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Scientific & Industrial Experience

#	Responsibilities Titles	Name of Organization	Starting Date	Termination Date
1	Professor	Amirkabir University of Technology	2011	now
2	Associate Professor	Amirkabir University of Technology	2003	2011
3	Assistant Professor	Amirkabir University of Technology	1993	2003
4	Adjunct Research Professor:Duties include: design and development of a digital image processor for motion detection, and classification	Sharif University of Technology	1993	1996
5	Head of Communications Group	Amirkabir University of Technology, Department of Electrical Engineering	2000	2002
6	Undergraduate Coordinator	Amirkabir University of Technology, Department of Electrical Engineering	2002	2004

Supervised PhD Theses

#	Thesis title	By	Date
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1	Statistical Model among Dependent Sparse Coefficients	Zeinab Hashemifard & Hamidreza Amindavar	December 2016
2	Hederosedastic and non-Gaussian signal modeling and its application in signal processing	Maryam Amir Mozlaghani & Hamidreza Amindavar	December 2009
3	Array Signal Processing Based on GARCH Model	Hadi Amiri & Hamidreza Amindavar	February 2007
4	Modeling diffraction loss with MUTD Method in inhomogeneous building for microcell and comparing with measurement data	Emad Torabi & Hamidreza Amindavar	February 2007

Supervised MSc Theses

#	Thesis title	By	Date
1	Reconstructing GPR images by estimating the MAP probability and use of machine learning to detect planted landmines and explosive devices	Mohammadamin Latifi & Hamidreza Amindavar	October 2021
2	Hierarchical symbolic dynamic filtering of time series data (HSDF)	Farzad Eskandari Oryad & Hamidreza Amindavar	August 2021
3	Adaptive cross equalization processing for time-lapse seismic data	Sara Ghasemi & Hamidreza Amindavar	May 2021
4	Discrimination of EEG in human hand and feet real movement and its imagination using statistical processing in time-frequency domain	Elham Reyhanian Motehavver & Hamidreza Amindavar	April 2021
5	Artifact compensated normalized CNN and GAN for heart rate pulse estimation	Seyede Fatemeh Mirhosseini & Hamidreza Amindavar	April 2021
6	Event-triggered Filtering with Application to Target Tracking in Binary Sensor Networks	Mohammad Mahdi Yaghoubi Koupaie & Hamidreza Amindavar	February 2021
7	Machine Learning Classifiers	Niloufar Fakhfour & Hamidreza Amindavar	October 2019
8	Classification based on Parameter Invariant Statistics	Fatemeh Nikkhoo & Hamidreza Amindavar	September 2019
9	Classification of Brain Diseases Using support vector machines Based on Neuroimaging Data	Mahsa Abdollahi & Hamidreza Amindavar	March 2019
10	gpr image reconstruction using bayesian approach	Ahmad Abbasi & Hamidreza Amindavar	December 2018
11	nonlinear study of sigma_delta modulator	Leila Kamranifakoor & Hamidreza Amindavar	July 2018
12	use of helmholtz stereopsis in the enhanced reconstruction of three-dimensional images	Razieh Azizi & Hamidreza Amindavar	January 2018
13	transform Application in non-stationary deconvolution	Zahra Shahriar & Hamidreza Amindavar	January 2017
14	Application of Hilbert transform in OFDM signal generation	Sadaf Joodaki & Hamidreza Amindavar	January 2017
15	estimation of frequency and phase of heart sound	Morteza Gahremani & Hamidreza Amindavar	August 2016

16	Non-Stationary signal prediction –Application to epileptic seizures prediction	Salman Mohamadi & Hamidreza Amindavar	July 2016
17	Using Copula in target tracking	Mohammad Moradi & Hamidreza Amindavar	December 2015
18	: Application of CFAR for detection of sparse signals	Narges Mohammadi & Hamidreza Amindavar	October 2015
19	: Delamination Detection in Composite Plates by Reflected Scattered Wave	Amir Ashkan Mokhtari & Hamidreza Amindavar	February 2015
20	Gearbox fault diagnosis based on non-stationary vibration signal using wavelet and fuzzy decision neural network (FDNN) classification	Mohammadsaber Nemati & Hamidreza Amindavar	February 2014
21	compressive sensing of supersosition of pulses	Zahra Sabet Sabervestani & Hamidreza Amindavar	October 2013
22	compressive sensing and sparse representation based on super resolution	Naser Karimi Ahmadabad & Hamidreza Amindavar	October 2013
23	solving inverse problems with piecewise linear estimators	Ahad Rajabi & Hamidreza Amindavar	October 2013
24	improving the power-law cfar in detecting transient signals	Roghaye Ashenayi & Hamidreza Amindavar	February 2013
25	crosstalk(next&fext) reduction in multipath environment in vdsl transmission lines	Mojtaba Shirazi & Hamidreza Amindavar	October 2012
26	a new approach in dynamic spectrum access	Mehdi Ataee & Hamidreza Amindavar	October 2012
27	improve mri imagenes using compressed sensing theory	Seyedataollah Ziaeian Hosseinian & Hamidreza Amindavar	October 2012
28	Stochastic differential equation for multi target tracking	Mohammadehsan Hajiramezanali & Hamidreza Amindavar	January 2012
29	Sonar source separation using multiwavelet	Seyyed Hamed Fouladi & Hamidreza Amindavar	January 2012
30	A new underwater localization approach using phase tracking	Hannan Lohrasbi Peydeh & Hamidreza Amindavar	December 2011
31	acoustic modeling based on Helmholtz equation and tracking using alpha-beta filters	Seyyed Morteza Jarchi & Hamidreza Amindavar	October 2011
32	A new statistical method for detection of metallic landmine using ground penetrating radar	Hamin Adib Zadeh Sereshki & Hamidreza Amindavar	February 2011
33	A new method in target tracking using over the horizon radar	Nafiseh Shahbazi & Hamidreza Amindavar	February 2011
34	OTH RADAR target classification	Amir Jalalirad & Hamidreza Amindavar	February 2011
35	fingerprint recognition by statistical approaches	Seyed Mohammad Golzan & Hamidreza Amindavar	January 2011
36	A new method in targets detection using MIMO radar	Zahedeh Farshad & Hamidreza Amindavar	October 2010

37	New signal processing method applied to detect cracks in impedance-based structural health monitoring	Ali Bastani & Hamidreza Amindavar	January 2010
38	Analysis and simulation of multicarrier communication receivers based on matrix-valued wavelets	Hamid Esmaili Najafabadi & Hamidreza Amindavar	January 2010
39	A new cyclostationary based detector	Mohammad Tayaranianhosseini & Hamidreza Amindavar	January 2010
40	An improved method for time and frequency delay estimation in noisy environment	Mohammad Hossein Goli Zadeh & Hamidreza Amindavar	January 2010
41	a new approach in cfar detection for non_stationary radar signals in non_gaussian interference	Mahdi Parchami & Hamidreza Amindavar	February 2009
42	a new approach in texture segmentation	Nastaran Nikooienejad & Hamidreza Amindavar	February 2009
43	A NEW STATISTICAL APPROACH IN WORD SEGMENTATION OF UNCONSTRAINED PERSIAN_ENGLISH TYPEWRITTEN TEXT	Mona Hajimomeni & Hamidreza Amindavar	February 2009
44	ESTIMATION OF NON-STATIONARY PROCESSES AND ANALYSIS OF THEIR PERFORMANCE IN WIRELESS SENSOR NETWORKS	Zeinab Zeinalkhani & Hamidreza Amindavar	January 2009
45	SIGNAL DETECTION IN NONSTATIONARY ENVIRONMENT USING WAVELET TRANSFORM	Behrooz Vadadian & Hamidreza Amindavar	July 2008
46	under water target tracking using synthetic aperture sonar	Farzad Farhadzadeh & Hamidreza Amindavar	February 2008
47	MOVING TARGET TRACKING USING JUMP PROCESSES ESTIMATOR	Mohammad Ali Sebghati & Hamidreza Amindavar	January 2008
48	A WAVELET BASED PARTICLE FILTERING METHOD FOR SHORT-TIME HARMONIC ANALYSIS	Maryam Fatemi Dezfouli & Hamidreza Amindavar	January 2008
49	RECOGNITION OF MOVING TERRESTRIAL TARGETS IN THE PRESENCE OF TERRESTRIAL CLUTTERS	Mohammad Alaei Kerahroodi & Hamidreza Amindavar	September 2007
50	CROSS-LAYER ANALYSIS AND SIMULATION OF DYNAMIC RESOURCE ALLOCATION IN MULTI-USER OFDM NETWORK	Hoda Najafi & Hamidreza Amindavar	March 2007
51	DESIGN OF RATIONAL ESTIMATORS AND DIGITAL FILTERS WITH NEVANLINNA CLASSES	Saeed Badri Nodeh & Hamidreza Amindavar	February 2007
52	A METHOD FOR CHANNEL ESTIMATION AND SIGNAL DETECTION IN MIMO-OFDM SYSTEMS	Mostafa Nosrati & Hamidreza Amindavar	January 2007

