# **Curriculum Vitae**



REZA PR HASANZADEH

Ph.D.

# Associate Professor,

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### REFERENCES:

Asadollah Shahbahrami, Professor, Department of Computer Engineering, University of Guilan, Rasht, Iran, <a href="mailto:shahbahramil@gmail.com">shahbahramil@gmail.com</a>. (Graduated from Delft University of Technology)

Manoochehr Nahvi, Associate Professor, Department of Electrical Engineering, University of Guilan, Rasht, Iran, <a href="mainto:nahvi@guilan.ac.ir">nahvi@guilan.ac.ir</a> and <a href="mainto:mnahvi3095@gmail.com">mnahvi3095@gmail.com</a>. Mathias Kersemans, Assistant Professor, Mechanics of Materials and Structures, Ghent University, Ghent, Belgium, <a href="mathbase.">Mathias.kersemans@ugent.be</a>.

# **RESEARCH ACTIVITIES:**

Image Processing
Industrial and Medical Image Processing
Fuzzy Logic
Non-destructive Evaluation

#### **SOFTWARE SKILLS:**

LabVIEW, C, Matlab

# **EDUCATIONAL QUALIFICATIONS:**

<u>Ph.D.</u> degree, with excellence (17.2/20---GPA=3.75), Department of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran, September 2007. 21/1/2003-17/9/2007

Title of Dissertation: "Defect detection in metallic structures by EC method using a combined image processing and fuzzy logic techniques"

M.Sc. degree, with honor (17.87/20---GPA=4), Department of Electrical Engineering, Amirkabir University of Technology, Tehran, Iran, January 2002. 22/9/2000-18/1/2003 Title of Dissertation: "Design and Manufacturing a System for Measuring the Wicking of Water in Yarn", selected thesis for research grant wizard.

B.Sc. degree, with honor (17.07/20---GPA=3.71), Department of Electrical Engineering, University of Guilan, Rasht, Iran, July 2000. 22/9/1996-23/7/2000

Title of Dissertation: "Design and Manufacturing a Total Harmonic Distortion (THD) Measurement System"

#### **TEACHING ACTIVITIES:**

B.Sc. Courses	M.Sc. Courses
1) Pulse Circuits	1) Image Processing
2) Microprocessor (Intel)	2)Discrete-time Signal Processing (DSP)
3) Electronic Measurement	3) Fuzzy Logic
	4) Nondestructive Testing
	5) Virtual Instrumentation (LabVIEW)

#### **EXECUTIVE ACTIVITIES:**

- \*Research vice chancellor of the faculty of engineering, University of Guilan, September 2022- now.
- \*Supervisory member of Guilan Science and Technology Park, 2008-2014.
- \*Editorship of faculty of engineering research committee, University of Guilan, 2009-2011.
- \*Research deputy of electrical engineering group and research councilor of faculty of engineering, University of Guilan, 2009-2011.
- \*Executive Chairman, International Conference of Pattern Recognition and Image Analysis (IPRIA2015), 2014-2015.

#### TECHNICAL MEMBER OR REVIEWER:

- \*IEEE Transactions on Instrumentation and Measurement, IEEE
- \*IEEE Transactions on Medical Imaging, IEEE
- \*IEEE Transactions on Industrial Informatics, IEEE
- \*Magnetic Resonance Imaging, Elsevier
- \*Signal Processing, Elsevier
- \*Neurocomputing, Elsevier
- \*Scanning, Wiley
- \*Image Processing, IET
- \*Computer Vision, IET
- \*Biomedical Signal Processing and Control, Elsevier
- \*International Journal for Light and Electron Optics-Optik, Elsevier
- \*Journal of Electronic Imaging, SPIE
- \*Ocean Engineering, Elsevier
- \*Journal of Zhejiang University Science C (Computers & Electronics), Springer
- \*Iranian Journal of Fuzzy Systems
- \*Iranian Journal of Electrical and Computer Engineering
- \*Computer and Knowledge Engineering, University of Mashhad
- \*Current Medical Imaging Reviews, Bentham Science
- \* International Conf. on Pattern Recognition and Image Analysis (IPRIA)
- \*Iranian Conf. of Electrical Engineering (ICEE)
- \*International eConf. on Computer and Knowledge Engineering (ICCKE)
- \*International Conf. on Control, Instrumentation, and Automation (ICCIA)
- \*Iranian Symp. on Mechanical Engineering (ISME)
- \*Iranian Conf. on Machine Vision and Image Processing (MVIP)
- \*IEEE International Conf. on Communications, Computers and Signal Processing

