in MRI Images", Sahand Univ. of Tech., 2001.

7. M. H. Sedaaghi, "A package for genetic algorithms using visual C++", Sahand Univ. of Tech., 1999.

8. M. H. Sedaaghi, "Sahand general database", Sahand Univ. of Tech., 1993.

Teaching experiences

Signals & systems, DSP, DIP, ADSP, statistical pattern recognition, genetic algorithms, feature extraction, deep learning.

Employments and professional experiences

1. [1998-present], Reviewer for: Electronics Letters, IET, IEEE.

2. [1999-present], Member of academic staff and lecturer, Faculty of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.

3. [1994-1998], Demonstrator, Department of Electrical Engineering and Electronics, University of Liverpool, Liverpool, UK.

4. [1991-1994], Head of computer center, PC division and designer of the general-purpose data-base of the university, Sahand University of Technology, Tabriz, Iran.

5. [1991-1994], Member of academic staff and lecturer, Department of Electrical Engineering, Sahand University of Technology, Tabriz, Iran.

6. [1989-1991], Member of academic staff, lecturer and establisher of microcomputer laboratory, Department of Electrical Engineering Sharif University of Technology, Tehran, Iran.

7. [1987-1991], Technical manager (design of Z80-based controllers), Fajr-e-Rizpardaz Co. Ltd., Tehran, Iran.

8. [1987-1988], Research assistant, Department of Electrical Engineering, Sharif University of Technology, Tehran, Iran.

9. [1986-1987], Teaching assistant, Department of Electrical Engineering, Sharif University of Technology, Tehran, Iran.

Other technical experiences and skills

1. Digital design: Design of PPI (Plan-Position Indicator) for on-shore radar, azimuth resolution=0.2, 0.6.

2. Software and packages: Familiar with most of software and packages in the field, for PC and unix (MATLAB, Labview, Visual Studio, Modelsim.

3. Programming languages: C, C++, Python (pycharm, pytorch, tensor flow, keras, ...), ASSEMBLY (Z80, 8086, 6809E, 68000), TMS320 family, PASCAL, FORTRAN, BASIC.

4. Hardware: FPGA design, Microprocessor-based controllers for factories with different CPUs and micro controllers.

5. Logic circuit design with TTL and CMOS ICs.

Honours

- Scholarship by Sahand University of Technology for PhD period.

- ORS (The Overseas Research Students Awards Scheme) by committee of vice-chancellors and principles of the universities of the United Kingdom.

- Top researcher in EA

- Owner of best prize from NIOC for Study and investigation of the software program on stability, loading and unloading of balancing reservoirs and load on semi-submersible Amir Kabir Rig Platform together with presenting applicable and optimization methods

Supervised PhD theses (in Persian)

1. M. Hassanpour, "Diagnosis of schizophrenia from ECG signals using deep neural networks", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2023-.

2. A. Alipour Seifar, "Anthropometric analysis of cerebral ventricles based on brain MRI images acquired in different times using machine learning algorithms", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Biomedical & Electrical Eng., Sahand University of Technology, 2023-.

3. E. Kogani, "Detection of radar signals' modulation from received pulses of targets employing deep neural networks", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2022-.

4. H. Akbarian, "Acoustic recognition Of surface floating targets using deep learning", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2021-.

5. A. Kouhi, "A new predictor for reversible data hiding based on prediction-error expansion", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2015-2021.

6. Z. Bounik, "Soft-Tissue Modeling for Surgical Simulators in the Data-Driven Approaches", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Biomedical & Electrical Eng., Sahand University of Technology, 2016-2021.

7. M. J. Amoshahi Foroushani, "Segmentation of human brain MRI images using improved particle swarm optimization based methods", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2015-2019.

8. M. Bagheri, "Radar pulses deinterleaving based on clustering output", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2015-2018.

9. H. Khodabakhshi, "Digital image denoising using PDE-based diffusion processes", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2011-2018.

10. F. Golabi, "Prediction of gene regulatory regions using signal processing", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2011-2020.

11. M. Farhid, "Design of adaptive networks based on distributed processing", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2010-2017.

12. S. Karimi, "Feature extraction and selection for emotion recognition in speech", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2008-2014.

Supervised MSc theses (in Persian)

1. F. Ahmadi, "Diagnosis of brain tumors in medical images using fuzzy and genetic methods ", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2021-.