Journal Papers

Portal Records

- Masoume Lotfi, Abdolrahim Javaherian, Dr Saeid Rezakhah Varnousefadernai, Hamidreza Amindavar, "Channel boundary detection using partial area effect with sub-pixel resolution", JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, August 2021 Vol. 0, Num. 0, Page 1-21, August 2021,
- Dr Saeid Rezakhah Varnousefadernai, Mohammad Mohammadi, Navideh Modarresi, Hamidreza Amindavar, "Continuous-time autoregressive models excited by semi-Levy process for cyclostationary signal analysis", DIGITAL SIGNAL PROCESSING, August 2021 Vol. 118, Num. 103195, Page 1-12, August 2021,

- 3 Reza Sharbati, Rozbeh Rahimijoorabi, Mohammadreza Koopialipour, Niloufar Elyasi, Faramarz Khoshnudian, Hamid Reza Ramazi, Hamidreza Amindavar, "Detection and extraction of velocity pulses of near-fault ground motions using asymmetric Gaussian chirplet model", *SOIL DYNAMICS AND EARTHQUAKE ENGINEERING*, December 2020 Vol. 133, Num. 1, Page 1-10, December 2020,
- 4 Reza Sharbati, Saeed Mostafaei, Faramarz Khoshnudian, Hamid Reza Ramazi, Hamidreza Amindavar, "Cluster Analysis of Near-Fault Ground Motions Based on the Intensity of Velocity Pulses", *JOURNAL OF ENGINEERING MECHANICS*, December 2020 Vol. 146, Num. 10, Page 1-20, December 2020,
- 5 Maryam Noori, Hossein Hassani, Abdolrahim Javaherian, Hamidreza Amindavar, "3D seismic fault detection using the Gaussian process regression, a study on synthetic and real 3D seismic data", *JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING*, July 2020 Vol. 195, Num. 107746, Page 0-0, July 2020,
- 6 Bahareh Boustani, Abdolrahim Javaherian, Majid Nabi-Bidhendib, Siyavash Torabi, Hamidreza Amindavar, "Detection in seismic data using curvelet transform and tensor-based elliptical adaptive structuring elements", *JOURNAL OF APPLIED GEOPHYSICS*, November 2019 Vol. 172, Num. 0, Page 1-11, November 2019,
- 7 Bahareh Boustani, Abdolrahim Javaherian, Majid Nabi-Bidhendib, Siyavash Torabi, Hamidreza Amindavar, "Channel boundary detection using a 3D morphological filter and adaptive ellipsoidal structuring element", *EXPLORATION GEOPHYSICS*, August 2019 Vol. 0, Num. 0, Page 0-0, August 2019,
- 8 Reza Sharbati, Hamid Reza Ramazi, Faramarz Khoshnudian, Hamidreza Amindavar, Hamid Rabbani, "Stochastic Model for Simulation of Ground motion sequences using kernel-based smoothed wavelet transform and Gaussian mixture distribution", *JOURNAL OF EARTHQUAKE ENGINEERING*, April 2019 Vol. 0, Num. 0, Page 1-15, April 2019,
- 9 Maryam Noori, Hossein Hassani, Abdolrahim Javaherian, Hamidreza Amindavar, Siyavashtorabi, "Automatic fault detection in seismic data using Gaussian process regression", *JOURNAL OF APPLIED GEOPHYSICS*, March 2019 Vol. 0, Num. 0, Page 0-0, March 2019,
- 10 Seyed Ahmad Mortazavi, Abdolrahim Javaherian, Majid Nabi Bidhendi, Siyavash Torabi, Hamidreza Amindavar, Mohammad Reza Bakhtiari, "Adaptive tube wave suppression and elastic down-going and up-going separation in VSP data using pyramidal dual tree directional filter bank", *EXPLORATION GEOPHYSICS*, March 2019 Vol. 50, Num. 1, Page 57-74, March 2019,
- 11 Bahareh Boustani, Abdolrahim Javaherian, Mjid Nabi-Bidhendi, Siyavash Torabi, Hamidreza Amindavar, "Mapping channel edges in seismic data using curvelet transform and morphological filter", *JOURNAL OF APPLIED GEOPHYSICS*, November 2018 Vol. 160, Num. 1, Page 57-68, November 2018,
- 12 Reza Sharbati, Faramarz Khoshnudian, Hamid Reza Ramazi, Hamidreza Amindavar, "Stochastic modeling and simulation of ground motions using complex discrete wavelet transform and Gaussian mixture mode", *SOIL DYNAMICS AND EARTHQUAKE ENGINEERING*, August 2018 Vol. 114, Num. 0, Page 267-280, August 2018,
- 13 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, Javad Alikhani Koupaei, "Three-Step-Prediction for Object Tracking", *IMAGE AND VISION COMPUTING*, March 2018 Vol. 169, Num. 1, Page 1-18, March 2018,
- 14 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, Javad Alikhani Koupaei, "Chaotic Particle Filter for Visual Object Tracking", *JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION*, January 2018 Vol. 2018, Num. 2, Page 1-18, January 2018,
- 15 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, "Exploring Chaotic Attractors in Nonlinear Dynamical System under Fractal Theory", *MULTIDIMENSIONAL SYSTEMS AND SIGNAL PROCESSING*, August 2017 Vol. 0, Num. 0, Page 1-17, August 2017,
- 16 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, Javad Alikhani, Pietro Pantano, Eleonora Bilotta, "Multi-Step Prediction Method for Robust Object Tracking", *DIGITAL SIGNAL PROCESSING*, July 2017 Vol. 70, Num. 7, Page 1-26, July 2017,
- 17 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, "Visual Object Tracking with Online Weighted Chaotic Multiple Instance Learning", *NEUROCOMPUTING*, March 2017 Vol. 0, Num. 0, Page 1-40, March 2017,
- 18 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, Eleonora Bilotta, "Chaotic Target Representation for Robust Object Tracking", *SIGNAL PROCESSING-IMAGE COMMUNICATION*, March 2017 Vol. 0, Num. 0, Page 1-31, March 2017,