#### **EMPLOYMENT:**

- [1] July 2014-till now, Associate Professor, Electrical Engineering Department, University of Guilan, Rasht, Iran.
- [2] September 2007-July 2014, Assistant Professor, Electrical Engineering Department, University of Guilan, Rasht, Iran.
- [3] 2002-2004, Researcher, Niroo Research Institute (NRI), Tehran, Iran.
- [4] 2000-2003, Researcher, Electrical and Electronic Research Center, Amirkabir University of Technology.
- [5] Guest Professor for teaching some courses in the universities of Qazvin (2011), Shahr-e-rey (2007), Lahijan (2008-2010).

#### **HONORS AND AWARDS:**

- \*B.Sc with honor degree, University of Guilan, Rasht, Iran, 1999.
- \*M.Sc with honor degree, Amirkabir University of Technology, Tehran, Iran, 2002.
- \*Ph.D with excellent degree, Amirkabir University of Technology, Tehran, Iran, 2007.

# **BOOKS PUBLISHED:**

R. PR Hasanzadeh and E. Tagvaeian, "Nondestructive Inspection Methods for Oil and Gas Pipelines", **University of Guilan Press**, 2024.

#### JOURNAL PAPERS:

- [1] E. Basiri, R. PR Hasanzadeh and M. Kersemans, "Full-field damage imaging in multi-layer plates by evaluating local entropy", **Elsevier, Measurement**, vol. 229, 2024, Article 114347.
- [2] Maziar Zamani and Reza PR Hasanzadeh, "Diagnosis of common eye diseases in retinal fundus images containing cataract using deep learning network", **Journal of Machin Vision and Image Processing**, vol. 10, no. 4, pp. 75-84, 2024.
- [3] M. Rajabi, H. Golshan and R. PR. Hasanzadeh, "Non-local adaptive Hysteresis despeckling approach for medical ultrasound images", **Elsevier, Biomedical Signal Processing and Control**, vol. 85, 105042, 2023.
- [4] B. Azizinasab, R. PR Hasanzadeh, S. Hedayatrasa and M. Kersemans, "Defect detection and depth estimation in CFRP through phase of transient response of flash thermography", **IEEE Transactions on Industrial Informatics**, vol. 18, no. 4, 2364-2373, 2021.
- [5] Mahsa Rajabi and Reza PR Hasanzadeh, "A modified adaptive Hysteresis smoothing approach for image denoising based on spatial domain redundancy", **Springer**, **Sensing and Imaging**, vol. 22, article no. 42, pp. 1-25, 2021.
- [6] S. Haghzad, M. Javadian, R. Omidi, R. P. R. Hasanzadeh, "Memristor Crossbarbased Hardware Implementation of Type-2 Fuzzy Membership Function and On-chip Learning", **International Journal of Engineering**, vol. 34, no. 9, pp. 2180-2188, 2021.
- [7] Niloufar Alipour, Reza PR Hasanzadeh, "Superpixel-based brain tumor segmentation in MR images using an extended local fuzzy active contour model", **Springer, Multimedia Tools and Applications**, vol. 80, no. 6, pp. 8835-8859, 2021.
- [8] N. Rahimizadeh, R. PR Hasanzadeh and F. Janabi-Sharifi, "An optimized non-local LMMSE approach for speckle noise reduction of medical ultrasound images", **Springer, Multimedia Tools and Applications**, vol. 80, no. 6, pp. 9231-9253, 2021.
- [9] Saeed Ramezani and Reza PR Hasanzadeh, "Defect detection in metallic structures through AMR C-scan images using deep learning method", **Journal of Machine Vision and Image Processing**, vol. 7, no. 2, pp. 13-24, 2021 (In Persian).
- [10] Hanif Golshan and Reza PR Hasanzadeh, "Fuzzy Hysteresis Smoothing: A New Approach for Image Denoising", **IEEE Transactions on Fuzzy Systems**, vol. 29, no. 3, pp. 686-697, 2021.
- [11] M. Ahmadkhah, R. PR Hasanzadeh and M. Papaelias, "Arbitrary Crack Depth Profiling through ACFM Data using Type-II Fuzzy Logic and PSO Algorithm", **IEEE Transactions on Magnetics**, vol. 55, no.2, pp. 1-10, 2019.