2. Y. Sadeghzadeh, "Feature extraction and classification of brain disease mri images using pretrained CNN network and machine learning ", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2021-.

3. A. Alamatsaz, "Segmentation & extraction of brain white matter from MRI images using deep learning", **Supervisor(s): M. H. Sedaaghi, M. Shamsi**, Dept. of Electrical Eng., Sahand University of Technology, 2020-2022.

4. K. Hashemi, "Increasing the Capacity of LSB-based image steganography", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2020-2021.

5. Z. Tazikeh, "Detection of Diabetic Retinopathy using Machine Learning", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2020-2021.

6. A. Abdolalipour, "Classification of heartbeat types in ECG signals", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2019-2021.

7. R. Youzbashi, "Controlling entry into security centers based on speech recognition", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2018-2019.

8. F. Jabbari, "Application of non-linear filters in distributed processing over wireless sensor", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2016-2018.

9. H. Mehmandoust, "Improving noise removal methods in speech", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2016-2018.

10. A. H. Monazzah, "Segmentation and Enumerating of minuscule particles in low-resolution", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2016-2018.

11. M. Pishvaei, "Data hiding over The network using matlab", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2015-2016.

12. H. Ahmadi, "The study of data hiding capacity in H.264/AVC video compression standard", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2014-2016.

13. S. Vaali, "MP4 compression capabilities for data hiding", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2014-2016.

14. S. Yazdani, "Detection and extraction of biosignals by identification of signal behavior", **Supervisor(s): M. H. Sedaaghi, M. R. Azghani**, Dept. of Electrical Eng., Sahand University of Technology, 2014-2016.

15. S Kalantari, "Development of an intelligent algorithm to detect driver sleepiness", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2014-2016.

16. S. M. Mousavi, "Experimental study of vortex induced vibrations (VIVs) of marine pipelines near a rigid bed in wave", **Supervisor(s): A. R. Mostafa Gharabaghi, M. H. Sedaaghi**, Dept. of Civil Eng., Sahand University of Technology, 2013-2014.

17. A. Bozorghi, "Investigation on equilibrium and stability of the Amirkabir semi-submersible oil rig", **Supervisor(s): H. Hakimzadeh, M.**

H. Sedaaghi, Dept. of Civil Eng., Sahand University of Technology, 2013-2015.

18. P. Akhoundzadeh, "Palmprint recognition using directional features", **Supervisor(s): H. EbrahimNezhad, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2013-2014.

19. E. Alaee, "Facial feature extraction based on orthogonal color images for facial surgery analysis", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2013-2014.

20. M. Fadaee, "Medical image denoising using optimal algorithms", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2013-2014.

21. H. Saberkari, "Identification of protein coding regions in DNA sequences using signal processing algorithms", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

22. M. Joroughi, "Classification of DNA microarray data using Neural Networks", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

23. N. M. Bakhshayesh, "Genomic data analysis using hidden Markov models", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

24. A. Joudi Alvandi, "Data hiding over mp3 audio using wavelets in visual C++", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

25. A. M. Molaei Kermani, "Digital watermarking for 3D mesh models", **Supervisor(s): H. Ebrahimnezhad, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

26. H. Nosrati, "Distributed adaptive analysis of Gaussian space-time sources in wireless sensor networks", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

27. P. Ghaderyan, "Seizure prediction using EEG signal processing and SVM algorithm", **Supervisor(s): A. Abbasi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2012-2013.

28. R. Ali Zamani, "Dental radiography images registration", **Supervisor(s): S. Daneshvar, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2011-2013.

29. A. Gholipour, "Accent classification in Persian language", **Supervisor(s): M. H. Sedaaghi, M. Shamsi**, Dept. of Electrical Eng., Sahand University of Technology, 2011-2012.

30. H. Mirzaei, "Automatic facial feature extraction and facial surgery analyzing", **Supervisor(s): M. Shamsi, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2010-2011.

31. M. Baradaran, "Clustering based abnormal event detection from surveillance video", **Supervisor(s): M. H. Sedaaghi**, *Consultant(s): H. Ebrahimnezhad*, Dept. of Electrical Eng., Sahand University of Technology, 2010-2011.

32. D. Farrokhi, "Image mosaicing by feature based method", **Supervisor(s): M. H. Sedaaghi**, *Consultant(s): A. Ebrahimi*, Dept. of Electrical Eng., Sahand University of Technology, 2010-2011.