- 19 Seyed Ahmad Mortazavi, Abdolrahim Javaherian, Majid Nabi Bidhendi, Hamidreza Amindavar, Siyavash Torabi, Mohammad Reza Bakhtiari, "Application of adaptive pyramidal dual-tree directional filter bank in ground roll attenuation", *JOURNAL OF SEISMIC EXPLORATION*, February 2017 Vol. 26, Num. 0, Page 49-79, February 2017,
- 20 Mohammadreza Hassannezhad Bibalan, Hamidreza Amindavar, Maryam Amir Mazlaghani, "Characteristic function based parameter estimation of skewed alpha-stable distribution: An analytical approach", *SIGNAL PROCESSING*, January 2017 Vol. 130, Num. 0, Page 323-336, January 2017,
- 21 Marjan Firouznia, Karim Faez, Hamidreza Amindavar, Eleonora Bilotta, "The Chaotic Dynamics of High-Dimensional Systems", *NONLINEAR DYNAMICS*, January 2017 Vol. 2017, Num. 1, Page 1-14, January 2017,
- 22 Mohammadreza Hassannezhad Bibalan, Hamidreza Amindavar, "NonGaussian amplitude PDF modeling of ultrasound images based on a novel generalized CauchyRayleigh mixture", *Eurasip Journal on Image and Video Processing*, November 2016 Vol. 48, Num. 0, Page 123-145, November 2016,
- 23 Zeinab Hashemifard, Hamidreza Amindavar, "PDF approximations to estimation and detection in timecorrelated alphastable channels", *SIGNAL PROCESSING*, October 2016 Vol. 133, Num. 0, Page 97-106, October 2016,
- 24 Seyed Mohammad Ali Tayaranian Hosseini, Hamidreza Amindavar, Maryam Amir Mazlaghani, "A New Robust Vital Sign Detection in Complex Environments Using Ultrawideband Radar", *IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING*, August 2016 Vol. 54, Num. 11, Page 6771-6782, August 2016,
- 25 Seyed Mohammad Ali Tayaranian Hosseini, Hamidreza Amindavar, Maryam Amir Mazlaghani, "A new robust vital sign detection in complex environments using ultrawideband radar", *IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING*, July 2016 Vol. 54, Num. 11, Page 6771-6782, July 2016,
- 26 Zeinab Hashemifard, Hamidreza Amindavar, Arash Amini, "Parameters estimation for continuous-time heavy-tailed signals modeled by alpha-stable autoregressive processes", *DIGITAL SIGNAL PROCESSING*, June 2016 Vol. 57, Num. 0, Page 79-92, June 2016,
- 27 Seyed Mohammad Ali Tayaranian Hosseini, Hamidreza Amindavar, James A. Ritcey, "Robust detection in ultrawideband impulse radar using DPSS-MMSE estimator", *EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING*, May 2016 Vol. 0, Num. 0, Page 1-15, May 2016,
- 28 Ameneh Maghsoodi, Abdolreza Ohadi Hamadani, Mojtaba Sadighi, Hamidreza Amindavar, "Damage detection in multilayered fiber-metal laminates using guided-wave phased array", *JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY*, April 2016 Vol. 30, Num. 5, Page 2113-2120, April 2016,
- 29 Narges Zarnaghinaghsh, Ayaz Ghorbani, Hamidreza Amindavar, "A Novel Method for Multistatic UWB Radar-Based Microwave Breast Cancer Imaging", *رانداد*, March 2016 Vol. 4, Page 43-51, March 2016,
- 30 Somayah Kazami Najaf Abadi, Ayaz Ghorbani, Hamidreza Amindavar, Dennis R. Morgan, "Vital Signs Extraction Using Bootstrap-Based Generalized Warblet Transform in Heart and Respiration Monitoring Radar System", *IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT*, February 2016 Vol. 65, Num. 2, Page 255-263, February 2016,
- 31 Narges Zarnaghinaghsh, Ayaz Ghorbani, Hamidreza Amindavar, "Compressive sensing for radar imaging via DAS beamforming method", *Bulletin of Environment, Pharmacology and Life Sciences*, August 2015 Vol. 4, Num. 9, Page 26-30, August 2015,
- 32 Amir Ashkan Mokhtari, Abdolreza Ohadi Hamadani, Hamidreza Amindavar, "Reconstructing the damage shape in aluminum plate using guided Lamb wave and polygon reconstruction technique in tomography", *رانداد*, June 2015 Vol. 15, Num. 4, Page 239-246, June 2015,
- 33 Somayah Kazami Najaf Abadi, Ayaz Ghorbani, Hamidreza Amindavar, "Cyclostationary modelling of amplitude and frequency modulated signals in heart and respiration monitoring Doppler radar systems", *IET RADAR SONAR AND NAVIGATION*, April 2015 Vol. 9, Num. 2, Page 116-124, April 2015,
- 34 Maryam Amir Mazlaghani, Mansoor Rezghi, Hamidreza Amindavar, "A novel robust scaling image watermarking scheme based on Gaussian Mixture Model", *EXPERT SYSTEMS WITH APPLICATIONS*, March 2015 Vol. 42, Num. 4, Page 1960-1971, March 2015,
- 35 Aryam Sajedin, Ayaz Ghorbani, Hamidreza Amindavar, "Nonlinearity Compensation for High Power Amplifier Based on Look-Up Table Method for OFDM Transmitters", *International Journal of Advanced Computer Science and Information Technology(IJACSIT)*, March 2015 Vol. 3, Num. 4, Page 355-367, March 2015,

- 36 Hannan Lohrasbi, D. T. Dakin, T. A. Gulliver, Hamidreza Amindavar, "Adaptive Energy Based Acoustic Sperm Whale Echolocation Click Detection", IEEE JOURNAL OF OCEANIC ENGINEERING, December 2014 Vol. PP, Num. 99, Page 1-12, December 2014,
- 37 Somayah Kazami Najaf Abadi, Ayaz Ghorbani, Hamidreza Amindavar, Changzhi Li, "Cyclostationary Approach to Doppler Radar Heart and Respiration Rates Monitoring With body Motion Cancellation Using Radar Doppler system", BIOMEDICAL SIGNAL PROCESSING AND CONTROL, October 2014 Vol. 13, Num. 0, Page 79-88, October 2014,
- 38 Hannan Lohrasbipeydeh, T. A. Gulliver, Hamidreza Amindavar, "Blind Received Signal Strength Difference Based Source Localization With System Parameter Errors", IEEE TRANSACTIONS ON SIGNAL PROCESSING, July 2014 Vol. 62, Num. 17, Page 4516-4521, July 2014,
- 39 S. M. Saberli, Hamidreza Amindavar, "Low-complexity ad-hoc non-linearities for blind multiuser detection of long-code code-division multiple access signals and asymptotic performance evaluation", IET COMMUNICATIONS, June 2014 Vol. 8, Num. 9, Page 1527-1533, June 2014,
- 40 S. M. Saberli, Hamidreza Amindavar, "Nonlinear Detector Design for CDMA Signals in the Presence of Unknown Interferers Using Maximum Entropy Method and Comparison with SIC", IEEE COMMUNICATIONS LETTERS, April 2014 Vol. 18, Num. 5, Page 737-740, April 2014,
- 41 Mohammada Ali Sebzghi, Hamidreza Amindavar, James A Ritcey, "Basis Approach to Estimate the Instantaneous Frequencies in Multicomponent AM-FM Signals", Eurasip Journal on Audio Speech and Music Processing, March 2014 Vol. -, Num. 0, Page 1-11, March 2014,
- 42 Yousef Zanjireh, Amir Hossein Rezaei, Hamidreza Amindavar, "Multi Component Signal Decomposition Based on Chirplet Pursuit and Genetic Algorithms", APPLIED ACOUSTICS, December 2013 Vol. 74, Num. 12, Page 1333-1342, December 2013,
- 43 Seyyed Hamed Fouladi, Mohammadehsan Hajiramezanali, Hamidreza Amindavar, James A. Ritcey, Payman Arabshahi, "Denoising Based on Multivariate Stochastic Volatility Modeling of Multiwavelet Coefficients", IEEE TRANSACTIONS ON SIGNAL PROCESSING, November 2013 Vol. 61, Num. 22, Page 5578-5589, November 2013,
- 44 Seyed M. Hosseini, Hamidreza Amindavar, Saralees Nadarajah, "Statistical Analysis of Cognitive Radio Operation in a Periodic Pattern of Sensing and Transmission", WIRELESS PERSONAL COMMUNICATIONS, October 2013 Vol. 2013, Num. 0, Page 1-31, October 2013,
- 45 Mohammadehsan Hajiramezanali, Seyyed Hamed Fouladi, James A. Ritcey, Hamidreza Amindavar, "Stochastic Differential Equations for Modeling of High Maneuvering Target Tracking", ETRI JOURNAL, October 2013 Vol. 35, Num. 5, Page 849-858, October 2013,
- 46 Babak Haji Bagher Naeeni, Hamidreza Amindavar, "Performance Analysis of SVM-Type Per Tone Equalizer Using Blind and Radius Directed Algorithms for OFDM Systems", Journal of Information systems and Telecommunication, July 2013 Vol. 2, Num. 1, Page 1-6, July 2013,
- 47 Seyed Younes Seyedi, Mojtaba Shirazi, Ali Moharrer, S. Mostafa Safavihamami, Hamidreza Amindavar, "Use of Shadowing Moments to Statistically Model Mobile Satellite Channels in Urban Environments", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, July 2013 Vol. 12, Num. 8, Page 3760-3769, July 2013,
- 48 Mohammad Hossein Gholizadeh, Hamidreza Amindavar, James A Ritcey, "Analytic Nakagami Fading Parameter Estimation in Dependent Noise Channel Using Copula", EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING, July 2013 Vol. 2013, Num. 1, Page 1-11, July 2013,
- 49 Sayed Mohammad Saberli, Hamidreza Amindavar, "Analytical Investigation of Stochastic Resonance Phenomenon in Linear Detectors and Comparison to ML Detector with Application in Co-channel Interferer Channels", IET SIGNAL PROCESSING, June 2013 Vol. 7, Num. 2, Page 128-133, June 2013,
- 50 Mahdi Tohidian, Hamidreza Amindavar, Alireza Moghaddamjoo, "A DFT-based Approximate Eigenvalue and Singular Value Decomposition of Polynomial Matrices", EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING, April 2013 Vol. 2013, Num. 1, Page 1-13, April 2013,
- 51 Maryam Amir Mazlaghani, Hamidreza Amindavar, "Statistical modeling and denoising Wigner-Ville distribution", DIGITAL SIGNAL PROCESSING, February 2013 Vol. 23, Num. 2, Page 506-513, February 2013,