- [12] Nima Yaghoobi and Reza PR Hasanzadeh, "De-noising of 3D multiple-coil MR images using modified LMMSE estimator", **Elsevier, Magnetic Resonance Imaging**, vol. 52, pp. 102-117, 2018.
- [13] A. Rahmani, R. PR Hasanzadeh, N. Kordani, "Smart portable cryotherapy system involving controlled thermoelectric cooling modules for medical applications", **HUM Engineering Journal**, vol. 19. no. 1, pp. 117-128, 2018.
- [14] F. A. Rahimi, Y. G. Abbaspour, K. Mollazade, R.P.R. Hasanzadeh, "Development of a novel machine vision procedure for rapid and non-contact measurement of soil moisture content", **Elsevier, Measurement**, vol. 121. pp. 179-189, 2018.
- [15] Ali Kh. Sabzi, Reza PR Hasanzadeh, and Amir H.N. Chegini, "An image-based object tracking technique for identification of moving sediment grains on bed deposits", **Springer, KSCE Journal of Civil Engineering**, vol. 22, no. 4, pp. 1170-1178, 2018.
- [16] Saeed Ahmadkhah and Reza PR Hasanzadeh, "Crack Depth Profiling in Metallic Structures through ACFM Data using Type-II Fuzzy Logic System", **Modares Mechanical Engineering**, vol. 17. no. 8, pp. 163-153, 2017, In Persian.
- [17] Danial Katoozian and Reza PR Hasanzadeh, "A fuzzy error characterization approach for crack depth profile estimation in metallic structures through ACFM data", **IEEE Transactions on Magnetics**, vol. 53, no.9, pp. 1-10, 2017.
- [18] Danial Katoozian and Reza PR Hasanzadeh, "Identification of surface crack profile in metallic structures through ACFM data using first and second order fuzzy approximation", **Electronic Industries**, vol.7, no.4, pp. 19-34, 2016, In Persian.
- [19] F. R. Ajdadi, Y. A. Gilandeh, K. Mollazade, R. P.R. Hasanzadeh, "Application of machine vision for classification of soil aggregate size", **Elsevier**, **Soil & Tillage Research**, vol. 162, pp. 8-17, 2016.
- [20] Mohadeseh Mazhari and Reza PR Hasanzadeh, "Suppression of noise in SEM images using weighted local Hysteresis smoothing filter", **Wiley, Scanning**, vol. 38. no.6, pp. 634-643, 2016.
- [21] Reza PR Hasanzadeh, Mohammad B. Daneshvar, "A novel image noise reduction technique based on Hysteresis processing", **Elsevier, Optik-International Journal for Light and Electron Optics**, vol.126, no.21, pp. 3039-3046, 2015.
- [22] Mohammad E. Ranjkesh, Reza PR Hasanzadeh, "A Fast and Accurate Sound Source Localization Method using Optimal Combination of SRP and TDOA Methodologies", **Journal of Information Systems and Telecommunication (JIST)**, vol. 3, no.2, pp. 100-107, 2015.
- [23] Hosein M. Golshan, Reza PR Hasanzadeh, "An Optimized LMMSE based Method for 3D MRI Denoising", **IEEE/ACM Transactions on Computational Biology and Bioinformatics**, vol. 12, no. 4, pp. 861-870, 2015.