33. S. Gharebaghi, "Retinal image registration using geometrical features", **Supervisor(s): S. Daneshvar, M. H. Sedaaghi**, *Consultant(s): H. Ebrahimnezhad*, Dept. of Electrical Eng., Sahand University of Technology, 2010-2011.

34. A. Mohammadi, "Robust digital watermarking based on histogram modification of image ", **Supervisor(s): M. H. Sedaaghi**, *Consultant(s): H. Ebrahimnezhad*, Dept. of Electrical Eng., Sahand University of Technology, 2009-2011.

35. Z. Gholizadeh, "Fragile watermarking on digital images ", **Supervisor(s): M. H. Sedaaghi**, *Consultant(s): H. Ebrahimnezhad*, Dept. of Electrical Eng., Sahand University of Technology, 2009-2010.

36. M. Ebrahimi, "Color images watermarking by using wavelet ", **Supervisor(s): M. H. Sedaaghi**, *Consultant(s): H. Ebrahimnezhad*, Dept. of Electrical Eng., Sahand University of Technology, 2009-2010.

37. E. Keramatizadeh, "Speaker change detection in speech", **Supervisor(s): H. Ebrahimnezhad, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2009-2010.

38. H. Soleymani, "Car detection in scene", **Supervisor(s): H. Ebrahimnezhad, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2009-2010.

39. M. Emambakhsh, "Region-based segmentation using statistical features of color texture & shape", **Supervisor(s): H. Ebrahimnezhad, M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2008-2009.

40. R. Kheirolahi, "Pupil detection for iris recognition", **Supervisor(s): M. H. Sedaaghi, H. Ebrahimnezhad**, Dept. of Electrical Eng., Sahand University of Technology, 2008-2009.

41. P. Shavandy, "Fighter aircraft tracking in video frames using segmentation of optical flow field", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2008-2009.

42. F. Hourali, "Face detection against pictures & other objects in video frames", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2008-2009.

43. N. Rabbani Najaf-Abadi, "Speaker identification using speech signal", **Supervisor(s): M. H. Sedaaghi, A. Ebrahimi**, Dept. of Electrical Eng., Sahand University of Technology, 2006-2007.

44. J. Asadi Saghandi, "Prediction of P_b & B_{ob} properties of Iranian crude oils using artificial neural network", **Supervisor(s): A. R. Tabatabaeinejad & M. H. Sedaaghi**, *Consultant(s): A. Naseri*, Dept. of Chemical Eng., Sahand University of Technology, 2005-2006.

45. A. R. Dastkhosh, "Tapered micro strip filter optimization using genetic algorithm", **Supervisor(s): M. H. Sedaaghi, G. Dadashzadeh**, Dept. of Electrical Eng., Sahand University of Technology, 2005-2006.

46. M. Fallahpour, "Data hiding", **Supervisor(s): M. H. Sedaaghi, E. Najafi Aghdam**, Dept. of Electrical Eng., Sahand University of Technology, 2004-2006.

47. S. Yousefi, "Applications of morphological operators in digital image analysis & watermarking", **Supervisor(s): M. H. Sedaaghi**, Dept. of Electrical Eng., Sahand University of Technology, 2004-2005.

48. H. Shakiba, "Implementing V.32 bits modem protocol over DSP", **Supervisor(s): M. H. Sedaaghi, M. Sheikhan**, *Consultant(s): R. Safavi Naeini*, Dept. of Electrical Eng., Sahand University of Technology, 2004-2005.

49. E. Khodapanah, "Modeling of wax precipitation for live oils using solid solution theory & equation of state", **Supervisor(s): A. R. Tabatabaeinejad**, *Consultant(s): M. H. Sedaaghi*, Dept. of Chemical Eng., Sahand University of Technology, 2003-2004.

50. M. Khosravi, "Preprocessing of ECG signals using morphological filters", **Supervisor(s): M. H. Sedaaghi**, *Consultant(s): M. H. Ghasemian Yazdi*, Dept. of Medicine, Shahid Beheshti University, 2003-2004.

Books

1. (in Persian) M. H. Sedaaghi, "DSP with simulation of analytical propositions and applied examples in Matlab", Sahand University of Technology, 2012.