- 52 Maryam Amir Mazlaghani, Hamidreza Amindavar, "A Novel Sparse Method for Despeckling SAR Images", IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, December 2012 Vol. 50, Num. 12, Page 5024-5032, December 2012,
- 53 Maryam Amir Mazlaghani, Hamidreza Amindavar, "Wavelet Domain Bayesian Processor for Speckle Removal in Medical Ultrasound Images", IET IMAGE PROCESSING, July 2012 Vol. 6, Num. 5, Page 580-588, July 2012,
- 54 Haleh Karkhaneh, Ayaz Ghorbani, Hamidreza Amindavar, "Quantifying and Cancellation Memory Effects in High Power Amplifier for OFDM Systems", ANALOG INTEGRATED CIRCUITS AND SIGNAL PROCESSING, November 2011 Vol. SIGNAL PROCESSING, Num. 11, Page 1-10, November 2011,
- 55 Alimorad Mahmoudi, Mahmood Karimi, Hamidreza Amindavar, "Parameter estimation of autoregressive signals in presence of colored AR(1) noise as a quadratic eigenvalue problem", SIGNAL PROCESSING, November 2011 Vol. 92, Num. 4, Page 1151-1156, November 2011,
- 56 Hamidreza Aghasi, Hamidreza Amindavar, Alireza Aghasi, "A hybrid global minimization scheme for accurate source localization in sensor networks", EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING, October 2011 Vol. 2011, Num. 6, Page 1-13, October 2011,
- 57 Mohammad Ali Sebt, Mohammad Mahdi Nayebi, Hamidreza Amindavar, "Multiple Target Parameter Estimation in Multi-Frequency Array Radar", INTERNATIONAL REVIEW OF ELECTRICAL ENGINEERING-IREE, December 2010 Vol. 5, Num. 6, Page 2692-2709, December 2010,
- 58 Maryam Amir Mazlaghani, Hamidreza Amindavar, "Two Novel Bayesian Multiscale Approaches for Speckle Suppression in SAR Images", IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, July 2010 Vol. 48, Num. 7, Page 2980-2993, July 2010,
- 59 Maryam Fatemi Dezfouli, Hamidreza Amindavar, "Noise reduction via harmonic estimation in Gaussian and non-Gaussian environments", Elsevier, Signal Processing, April 2010 Vol. 90, Num. 5, Page 0-0, April 2010,
- 60 Bijan Zakeri Gatabi, Ayaz Ghorbani, Hamidreza Amindavar, "Eigenvector Method for Scattering Mechanism and Entropy extraction of Random Rough surface by Decomposition Theorem in polarimetric Radars", MODARES TECHNICAL AND ENGINEERING, March 2010 Vol. 38, Num. 38, Page 0-0, March 2010,
- 61 Saied Mohammad Saberli, Hamidreza Amindavar, "Blind detection in symmetric non-Gaussian noise with unknown PDF using maximum entropy method with moment generating function constraints", , March 2010 Vol. , Num. 90, Page 0-0, March 2010,
- 62 Hamidreza Amindavar, "Blind per tone equalization of multilevel signals using support vector machines for OFDM in wireless communication", , February 2010 Vol. , Num. 64, Page 0-0, February 2010,
- 63 Hamidreza Amindavar, "High-Resolution ARMA Estimation of Mixed Spectra", IEEE TRANSACTIONS ON SIGNAL PROCESSING, January 2010 Vol. 58, Num. 1, Page 0-0, January 2010,
- 64 Saed Mohammad Saberli, Hamidreza Amindavar, "Blind MEM PDF Estimation for Detection in the Presence of Unknown Non-Gaussian Noise", IEEE SIGNAL PROCESSING LETTERS, December 2009 Vol. 16, Num. 12, Page 0-0, December 2009,
- 65 Nima Khademi Kalantari, Mohammad-Ali Akhaiee, S.M. Ahadi Sarkani, Hamidreza Amindavar, "Robust Multiplicative Patchwork Method for Audio Watermarking", IEEE Transactions on Audio Speech and Language Processing, August 2009 Vol. 17, Num. 6, Page 0-0, August 2009,
- 66 Bijan Zakeri Gatabi, Ayaz Ghorbani, Hamidreza Amindavar, "A New Method for Extraction of the Scattering Mechanism of Randomly Rough Surfaces Using Eigenvector Based Decomposition Technique", , April 2009 Vol. , Num. 29, Page 0-0, April 2009,
- 67 Maryam Amir Mozlaghani, Hamidreza Amindavar, Alireza Moghaddamjoo, "Speckle Suppression in SAR Images Using the 2-D GARCH Model", , February 2009 Vol. , Num. 18, Page 0-0, February 2009,
- 68 Saied Mohammad Saberli, Hamidreza Amindavar, Alireza Moghaddamjoo, "BER Calculation and Investigation of Optimal Single User Detector for a BPSK Signal Contaminated by Cochannel Interferer", , October 2008 Vol. , Num. 10, Page 0-0, October 2008,
- 69 Bijan Zakeri Gatabi, Ayaz Ghorbani, Hamidreza Amindavar, "A New Method to Extract the Polarimetric Parameters in Imaging Radars", , October 2008 Vol. , Num. 87, Page 0-0, October 2008,

- 70 Nima Sedaghat Alvar, Ayaz Ghorbani, Hamidreza Amindavar, "A Novel Hybrid Approach to Ray Tracing Acceleration Based on Pre-Processing & Bounding Volumes", , September 2008 Vol. , Num. 82, Page 0-0, September 2008,
- 71 Haleh Karkhaneh, Ayaz Ghorbani, Hamidreza Amindavar, "Modeling and Compensating Memory Effect in High Power Amplifier for OFDM Systems", Progress in Electromagnetics Research C, September 2008 Vol. 0, Num. 3, Page 0-0, September 2008,
- 72 Hoda Najafi, Hassan Taheri, Hamidreza Amindavar, "JOINT CROSS-LAYER AND DYNAMIC SUBCARRIER ALLOCATION DESIGN FOR MULTICAST OFDM NETWORKS", New Technologies, Mobility and Security, Springer Book Chapter, November 2007 Vol. 0, Num. 0, Page 0-0, November 2007,
- 73 Emad Torabi, Ayaz Ghorbani, Hamidreza Amindavar, "Modification of The UTD Model for Cellular Mobile Communication in an Urban Environment", , January 2007 Vol. , Num. 27, Page 0-0, January 2007,
- 74 Emad Torabi, Ayaz Ghorbani, Hamidreza Amindavar, "Modified Reflection Coefficient For Use in Mobile Path Loss Calculations", , December 2006 Vol. 0, Num. 26, Page 0-0, December 2006,
- 75 Hadi Amiri, Hamidreza Amindavar,, "Underwater Noise Modeling and Direction-Finding Based on Heteroscedastic Time Series", EURASIP Journal on Advances in Signal Processing, June 2006 Vol. 0, Num. 0, Page 0-0, June 2006,
- 76 Hamidreza Amindavar, "Channel assignment for cellular radio using extended dynamic programming", AEU - International Journal of Electronics and Communications, November 2005 Vol. 0, Num. 0, Page 0-0, November 2005,
- 77 Hamidreza Amindavar, "Fixed channel assignment using new dynamic programming approach in cellular radio networks", Elsevier, Computers & Electrical Engineering, July 2005 Vol. 31, Num. 0, Page 0-0, July 2005,
- 78 Hamidreza Amindavar, "A new simultaneous estimation of directions of arrival and channel parameters in a multipath environment", , February 2005 Vol. , Num. , Page 0-0, February 2005,
- 79 Mahrokh Ghani Shayeste, Hamidreza Amindavar, "Performance analysis of neural network detectors in DS/CDMA systems", , December 2003 Vol. , Num. , Page 0-0, December 2003,
- 80 Hamidreza Amindavar, Peyman Poor Moghaddam, R.L Kirlin, "A new time - delay estimation in multipath", , May 2003 Vol. , Num. 5, Page 0-0, May 2003,
- 81 Mahrokh Ghani Shayeste, Hamidreza Amindavar, "Neural networks for multiuser detection of signals in DS/CDMA systems", , May 2003 Vol. , Num. , Page 0-0, May 2003,
- 82 Leila Ghaabeli, Hamidreza Amindavar, "Image denoising using hidden markov models", , December 2002 Vol. , Num. , Page 0-0, December 2002,
- 83 Mahrokh Ghani Shayeste, Hamidreza Amindavar, "Multiuser detection of DS/CDMA signals using neural networks", , September 2002 Vol. 0, Num. 52, Page 0-0, September 2002,
- 84 Hamidreza Amindavar, "Image Denoising Using Hidden Markov Models", Lecture Notes in Computer Science, EurAsia-ICT 2002: Information and Communication Technology, Springer Chapter Book, January 2002 Vol. 0, Num. 0, Page 0-0, January 2002,
- 85 Hamidreza Amindavar, "Analytical computation of Markov chain using Pade approximations", Computers & Operations Research, July 1994 Vol. 21, Num. 6, Page 0-0, July 1994,