- [24] Kamran Binaee, Reza PR Hasanzadeh, "An Ultrasound Image Enhancement Method Using Local Gradient Based Fuzzy Similarity", **Elsevier, Biomedical Signal Processing and Control**, vol. 13, pp. 89-101, 2014.
- [25] Zahra Zareezadeh, Reza PR Hasanzadeh, Gholamreza Baghersalimi, "A Recursive Color Image Edge Detection Method Using Green's Function Approach", **Elsevier, Optik-International Journal for Light and Electron Optics**, vol. 124, no.21, pp. 4847-4854, 2013.
- [26] Amin Noroozi, Reza PR Hasanzadeh, Maryam Ravan, "A Fuzzy Learning Approach for Identification of Arbitrary Crack Profiles Using ACFM Technique", **IEEE Transactions on Magnetics**, vol. 49, no. 9, pp. 5016-5027, 2013.
- [27] Hosein M. Golshan, Reza PR Hasanzadeh, Shahrokh C. Yousefzadeh, "An MRI Denoising Method Using Image Data Redundancy and Local SNR Estimation", **Elsevier, Magnetic Resonance Imaging**, vol. 31, no. 7, pp. 1206-1217, 2013.
- [28] Hosein M. Golshan and Reza PR Hasanzadeh, "A Modified Rician LMMSE Estimator for Restoration of Magnitude MR Images", **Elsevier**, **Optik-International Journal for Light and Electron Optics**, vol. 124, no. 16, pp. 2387-2392, 2013.
- [29] Reza PR Hasanzadeh, Ali M. Reza, "Signal Adaptive Filter for Noisy Images Based on Fuzzy S- and T-norm Operators", **Elsevier, Optik-International Journal for Light and Electron Optics**, vol. 124, no. 7, pp. 635-643, 2013.
- [30] M. Moghaddam, M. Nahvi, R. PR Hasanzadeh, "Persian Sign Language Recognition using Kernel-based Feature Extraction", **International Journal of Information and Communication Technology**, vol. 4, no.1, pp. 21-28, 2011.
- [31] R.P.R. Hasanzadeh et al, "A Fuzzy Alignment Approach to Sizing Surface Cracks by the AC Field Measurement Technique", **Elsevier, NDT&E International**, vol. 44, no. 1, pp. 75-83, 2011.
- [32] M Mahdavi, SN Shahrouzi, R PR Hasanzadeh, "A novel method for tracking moving objects using block based similarity", **International Journal of Engineering**, Transaction B: Applications, vol. 22, no. 1, pp. 35-42, 2009.
- [33] R PR Hasanzadeh et al, "Noise suppression in eddy current C-scan images using a non-linear adaptive maximum likelihood filter", **Amirkabir Journal of Science and Technology**, vol. 19, no. 68-A, pp. 55-61, 2008.
- [34] Reza PR Hasanzadeh et al, "Optimal signal adaptive maximum likelihood filter for enhancement of defects in eddy current C-scan images", **Elsevier, NDT&E International**, vol. 41, no. 5, pp. 371-381, 2008.
- [35] Hasanzadeh P.R.R. et al, "A density-based fuzzy clustering technique for non-destructive detection of defects in materials", **Elsevier**, **NDT&E International**, vol. 40, no. 4, pp. 337-346, 2007.