Book chapters

1. H. Nosrati, S. M. Taheri, M. Shamsi, M. H. Sedaaghi, "Distributed adaptive parametric power spectral estimation using wireless sensor networks", **Technological Breakthroughs in Modern Wireless Sensor Applications**, IGI Global, Chapter 13, pp. 321-351, 2015.

2. M. H. Sedaaghi, "Gender Classification in Emotional Speech", **Speech Recognition: Technologies and Applications**, Eds. France Mihelič and Janez Žibert, I-Tech, Vienna, Austria, , Chapter 20, pp. 363-376 November 2008.

Journal publications

1. (in Persian) R. Kheirolahi, 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, pp. 1-17, https://doi.org/10.34172/jhbmi.2023.10, Jul. 2023,

2. 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**, vol. 33, 104743, ISSN 2352-4928, https://doi.org/10.1016/j.mtcomm.2022.104743, Nov. 2022,

3. A. Kouhi, M. H. Sedaaghi, "Reversible data hiding based on high fidelity prediction scheme for reducing the number of invalid modifications", **Information Sciences**, vol. 589, pp. 46-61, ISSN 0020-0255, https://doi.org/10.1016/j.ins.2021.12.092, Apr. 2022.

4. A. Kouhi, M. H. Sedaaghi, "Prediction error distribution with dynamic asymmetry for reversible data hiding", **Expert Systems With Applications**, https://doi.org/10.1016/j.eswa.2021.115475, vol. 184, pp. 115475, Jun. 2021.

5. H. Rezaei, R. Mahboobi Esfanjani, A. Akbari, M. H. Sedaaghi, "Scalable event-triggered distributed extended Kalman filter for nonlinear systems subject to randomly delayed and lost measurements", **Digital Signal Processing**, vol. 111, pp. 102957, doi: 10.1016/j.dsp.2020.102957, Apr. 2021.

6. H. Rezaei, R. Mahboobi Esfanjani, A. Akbari, M. H. Sedaaghi, "Event-triggered distributed Kalman filter with consensus on estimation for state-saturated systems", **International Journal of Robust & Nonlinear Control**, vol. 30, no. 18, pp. 8327-8339, doi: 10.1002/rnc.5241, Dec. 2020.

7. (in Persian) Z. Bounik, M. Shamsi, M. H. Sedaaghi, "Real-time interactive high resolution soft tissue modeling in a data-driven enrichment approach", **Journal of Nonlinear Systems in Electrical Engineering**, vol. 7, no. 1, pp. 149-162, Sep. 2020.

8. F. Golabi, E. Mehdizadeh Aghdam, M. Shamsi, M. H. Sedaaghi, A. Barzegar, M. S. Hejazi, "Classification of seed members of five riboswitch families as short sequences based on the features extraction by Block Location Based Feature Extraction (BLBFE) method", **Bioimpacts**, vol. 11, no. 2, pp. 101-109, doi: 10.34172/bi.2021.17, Mar. 2021.

9. Z. Bounik, M. Shamsi, M. H. Sedaaghi, "Accurate coarse soft tissue modeling using FEM-based fine simulation", **Multimedia Tools and Applications**, vol. 79, no. 11-12, pp. 71217143, doi: 0.1007/s11042-019-08532-x, Mar. 2020.

10. F. Golabi, M. Shamsi, M. H. Sedaaghi, A. Barzegar, M. S. Hejazi, " Development of a new oligonucleotide block location-based feature extraction (BLBFE) method for classification of riboswitches", **Molecular Genetics and Genomics**, vol. 295, no. 2, pp. 525-534, doi: 10.15171/apb.2020.012, Jan. 2020.

11. F. Golabi, M. Shamsi, M. H. Sedaaghi, A. Barzegar, M. S. Hejazi, " Classification of riboswitch families using block location-based feature extraction (BLBFE) method", **Advanced Pharmaceutical Bulletin**, vol. 10, no. 1, pp. 97-105, doi:10.15171/apb.2020.012, Jan. 2020.

12. (in Persian) M. J. Amoshahy, M. Shamsi, M. H. Sedaaghi, "An improved particle swarm optimizer based on a novel class of fast and efficient learning factors strategies", **Journal of Nonlinear Systems in Electrical Engineering**, vol. 6, no. 1, pp. 4-33, 2019.

13. N. Mostaghim, 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**, vol. 9, no. 4, pp. 252-258, doi: 10.4103/jmss.JMSS_11_19, Oct. 2019.