Other Records

- 1 Mahdi Parchami, Hamidreza Amindavar, Wei-Ping Zhu, "Learning-Based Design of Random Measurement Matrix for Compressed Sensing with Inter-Column Correlation Using Copula Function", IET Signal Processing, 2020 Vol. , Num. , Page , 2020, June
- 2 R Sharbati, R Rahimi, MR Koopialipoor, N Elyasi, F Khoshnoudian, HR Ramazi, HR Amindavar, "Detection and extraction of velocity pulses of near-fault ground motions using asymmetric Gaussian chirplet model", Soil Dynamics and Earthquake Engineering, 2020 Vol. 133, Num. , Page 106, 2020, June
- 3 Huaicong Kong, Min Lin, Wei-Ping Zhu, Hamidreza Amindavar, Mohamed-Slim Alouini, "Multiuser Scheduling for Asymmetric FSO/RF Links in Satellite-UAV-Terrestrial Networks", IEEE Wireless Communications Letters, 2020 Vol. , Num. , Page , 2020, April

- 4 Bahareh Boustani, Abdolrahim Javaherian, Majid Nabi-Bidhendi, Siyavash Torabi, Hamidreza Amindavar, "Channel boundary detection using a 3D morphological filter and adaptive ellipsoidal structuring element", *Exploration Geophysics*, 2020 Vol. 51, Num. 2, Page 232, 2020, March
- 5 Bahareh Boustani, Abdolrahim Javaherian, Majid Nabi-Bidhendi, Siyavash Torabi, Hamidreza Amindavar, "Detection in seismic data using curvelet transform and tensor-based elliptical adaptive structuring elements", *Journal of Applied Geophysics*, 2020 Vol. 172, Num. , Page 103, 2020, January
- 6 Salman Mohamadi, Farhang Yeganegi, Hamidreza Amindavar, "A New Framework For Spatial Modeling And Synthesis of Genome Sequence", *arXiv preprint arXiv:1908.03342*, 2019 Vol. , Num. , Page , 2019, August

Conference Papers

Portal Records

- 1 Maryam Noori, Hossein Hassani, Abdolrahim Javaherian, Hamidreza Amindavar, Siyavashtorabi, Sayed Ali Moalemi, "Application of Gaussian process in fault detection ", 18th Iranian Geophysical Conference, May 2018
- 2 Narges Zarnaghinaghsh, Ayaz Ghorbani, Hamidreza Amindavar, "UWB Microwave Breast Cancer Imaging via Delay-And-Sum Microwave Breast Cancer Imaging Using Compressive Sensing with LASSO Estimator ", 1st National conference on development of civil engineering,architecture,electricity and mechanical in Iran, December 2014
- 3 Narges Zarnaghinaghsh, Ayaz Ghorbani, Hamidreza Amindavar, "Microwave Breast Cancer Imaging viaMVDR Beamforming Using Compressive Sensing ", The International Congress on Technology, Communication and Knowledge (ICTCK 2014), November 2014
- 4 Yalda Rajabzadeh, Amir Hossein Rezaei, Hamidreza Amindavar, "Robust damage detection method against temperature variation using stochastic differential equations ", *Electrical Engineering (ICEE)*, 2014 22nd Iranian Conference on, May 2014
- 5 Mohammadsaber Nemati, Abdolreza Ohadi Hamadani, Hamidreza Amindavar, Hojat Heidaribafroui, "Performance comparison of various Decision-Based Neural Networks in gearbox fault diagnosis ", *The Bi-Annual International Conference on Experimental Solid Mechanics*, February 2014
- 6 Mohammad Hossein Gharavian, Abdolreza Ohadi Hamadani, Hamidreza Amindavar, Babak Sakhaei, "Fault Diagnosis of Internal Combustion Engine Valve Train Based on Hypothesis Tests ", *Second International Conference on Acoustics and Vibration*, December 2012
- 7 Mohammadehsan Hajiramezanali, Hamidreza Amindavar, "Maneuvering Target Tracking Based on SDE Driven by GARCH Volatility ", *IEEE workshop on Statistical Signal Processing, SSP*, 2012, August 2012
- 8 Mohammadehsan Hajiramezanali, Hamidreza Amindavar, "Maneuvering Target Tracking Based on Combined Stochastic Differential Equations and GARCH Process ", *International Conference on Information Sciences, Signal Processing and their Applications, ISSPA*, 2012, July 2012
- 9 Yaser Arianpour, Sedigheh Ghofrani, Hamidreza Amindavar, "Locally Nonlinear Regression Based on Kernel for Pose-Invariant Face Recognition ", *International Conference on Information Sciences, Signal Processing and their Applications, ISSPA*, 2012, July 2012
- 10 Ehsan Hassanisadi, Hamidreza Amindavar, "Joint Time Delay, Frequency and Amplitude Estimation Using Iterative Prefiltering Method ", *International Conference on Information Sciences, Signal Processing and their Applications, ISSPA*, 2012, July 2012
- 11 Seyyed Hamed Fouladi, Hamidreza Amindavar, "Blind Separation of Dependent Sources Using Multiwavelet Based on M-GARCH Model ", *International Conference on Information Sciences, Signal Processing and their Applications, ISSPA*, 2012, July 2012
- 12 Hannan Lohrasbi Peydeh, Hamidreza Amindavar, "Diver Range Estimation Based on Shallow Water Cavitation ", *IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP*, 2012, March 2012
- 13 Maryam Amir Mazlaghani, Hamidreza Amindavar, "A Novel Curvelet Domain Speckle Suppression Method for SAR Images ", *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2012) c*, March 2012

- 14 Seyed Ali Saberali, Seyed Mohammad Saberali, Hamidreza Amindavar, "Detection of the Weak Signal in the Presence of Strong Interference Using Locally Optimal Rule and Estimation of the Parameters with the Method of Moments ", The IEEE Global Communications Conference 2011, December 2011
- 15 Siamak Layeghy, Maryam Odabae, Mohammad S. Khlif, Hamidreza Amindavar, "A Time Frequency Approach to CFAR Detection ", IEEE International Symposium on Signal Processing and Information Technology, ISSPIT 2011, December 2011
- 16 Amir Jalalirad, Hamidreza Amindavar, "Characteristic Function Based Method for SVM Classification of Maneuvering Over the Horizon Targets ", IEEE Africon 2011, September 2011
- 17 Pouya Ghofrani, Hamidreza Amindavar, "A New Method for Finding the Electrical Charge Distribution ", International Conference on Electromagnetics in Advanced Applications, ICEAA, 2011, September 2011
- 18 Zahedeh Farshad, Hamidreza Amindavar, "Detection Performance of MIMO Radars in Presence of K-distributed Clutter Using Multi-dimensional Saddle Point Approximation ", IEEE workshop on Statistical Signal Processing, SSP 2011, June 2011
- 19 Nafiseh Shahbazi, Hamidreza Amindavar, "Robust Space-Time Parameters Estimation in Heavy Interference Environments ", IEEE Workshop on Statistical Signal Processing, SSP 2011, June 2011
- 20 Mahdi Parchami, Hamidreza Amindavar, James A. Ritcey, "A Class of Suboptimum Methods for Space-Time Adaptive Processing Using Empirical Characteristic Function ", IEEE workshop on Statistical Signal Processing, SSP 2011, June 2011
- 21 Shwan Ashrafi, Hamidreza Amindavar, James A. Ritcey, Rodney Lynn Kirlin, "Construction of Positive Time-Frequency Distributions Using Dynamic Copula ", IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2011, May 2011
- 22 Ehsan Hassanisadi, Hamidreza Amindavar, "BLIND PHASE RECOVERY IN QAM COMMUNICATION SYSTEMS USING CHARACTERISTIC FUNCTION ", IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2011, May 2011
- 23 Mohammad Hossein Gholizadeh, Hamidreza Amindavar, "An Analytic Approach in Joint Delay and Doppler Estimation Using Copula ", IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2011, May 2011
- 24 Mohammada Ali Sebghati, Hamidreza Amindavar, "A Novel Analytical Approach to Orthogonal Bases Extraction From AM-FM Signals ", IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2011, May 2011
- 25 Mohammad Ali Sebt, Mohammad Mahdi Nayebi, Hamidreza Amindavar, "Parameter Identifiability Improvement in Multi-Frequency Array Radar ", IEEE International Radar Conference, Radar 2011, May 2011
- 26 Hadi Samiee, Reza Ebrahimi Atani, Hamidreza Amindavar, "A Novel Area-Throughput Optimized Architecture for the AES Algorithm ", IEEE International Conference on Electronic Devices, Systems and Applications, ICEDSA, April 2011
- 27 Nafiseh Shahbazi, Hamidreza Amindavar, "Angle-Doppler Estimation in Heavy Correlated Interference ", The Second International Conference on Intelligent Systems Modeling and Simulation, ISMS, 2011, January 2011
- 28 Javad Ebrahimi Jouzdani, Gevork B. Gharehpetian, Hamidreza Amindavar, Maryam Sadat Akhavan Hejazi, "Detection of Transformer Winding Radial Deformations by Using UWB Pulses and DWT ", 3rd International Power and Energy Conference (PECon), November 2010
- 29 Javad Ebrahimi Jouzdani, Gevork B. Gharehpetian, Hamidreza Amindavar, Maryam Sadat Akhavan Hejazi, "Antennas Positioning for On-line Monitoring of Transformer Winding Radial Deformation Using UWB Sensors ", 3rd International Power and Energy Conference (PECon), November 2010
- 30 Nima Sedaghat Alvar, Hamidreza Amindavar, "Precise 2-Step Segmentation of Corrupted Characters in License Plate Recognition Applications ", The 10th IEEE International Conference on Signal Processing, October 2010
- 31 Mohammad Hossein Goli Zadeh, Hamidreza Amindavar, "Delay and Doppler estimation of Gaussian Mixtures using Moments ", 17th international Conference on Systems, Signals and Image Processing, IWSSIP 2010, June 2010