#### NATIONAL AND INTERNATIONAL CONFERENCE PAPERS:

- [1] S. Mesdaghi, R. PR Hasanzadeh, and F. Janabi-Sharifi, "Finger-hand Rehabilitation using DNN-based Gesture Recognition of Low-cost Webcam Images", IEEE 3ed Int'l Conf. on Machine Vision and Image Processing (MVIP2024), Karaj, Iran, March 2024.
- [2] E. Basiri, R PR Hasanzadeh and M. Kersemans, "A successive wavenumber filtering approach for defect detection in CFRP using wavefield scanning", IEEE 7<sup>th</sup> Int'l Conf. on Signal Processing and Intelligent Systems (ICSPIS2021), Tehran, Iran, December 2021.
- [3] S. Hadi, R PR Hasanzadeh and M. Kersemans, "A defect image enhancement approach for detection of defective area in CFRPs through local defect resonance", IEEE 1st Int'l Conf. on Machine Vision and Image Processing (MVIP2020), Tehran, Iran, February 2020.
- [4] E. Basiri, R PR Hasanzadeh, S. Hadi, M. Kersemans, "A DNN-based image retrieval approach for detection of defective area in carbon fiber reinforced polymers through LDV data", IEEE 1st Int'l Conf. on Machine Vision and Image Processing (MVIP2020), Tehran, Iran, February 2020.
- [5] N. Rahimizadeh, R. PR Hasanzadeh, F. Janabi-Sharifi, M. Ghahramani, "A neutrosophic based non-local means filter for despeckling of medical ultrasound images", IEEE 9th Int'l Conf. on Computer and Knowledge Eng. (ICCKE2019), Mashhad, Iran, October 2019.
- [6] Niloofar Alipoor and Reza PR Hasanzadeh, "Automatic Brain Tumor Segmentation using Symmetric Superpixels and Deformable Model in MR Images", 4th Int'l Conf. on Natural Sciences (ICNS2019)-Mathematics & Computer, Sanandaj, Iran, April 2019.
- [7] Saeed Ramezani and Reza PR Hasanzadeh, "Defect detection in metallic structures through AMR C-scan images using deep learning method", IEEE 4<sup>th</sup> Int'l Conf. on Pattern Recognition and Image Processing (IPRIA), Tehran, Iran, March 2019. (SELECTED PAPER)
- [8] Danial Katoozian and Reza PR Hasanzadeh, "An upper bound error characterization approach based on fuzzy logic for surface crack depth profile estimation in metallic structures through ACFM data", 1<sup>st</sup> National Conf. on New Research Achievements in Electrical and Computer Eng., Tehran, Iran, 2016. (SELECTED PAPER)
- [9] Ali Kh. Sabzi, Reza PR Hasanzadeh, Amir HN Chegini, "A fast and accurate technique for tracking of moving grains in bed road images", IEEE 1<sup>st</sup> Int'l Conf. on New Research Achievements in Electrical and Computer Eng., Tehran, Iran, 2016.
- [10] H. Avardeh and R. PR Hasanzadeh, "Proposing a fuzzy local Hysteresis processing filter for image noise suppression", 1'st Intl' Conf. on Signal Processing and Intelligent Systems (SPIS), Tehran, Iran, November, 2015. (SELECTED PAPER)
- [11] M. Mehdipour, R. PR. Hasanzadeh, A. Shahbahrami "Proposing a fast and efficient method for depth estimation of monocular images", 2'ed National Applied