14. F. Jabbari, M. H. Sedaaghi, "Adaptive multilevel technique based on histogram shifting for reversible data hiding", **Multidimensional Systems and Signal Processing** , vol. 30, no. 3, pp. 15631581, doi: 10.1007/s11045-018-0617-x, issn: 1573-0824, Jul. 2019.

15. M. Bagheri, M. H. Sedaaghi, "A new method for detecting jittered PRI in histogram-based methods", **Turkish Journal of Electrical Engineering & Computer Sciences** , vol. 26, pp. 1214-1224, doi:10.3906/elk-1710-169, 2018.

16. F Golabi, M. Shamsi, M. H. Sedaaghi, A. Barzegar, M. S. Hejazi, "Development of a new sequential block finding strategy for detection of conserved sequences in riboswitches", **BioImpacts** , vol. 8, no. 1, pp. 13-22, 2018.

17. M. Bagheri, M. H. Sedaaghi, "A new approach to pulse deinterleaving based on adaptive thresholding", **Turkish Journal of Electrical Engineering & Computer Sciences** , vol. 25, pp. 3827-3838, doi:10.3906/elk-1606-415, 2017.

18. M. Farhid, M. H. Sedaaghi, M. Shamsi, "Distributed incremental least-mean square for parameter estimation using heterogeneous adaptive networks in unreliable measurements," **Journal of AI & data Mining**, vol. 5, no. 2, pp. 285-291, 2017.

19. S. Yazdani, M. R. Azghani, M. H. Sedaaghi, "A new algorithm for ECG interference removal from single channel EMG recording," **Australasian Physical & Engineering Sciences in Medicine**, vol. 40, pp. 575-584, 2017.

20. H. Saberkari, M. Shamsi, M. H. Sedaaghi, "Estimation of protein-coding regions in numerical DNA sequences using Variable Length Window method based on 3-D Z-curve," **Signal and Data Processing**, vol. 13, no. 4, pp. 63-77, 2017.

21. H. Khodabakhshi, M. H. Sedaaghi, S. Saryazdi, "An adaptive diffusion coefficient selection for image denoising", **Digital Signal Processing,** https://doi.org/10.1016/j.dsp.2017.02.004, vol. 64, no 4, pp. 71-82, May 2017.

22. M. Farhid, M. H. Sedaaghi, M. Shamsi, "Distributed estimation over complex adaptive networks with noisy links," **Journal of Smart Structures and Systems**, vol. 19, no. 4, pp. 383-391, 2017.

23. A. M. Molaei Kermani, 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, 2017.

24. M. J. Amoshahy, M. Shamsi, , M. H. Sedaaghi "A Novel Flexible Inertia Weight Particle Swarm Optimization Algorithm," **Journal of PLOS ONE**, doi:10.1371/journal.pone.0161558, vol. 11, no. 8, pp. 61-70, Aug. 2016.

25. (in Persian) M. Farhid, M. Shamsi,M. H. Sedaaghi, "Impact of complex networks' topology in distributed adaptive estimation based on

diffusion cooperation", **Journal of Electrical Engineering, The University of Tabriz,** vol. 46, no. 4, pp. 207-216, 2016.

26. H. Khodabakhshi, M. H. Sedaaghi, S. Saryazdi, "Efficient Diffusion Coefficient for Image Denoising", **Computers and Mathematics with Applications,** DOI: 10.1016/j.camwa.2016.06.005, vol. 72, no 4, pp. 893-903, Aug. 2016.

27. A. M. Molaei Kermani, H. Ebrahimnezhad, M. H. Sedaaghi, "Robust and Blind 3D Mesh Watermarking in Spatial Domain Based on Faces Categorization and Sorting", **3D Research, Springer,** DOI 10.1007/s13319-016-0088-5, ISSN: 2092-6731, vol. 7, no. 11, Apr. 2016.

28. S. Karimi, M. H. Sedaaghi, "How to categorize emotional speech signals with respect to the speaker's degree of emotional intensity", **Turkish Journal of Electrical Engineering & Computer Sciences** , DOI: 10.3906/elk-1312-196, vol. 24, pp. 1306-1324, Mar. 2016.

29. M. Fadaaie, M. Shamsi, H. Saberkari, M. H. Sedaaghi, "Computed tomography images de-noising using a novel two stage algorithm," **Journal of Medical Signals and Sensors**, vol. 5, no. 4, pp. 220-229, Oct. 2015.

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