- 32 Mohammad Tayaraniyhosseni, Hamidreza Amindavar, "A New Blind Ultra Wideband Impulse RADAR Detector ", 17th international Conference on Systems, Signals and Image Processing, IWSSIP 2010, June 2010
- 33 Mohammad Tayaraniyhosseni, Hamidreza Amindavar, Jimz Raeesi, "A New Cyclostationary Spectrum Sensing Approach in Cognitive Radio ", The 11th IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC 2010, June 2010
- 34 Mohammad Hossein Gholizadeh, Hamidreza Amindavar, "Delay-Doppler Radar Tracking Using Moments ", IEEE International Radar Conference, Radar 2010, May 2010
- 35 Hamidreza Amindavar, "Joint Multiuser LDPC Coding Scheme for Error Control in DS-CDMA Systems ", The Sixth Advanced International Conference on Telecommunications, AICT 2010, May 2010
- 36 Hamidreza Amindavar, "Sensor Selection for Target Tracking in Binary Sensor Networks using Particle Filter ", 33rd IEEE SARNOFF Symposium 2010, April 2010
- 37 Maryam Amir Mozlaghani, Hamidreza Amindavar, "A novel wavelet domain statistical approach for demosaicing sar images ", , November 2009
- 38 Nastaran Nikooienejad, Hamidreza Amindavar, Karim Faez, "Texture segmentation via statistical wavlet transform modeling ", , November 2009
- 39 Mona Hajimomeni, Hamidreza Amindavar, Karim Faez, "Ariational bayesian style classification for typographical persian text using gabor features ", , November 2009
- 40 Mohammad Ali Sebghati, Hamidreza Amindavar, "Frequency estimation of signal with lowpass envelope based on jump estimator ", , August 2009
- 41 Nima Khademi Kalantari, Mohammad-Ali Akhaiee, S.M. Ahadi Sarkani, Hamidreza Amindavar, "Robust multiplicative patchwork method for audio watermarking ", , July 2009
- 42 Ayaz Ghorbani, Hamidreza Amindavar, "A propagation model for designing an emission security standard ", , May 2009
- 43 Mahdi Parchami, Hamidreza Amindavar, "A new approach to coherent radar detection in non gaussian and correlated clutters ", , May 2009
- 44 Mahdi Parchami, Hamidreza Amindavar, "Application of characteristic function to detection in sinusoidal interference plus Gaussian noise ", IEEE International Conference on Acoustics, Speech and Signal Processing, 2009. ICASSP 2009., April 2009
- 45 Hamidreza Amindavar, "Synthesis of planar arrays with arbitrary geometry for flat-top footprint patterns ", IEEE International Conference on Acoustics, Speech and Signal Processing, 2009. ICASSP 2009., April 2009
- 46 Hamidreza Amindavar, "Blind Separation of Non-stationary Sources Based on Time-Frequency Signal Representations ", Signal Processing with Adaptive Sparse Structured Representations - SPARS 2009, April 2009
- 47 Hamidreza Amindavar, "A Variational Bayesian Style Classification for Typographic Persian Text Using Gabor Features ", , March 2009
- 48 Ahad Tavakoli, Hamidreza Amindavar, "Chalipa, A Novel Wideband Circularly Polarized Microstrip Fractal Antenna ", 3rd European Conference on Antennas and Propagation, 2009. EuCAP 2009., March 2009
- 49 Alireza Aghasi, Hamidreza Amindavar, "Flat-top power patterns of arbitrary footprint produced by arrays of arbitrary planar geometry ", 13th International Symposium on Antenna Technology and Applied Electromagnetics and the Canadian Radio Science Meeting, 2009. ANTEM/URSI 2009., February 2009
- 50 Maryam Amir Mozlaghani, Hamidreza Amindavar, "MODELING AND DENOISING WIGNER-VILLE DISTRIBUTION ", IEEE 13th Digital Signal Processing Workshop and 5th IEEE Signal Processing Education Workshop, 2009. DSP/SPE 2009., January 2009
- 51 Maryam Amir Mozlaghani, Hamidreza Amindavar, "A NOVEL STATISTICAL APPROACH FOR SPECKLE FILTERING OF SAR IMAGES ", IEEE 13th Digital Signal Processing Workshop and 5th IEEE Signal Processing Education Workshop, 2009. DSP/SPE 2009., January 2009

- 52 Hamidreza Amindavar, "Multiple target tracking in wireless networks based on time-frequency distributions ", 1st WSEAS International Conference on Sensors and Signals (SENSIG 08), November 2008
- 53 Hamidreza Amindavar, "Blind equalization in wavelet domain ", IEEE International Symposium on Wireless Communication Systems. 2008. ISWCS 08., October 2008
- 54 Mehdi Teimoury Yanessary, Hamidreza Amindavar, "A novel approach to calculate stable densities " , , July 2008
- 55 Farzad Aminravan, Firooz Bakhtiari Nejad, Hamidreza Amindavar, "Intelligent fault diagnosis of gearbox under running up condition " , , July 2008
- 56 Mohammad Ali Sebghati, Hamidreza Amindavar, "Tracking jump processes using particle filtering " , , July 2008
- 57 Farzad Aminravan, Firooz Bakhtiari Nejad, Hamidreza Amindavar, "Gearbox fault diagnosis based on adaptive time frequency representation " , , July 2008
- 58 [en-name N/A], Hamidreza Amindavar, "Chirplet based target recognition using radar technology " , , July 2008
- 59 Farzad Farhadzadeh, Hamidreza Amindavar, "Passive radar target tracking using chirplet transform " , , July 2008
- 60 Nima Khademi Kalantari, S.M. Ahadi Sarkani, Hamidreza Amindavar, "A universally optimum decoder for multiplicative audio watermarking " , , June 2008
- 61 Hamidreza Amindavar, Alireza Moghaddamjoo, "A new approach to moving terrestrial targets recognition using ground surveillance pulse doppler RADARs ", IEEE Radar Conference, 2008. RADAR 08., May 2008
- 62 Hamidreza Amindavar, "Recognition of moving terrestrial targets in the presence of terrestrial clutters with a pulse doppler RADAR " , , April 2008
- 63 Saied Mohammad Saberali, Hamidreza Amindavar, "Weak BPSK Signal Detection in the Presence of Cochannel Interference with Time Varying Characteristics Using Maximum Entropy Principle " , , March 2008
- 64 Saied Mohammad Saberali, Hamidreza Amindavar, "Spread spectrum signal detection in overlay systems using maximum entropy PDF estimation based on fractional moments " , , March 2008
- 65 Farzad Farhadzadeh, Hamidreza Amindavar, "Passive acoustic tracking of cetaceans using chirplet transform " , , March 2008
- 66 Hamidreza Amindavar, "An interpolation algorithm for high resolution spectral estimation ", International Conference on Acoustics, Speech and Signal Processing, 2008. ICASSP 2008, March 2008
- 67 Hamidreza Amindavar, "Spectral estimation through parallel filtering ", Australasian Telecommunication Networks and Applications Conference, 2007. ATNAC 2007., December 2007
- 68 Firooz Bakhtiari Nejad, Hamidreza Amindavar, "Fault Diagnosis of Rotating Machineries Using Order Analysis Feature Extraction ", International Congress on Manufacturing Engineering, December 2007
- 69 [en-name N/A], Ayaz Ghorbani, Hamidreza Amindavar, "A new signal detection with unknown doppler in an unknown background using spectrogram " , , December 2007
- 70 Nima Sedaghat Alvar, Ayaz Ghorbani, Hamidreza Amindavar, "A novel ray tracing acceleration method based on bounding volumes and prior environment processing " , , October 2007
- 71 Nima Sedaghat Alvar, Ayaz Ghorbani, Hamidreza Amindavar, "A novel ray tracing acceleration method for radio propagation modeling based on prior environment processing " , , September 2007
- 72 Hamidreza Amindavar, "Performance evaluation of two dimensional interpolations on OFDM channel estimation " , , September 2007
- 73 Maryam Amir Mozlaghani, Hamidreza Amindavar, "Speckle Suppression in Medical Ultrasound Images Using Two Dimensional GARCH Model ", IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, 2007. PacRim 2007., August 2007