- Research Conference on Computer Science and Information Technology, Tehran, Iran, February, 2015.
- [12] M. Mazhari, R. PR. Hasanzadeh, "An optimized local Hysteresis smoothing filter for SEM noise reduction using graph theory", 2ed National Applied Research Conference on Computer Science and Information Technology, Tehran, Iran, February, 2015.
- [13] M. Ghasemali, R. PR. Hasanzadeh, M. B. Daneshvar, "An image noise suppression technique using Hysteresis processing", 2ed International Conference on Pattern Recognition and Image Analysis, Rasht, Iran, March, 2015.
- [14] H. Niknafs, G. Zarepour, R. PR Hasanzadeh, "Intelligent systems based on fuzzy logic for real-time monitoring of the oil quality faults tracking in heavy engines", 2'ed National Applied Research Conference on Electrics, Mechanics and Mechatronics, Tehran, Iran, February, 2015.
- [15] A. Sedighnia, R. PR. Hasanzadeh, "Fuzzy Technique for Crack Shape detection Through Alternative Current Filed Measurement Data", 1st National Conference on Industrial Mathematics, Tabriz, Iran, May, 2014 (SELECTED PAPER).
- [16] I. Ansari, R. PR Hasanzadeh", Pre-compensation of Optical Aberrations in Eye through Image De-convolution Methods", 19<sup>th</sup> National Annual Conf. of Computer Society of Iran (CSICC2014), Tehran, Iran, 12-14 February, 2014.
- [17] M. Ansari, M. Mehri, R.PR Hasanzadeh, A. Salmanpour, "A Low Cost Thermal Imaging System for Power Equipments using Multi-Spectral Image Processing of Conventional CCD Camera", The 2ed Iranian Regional CIRED, Tehran, 14-15 Jan, 2014.
- [18] M. Sabbaghi, A. Shahbahrami, R. PR Hasanzadeh, "Presenting an Applied Method to Determine Object Depth Map in a Single Image and Making 3D Images", 8<sup>th</sup> Iranian Conf. on Machine Vision and Image Processing, Zanjan, Iran, 2013.
- [19] R. Rashidi, A. Shahbahrami, R. PR Hasanzadeh, "Affective interaction in an elearning environment via intelligent tutoring systems", the 5<sup>th</sup> Conference on Information and Knowledge Technology (IKT 2013), Shiraz, Iran, May 22-24, 2013.
- [20] S. Ershad, A. Shahbahrami, R. PR Hasanzadeh, "Comparison of fingerprint and face fusion algorithms in ranging level", the First Iranian Conference on Pattern Recognition and Image Processing (PRIA2013), Birjand, Iran, March 6-8, 2013.
- [21] M. Ebadi, A. Shahbahrami, R. PR Hasanzadeh, "Using biometric authentication in Internet banking", the First Iranian Conference on Pattern Recognition and Image Processing (PRIA2013), Birjand, Iran, March 6-8, 2013.
- [22] M. Mehri, B. Zanj, R. PR Hasanzadeh, "Using non-orthogonal adaptive dictionary for compressive sensing", 21'th Iranian Conference on Electrical Engineering (ICEE), Mashhad, Iran, May, 2013.
- [23] A Norouzi, R PR Hasanzadeh, M Ravan, "A Fuzzy Alignment Approach for Identification of Arbitrary Crack Shape Profiles in Metallic Structures Using ACFM Technique", Iranian Conference on Electrical Engineering (ICEE2012), (SELECTED PAPER).

- [24] H. Varzandeh, R PR Hasanzadeh, "Modification of Signal Adaptive Fuzzy Norms Filter for Image Noise Suppression", 17th CSI Computer Conference (CSI2012).
- [25] M. Ghane, A. Shahbahrami, R. PR Hasanzadeh, "Aesthetic automatic assessment in traditional Iranian motifs based on symmetry criteria", 17th CSI Computer Conference (CSI2012), (SELECTED PAPER).
- [26] M. Shekholeslam, A. Shahbahrami, R. PR Hasanzadeh, N. Karimpour, "A Simple and Efficient Fusion Model based on the Majority Criteria for Human Skin Segmentation", 3<sup>rd</sup> International Conference on Contemporary Issues in Computer and Information Sciences (CICIS 2012).
- [27] M. Ghane, A. Shahbahrami, R. PR Hasanzadeh, "Landscape images Aesthetics, the next generation of image management", 4<sup>th</sup> Conference on Information and Knowledge Technology (IKT2012).
- [28] H. M. Golshan, R PR Hasanzadeh, "A Non-Local Rician Noise Reduction Approach for 3-D Magnitude Magnetic Resonance Images", Iranian Conference on Machine Vision and Image Processing (MVIP2011), Tehran, (SELECTED PAPER).
- [29] K. Binaee, R PR Hasanzadeh, "A Non Local Means Method Using Fuzzy Similarity Criteria for Restoration of Ultrasound Images", Iranian Conference on Machine Vision and Image Processing (MVIP2011), Tehran, (SELECTED PAPER).
- [30] M. Moghaddam, M. Nahvi, R. PR Hasanzadeh, "Persian Sign Language Recognition using Kernel-based Feature Extraction", Iranian Conference on Machine Vision and Image Processing (MVIP2011), Tehran, (SELECTED PAPER).
- [31] K. Binaee, R PR Hasanzadeh, "A Modified Disk Expansion Method for Segmentation of Ultrasound Images", in proceeding Iranian Conference on Electrical Engineering (ICEE2011), pp. 3238-3343, Tehran, Iran, 2011.
- [32] Meshkinmojeh M., Hasanzadeh P. R. R., Zanj B., "Detection of Defects in Metallic Structures Using Segmentation of Eddy Current C-Scan Images", Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, pp. 111-116, 2010 (SELECTED PAPER).
- [33] Zareezadeh Z., Hasanzadeh P. R. R., Baghersalimi G., "Vector-Valued Color Image Edge Detection Using Green Function Approach", Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, pp. 273-277, 2010.
- [34] M. Abedini, B. Zanj, R. PR Hasanzadeh, "Application of compressive sensing in Magnetic Resonance Imaging for scan time reduction", Iranian Conference on Machine Vision and Image Processing (MVIP2010), Isfahan, Iran, pp. 50-56, 2010.
- [35] Hasanzadeh P.R. R. et al, "Fuzzy Clustering to the Detection of Defects from Nondestructive Testing". In Proc. IEEE Int'l Con. on Science of Electronic, Technology of Information and Telecommunication, Tunisia, 2005.
- [36] Hasanzadeh P.R. R. et al, "Motion Detection Using Differential Histogram Equalization", IEEE Int'l Sym. On Signal Processing and Information Technology, Greece, pp. 186-190, 2005.

- [37] Hasanzadeh P.R. R. et al, "Feature Extraction of Scale Pattern in Animal Textile Fibers". Int'l Con. in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG), Czech, pp. 53-56, 2004.
- [38] Ansari N, Hasanzadeh PR R, Rezaie AH, "The wicking of water in yarn as measured by magnetic induction technique", Int'l Conference of TEXSCI, 2003, Czech (SELECTED PAPER).

#### **LOCAL SYMPOSIUMS:**

- [1] M. Ghasemali, R. PR Hasanzadeh, "Image Gaussian noise reduction using adaptive Hysteresis processing method", the 12<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2013.
- [2] M. Jahandideh, N. Ahmadian, R. PR Hasanzadeh, "Representation of human eye aberration through degradation function modeling and applying on images", the 12<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2013.
- [3] A Noroozi, R PR Hasanzadeh, "Surface crack shape detection using empirical mode decomposition of alternative current field measurement data", the 11<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2011.
- [4] M B Daneshvar, R PR Hasanzadeh, "Image enhancement using differential Hysteresis process", the 11<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2011.
- [5] R PR Hasanzadeh, H. Varzandeh, "An image denoising approach using modification of fuzzy s- and t-norm filter", the 10<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2010.
- [6] Z Zareezadeh, R PR Hasanzadeh and G Baghersalimi, "Color image edge detection using Green's function approach", the 10<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2010.
- [7] M Meshkinmojeh, R PR Hasanzadeh, "Detection of defects in metallic structures using segmentation of eddy current C-scan images", the 10<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2010.
- [8] M Abedini, B Zanj and R PR Hasanzadeh, "Application of compressive sensing in MRI", the 10<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2010
- [9] Reza PR Hasanzadeh, "A fuzzy learning technique for shape alignment of cracks obtained using alternative current field measurement data", the 9<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2008.
- [10] Reza PR Hasanzadeh, "An image noise suppression technique using fuzzy s- and t-norms operators", the 9<sup>th</sup> Annual Research and Scientific Symposium in the University of Guilan, 2008.