- 74 Saied Mohammad Saberli, Hamidreza Amindavar, "LOCALLY OPTIMAL DETECTION FOR WEAK SPREAD SPECTRUM SIGNAL IN THE PRESENCE OF POWERFUL NARROWBAND M-ARY ASK INTERFERENCE ", IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, 2007. PacRim 2007., August 2007
- 75 Maryam Amir Mozlaghani, Hamidreza Amindavar, "Image denoising using two dimensional garch model ", , June 2007
- 76 Gavad Abtahi Shafi-Abadi, Ahad Tavakoli, Hamidreza Amindavar, Gholamreza Moradi, Alireza Moghaddamjoo, Parisa Dehkhoda, "Analysis of microstrip fractal antennas by means of RWG MoM and Wavelet Transformation ", , April 2007
- 77 Ahmad Jafarlou, Hamidreza Amindavar, "MULTIUSER DETECTION IN OVERLOADED SYNCHRONOUS CDMA USING MODIFIED PROBABILISTIC DATA ASSOCIATION ", International Conference on Acoustics, Speech and Signal Processing, 2007. ICASSP 2007, April 2007
- 78 Mostafa Nosrati, Hamidreza Amindavar, "APPLICATION OF ZERNIKE MOMENTS AS FEATURES IN KNN AND SVM AS SEMI-BLIND DETECTORS FOR STBC MIMO-OFDM SYSTEMS IN IMPULSIVE NOISE ENVIRONMENTS ", International Conference on Acoustics, Speech and Signal Processing, 2007. ICASSP 2007, April 2007
- 79 Saied Mohammad Saberli, Hamidreza Amindavar, "Spread spectrum signal detection in overlay systems using macimum entropy PDF estimation based on fractional moments ", , March 2007
- 80 Ahmad Jafarlou, Hamidreza Amindavar, "A new overloaded synchronous multiuser detection using PDA ", , March 2007
- 81 Hamidreza Amindavar, "PERFORMANCE OF PER TONE HAMMERSTEIN AND BILINEAR RECURRENT NEURAL NETWORK EQUALIZER FOR WIRELESS OFDM SYSTEMS ", 9th International Symposium on Signal Processing and Its Applications, 2007. ISSPA 2007., February 2007
- 82 [en-name N/A], Hamidreza Amindavar, "Estimation of propeller shaft rate in multipath environment using new anlinna- pick interpolation ", , February 2007
- 83 Mostafa Nosrati, Hamidreza Amindavar, "A semi-blind detection for stbc mimo-pfdm systems in impulsive noise environments using zernike moments ", , February 2007
- 84 Saeedeh Parsaee Fard, Hamidreza Amindavar, "JOINT ENTROPY CRITERION FOR TRAINING TIME DOMAIN EQUALIZER OF OFDM SYSTEM WITHOUT CP ", IEEE Region 10 Conference TENCON 2006, November 2006
- 85 Hamidreza Amindavar, "Performance Analysis of PT-MMA and PT-DDMLA and PT-DDAA for OFDM in Wireless Communication ", IEEE Region 10 Conference TENCON 2006, November 2006
- 86 Saeedeh Parsaee Fard, Hamidreza Amindavar, "FREQUENCY DOMAIN PROBABILISTIC DATA ASSOCIATION EQUALIZER FOR OFDM SYSTEMS WITHOUT CYCLIC-PREFIX ", IEEE Region 10 Conference TENCON 2006, November 2006
- 87 Hamidreza Amindavar, "PT-CMA and PT-MMA for OFDM in Wireless Communication ", First International Conference on Communications and Networking in China, 2006. ChinaCom 06., October 2006
- 88 Saed Mohammad Saberli, Hamidreza Amindavar, "NOVEL NONLINEAR FUNCTIONS USED FOR OPTIMAL DETECTION IN GAUSSIAN MIXTURE NOISE BASED ON MAXIMUM ENTROPY DENSITIES ", Fourth IEEE Workshop on Sensor Array and Multichannel Processing, 2006., July 2006
- 89 Saed Mohammad Saberli, Hamidreza Amindavar, "NEW NONLINEAR DETECTOR FOR INTERFERENCE CANCELLATION IN SPREAD SPECTRUM OVERLAY SYSTEMS ", IEEE 7th Workshop on Signal Processing Advances in Wireless Communications, 2006. SPAWC 06., July 2006
- 90 Hamidreza Amindavar, "A new Radar detector in unknown signal and clutter environment ", Fourth IEEE Workshop on Sensor Array and Multichannel Processing, 2006., July 2006
- 91 Hadi Amiri, Hamidreza Amindavar, "Maximum Likelihood Localization Using GARCH Noise Models ", Fourth IEEE Workshop on Sensor Array and Multichannel Processing, 2006., July 2006
- 92 Hamidreza Amindavar, "A Novel Non-Linear Approximation to the Huygens Fresnel Diffraction Patterns for Reconstructing Digital Holographic SAR Images ", Fourth IEEE Workshop on Sensor Array and Multichannel Processing, 2006., July 2006

- 93 Hamidreza Amindavar, "LEUKEMIA CELL RECOGNITION WITH ZERNIKE MOMENTS OF HOLOGRAPHIC IMAGES ", Signal Processing Symposium, 2006. NORSIG 2006. Proceedings of the 7th Nordic, June 2006
- 94 Ayaz Ghorbani, Alireza Aghasi, Hamidreza Amindavar, "Polynomial based predistortion for solid state power amplifier nonlinearity compensation ", , June 2006
- 95 Alireza Aghasi, Ayaz Ghorbani, Hamidreza Amindavar, Haleh Karkhaneh, "Solid State Power Amplifier Nonlinearity Compensation Through Amplitude and Phase Predistortion ", , June 2006
- 96 Alireza Aghasi, Ayaz Ghorbani, Hamidreza Amindavar, Haleh Karkhaneh, "Solid State Power Amplifier Linearization Using the Concept of Best Approximation in Hilbert Spaces ", International Conference on Communications, Circuits and Systems Proceedings, 2006, June 2006
- 97 Babak Abbasi Bastami, Hamidreza Amindavar, "SIGNAL DETECTION IN CLUTTER USING MAXIMUM ENTROPY PDF ESTIMATION BASED ON FRACTIONAL MOMENTS ", International Conference on Acoustics, Speech and Signal Processing, 2006. ICASSP 2006, May 2006
- 98 Hadi Amiri, Hamidreza Amindavar,, "underwater noise modeling and direction finding based on conditional heteroscedastic time series ", International Conference on Acoustics, Speech and Signal Processing, 2006. ICASSP 2006, May 2006
- 99 Hamidreza Amindavar, "A Hybrid Method for Channel Assignment Problems in Cellular Radio Networks ", IEEE Conference on Wireless Communications and Networking, 2006. WCNC 2006., April 2006
- 100 Hamidreza Amindavar, "Novel nonlinear function used for optimal detection in gaussian mixture noise based on maximum entropy densities ", , March 2006
- 101 Hamidreza Amindavar, Leila Shayan Pour, "Blind asynchronous multiuser detection in impulsive CDMA channel ", International Conference on Wireless Communications, Networking and Mobile Computing, 2005., September 2005
- 102 Farnaz Ghassemi, Hamidreza Amindavar, "BLIND SOURCE SEPARATION BASED ON MOMENTS MATCHING ", Eighth International Symposium on Signal Processing and Its Applications, 2005. Proceedings, August 2005
- 103 Hamidreza Amindavar,, "A New Underwater Ambient Noise Modeling based on Heteroscedasticity Time Series ", International Conference on New Concepts for Harbour Protection, Littoral Security and Shallow-Water Acoustic Communication, 2005, July 2005
- 104 Amir Minayi Jalil, Hamidreza Amindavar, Farshad Almasganj, "Sub band Blind Equalization using Wavelet Filter Banks ", International Symposium on Circuits and Systems, 2005. ISCAS 2005. IEEE, May 2005
- 105 Farnaz Ghassemi, Hamidreza Amindavar, "Blind source separation based on moments matching ", Symposium on Advances in Wired and Wireless Communication, 2005 IEEE/Sarnoff, April 2005
- 106 Safar Ali Rafizadeh Ghadrijani, Ayaz Ghorbani, Hamidreza Amindavar, "Vegetation clutter model for ultra wide band ", , March 2005
- 107 Seyed Shwan Ashrafi, Hamidreza Amindavar, "AUXILIARY PARTICLE FILTERING FOR DETECTION IN ARCH NOISE ", International Conference on Acoustics, Speech and Signal Processing, 2005. ICASSP 2005, March 2005
- 108 Hamidreza Amindavar, "GARCH COEFFICIENTS AS FEATURE FOR SPEECH RECOGNITION IN PERSIAN ISOLATED DIGIT ", International Conference on Acoustics, Speech and Signal Processing, 2005. ICASSP 2005, March 2005
- 109 Mehdi Vajdani Amiri, Hamidreza Amindavar, "A NEW MAXIMUM A POSTERIORI CFAR BASED ON STABILITY IN SEA CLUTTER STATE-SPACE MODEL ", International Conference on Acoustics, Speech and Signal Processing, 2005. ICASSP 2005, March 2005
- 110 Fateme Khajepiri, Ayaz Ghorbani, Hamidreza Amindavar, "A new method for estimating rain attenuation at high frequencies ", , November 2004
- 111 Hamidreza Amindavar, Hadi Amiri,, "A New Source Localization Method Using Heteroscedasticity Time Series in Passive Sonar ", , November 2004
- 112 Fateme Khajepiri, Ayaz Ghorbani, Hamidreza Amindavar, "A new method for estimating rain attenuation at high frequencies ", 9th International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, 2004. DIPED 2004., October 2004





- 113 Babak Abbasi Bastami, Hamidreza Amindavar, "A NEW METHOD FOR DETECTABILITY OF SIGNALS IN K-DISTRIBUTED CLUTTER ", Seventh International Symposium on Signal Processing and Its Applications, 2003., July 2004
- 114 Saed Mohammad Saberali, Hamidreza Amindavar, "A blind scheme for narrowband interference suppression in CDMA using random walk tracking algorithm ", 5th Workshop on Signal Processing Advances in Wireless Communications, 2004 IEEE, July 2004
- 115 Hadi Amiri, Hamidreza Amindavar, "array signal processing using garch noise modeling ", , May 2004
- 116 Hamidreza Amindavar, "BLIND HAMMERSTEIN DECISION FEEDBACK EQUALIZER (BHDFE) AS A NEW BLIND EQUALIZER ", Canadian Conference on Electrical and Computer Engineering, 2004., May 2004
- 117 Saied Mohammad Saberali, Hamidreza Amindavar, "Narrowband Interference Suppression in CDMA using Random Walk Tracking Algorithm ", the 2003 Joint Conference of the Fourth International Conference on Information, Communications and Signal Processing, 2003 and the Fourth Pacific Rim Conference on Multimedia., December 2003
- 118 Babak Abbasi Bastami, Ayaz Ghorbani, Hamidreza Amindavar, "An analytical expression for the doppler spectrum of forest clutter ", , August 2003
- 119 Yasin Miar, Hamidreza Amindavar, "Hammerstein Decision Feedback Equalization Hdfe As a New Equalizer of GSM Receivers ", , July 2003
- 120 Mohammad Reza Kabiry, Shahpour Moavenat, Hamidreza Amindavar, "A Proof and Improvement on Burrows Wheeler Toansfor ", , June 2003
- 121 Mahrokh Ghani Shayeste, Mohammad Bagher Menhaj, Hamidreza Amindavar, "Computational Intelligence techniques for wltiuser detection of DC/CDMA signal ", , May 2003
- 122 Hamid Ebrahimzad, Hamidreza Amindavar, "A new adaptive nonlinear multistage parallel interference cancellation for CDMA ", The 8th International Conference on Communication Systems, 2002. ICCS 2002., November 2002
- 123 Mahrokh Ghani Shayeste, Hamidreza Amindavar, "Multiuser Detectionin in DS/CDMA Systems Using Neural Networks ", , September 2002
- 124 Peiman Moalem, Hamidreza Amindavar, "Fast Edge Based Steveo Matchiny ", , September 2002
- 125 Hossein Roufarshbaf, Hamidreza Amindavar, "High-speed voiceband QAM constellation classification in multipath environment ", The 12th IEEE Workshop on Neural Networks for Signal Processing 2002, September 2002
- 126 Hamidreza Amindavar, "An asymptotic blind time delay estimation ", , July 2001
- 127 M. Tabibian, Hamidreza Amindavar, "E_commerce: Technical and market approach ", IEEE International Conference On Trends In Communication IEEE EUROCON 2001., July 2001
- 128 Ali Degir, Hamidreza Amindavar, "NEW WCDMA DETECTORS BASED ON CA/OS CFAR ", IEEE International Conference On Trends In Communication IEEE EUROCON 2001., July 2001
- 129 Hamidreza Amindavar, "A perturbational blind channel and signal estimation ", IEEE International Conference On Trends In Communication IEEE EUROCON 2001., July 2001
- 130 Navid Nezafati, Hamidreza Amindavar, "A NEW ENHANCED MORPHOLOGICAL FILTER AND SIGNAL RECOVERY ", , July 2001
- 131 Peyman Poor Moghaddam, Hamidreza Amindavar, "Estimation of multipath parameters for nonresolvable time delays ", , June 2000
- 132 Hamidreza Amindavar, Peyman Poor Moghaddam, "Estimation of Propeller Shaft Rate and Vessel Classification IN Multipath environment ", The 2000 IEEE Sensor Array and Multichannel Signal Processing Workshop. SAM 2000., June 2000
- 133 Hamidreza Amindavar, "A Perturbational Blind channel Equalization Metbod Based on ARMA MODELLING ", , June 2000

- 134 Peyman Poor Moghaddam, Hamidreza Amindavar, "Direction of arrival estimation in multipath : A new approach ", IEEE international Nordic Signal Processing Symposium 2000, NORSIG2000, January 2000
- 135 Mahrokh Ghani Shayeste, Hamidreza Amindavar, "DBNN, FDNN, discriminative learning, and back-propagation neural networks in DS/CDMA systems ", The IEEE-INNS-ENNS International Joint Conference on Neural Networks, 2000. IJCNN 2000,, January 2000
- 136 Hamidreza Amindavar, "Channel equalization based on ARMA modeling and perturbation analysis " , , January 2000
- 137 Peyman Poor Moghaddam, Hamidreza Amindavar, "A new algorithm for multipath time delay estimation in low SNR using MLE " , , January 1998
- 138 Kiana Peyvandi, F. Fazaee Far, Hamidreza Amindavar, "Determining Class Of Underwater Veicles In Passive Sonar Using Hidden Markov Model With Hausdroff Similarity " , , January 1998
- 139 Hamidreza Amindavar, "M-ary Detectability of Signals in K-Clutter Plus Noise: Evaluation by Pade Approximation ", IEEE International Symposium on Information Theory, June 1991
- 140 Saied Mohammad Saberali, Hamidreza Amindavar, "narrow band interence suppression in cdma using randem walk tracking algorithm " , ,

Professional Memberships

#	Professional memberships	Explanations
1	IEEE Member	
2	A Member of Tau-Beta-Pi Engineering Honor Society	
3	A Member of Eta-Kappa-Nu Electrical Engineering Honor Society	

Taught Courses

#	Course title	Description	Headlines	Date
1	Communication Systems (I)	1. Fourier Representation of Signal and Systems 2. Amplitude Modulation 3. Angle Modulation 4. Pulse Modulation 5. Digital Band-Pass Modulation 6. Noise in Analog Communications 7. Noise in Digital Communications		Fall 2021
2	Random Processes	stochastic processes		Fall 2021
3	Advanced Communications Theory	1 Introduction: A layered view of digital communication 2 Discrete source encoding 3 Memory-less sources, prefix free codes, and entropy 4 Entropy and asymptotic equipartition property 5 Markov sources and Lempel-Ziv universal codes 6 Quantizati		Spring 2021
4	Communication Systems (II)	Communication Engineering is an engineering field consisting of electronics, communication, computer, general engineering, physics, mathematics and chemistry disciplines. In the fast-developing electronics and communication industry, the Electronics		Spring 2021
5	Communication Systems (I)	1. Fourier Representation of Signal and Systems 2. Amplitude Modulation 3. Angle Modulation 4. Pulse Modulation 5. Digital Band-Pass Modulation 6. Noise in Analog Communications 7. Noise in Digital Communications		Fall 2020
6	Random Processes	stochastic processes		Fall 2020

