

Professor,
Department of Computer Science & Engineering
Qatar University
P. O. Box 2713
Doha, Qatar

Phone: +974 4403 4276
Fax: +974 4403 4241
Cell: +974 5519 8513
E-mail uqidwai@qu.edu.qa
URL:
<http://faculty.qu.edu.qa/qidwai>

Uvais Qidwai

Education

- **Ph.D. (EE)**, June 2001, University of Massachusetts Dartmouth, Massachusetts-USA
Thesis topic: *2-D Blind Deconvolution for Image Restoration with Applications to Ultrasonic NDE*.
(Awards: Best Ph.D. Thesis of the year 2001, University of Massachusetts. Best Researcher, ECE Department, University of Massachusetts, 2001)
- **MS (EE)** June 1997, King Fahd University of Petroleum & Minerals, Dhahran-Saudi Arabia.
Thesis topic: *Estimation and Filtering of Harmonics*
- **BS (EE)** October 1994, N.E.D. University of Engineering & Technology, Karachi-Pakistan.
Thesis topic: *An Intelligent Process Controller in the Networking Environment (IPCIN)*.

Research Interests

- Robotics and Machine Vision
- Signal and Image Processing
- Digital System Design
- Computer Interfacing and Instrumentation
- Medical Informatics
- Artificial Intelligence
- Fuzzy Logic and Soft Computing
- Nondestructive Testing of metals

Teaching Experience

Professor (Computer Engineering) September 2005 till Present
Qatar University, Doha, Qatar.
DENG-626, Modeling and Simulation
CMPT-602, Advanced Robotics
CMPT-611/711, Visual Computing
CMPE-480, Computer Vision
CMPE-462, PC Interfacing
CMPE 474 Artificial Neural Networks
CMPE 364 Microprocessor based Design
CMPE-370, Computer Engineering Practicum
CMPE-476, Digital Signal Processing
CMPE-261, Digital Logic Design
CMPE-471, Selected Topics in Computer Engineering: Motor Control.
CMPE-471, Selected Topics in Computer Engineering: Audio & Speech Processing.
CMPE-483, Introduction to Robotics
CMPE-485, Digital Image Processing

Assistant Professor (EECS Department) June 2001- June 2005
Tulane University, Louisiana-USA
CPEN 240, Digital Logic
CPEN 461/661, Graphics and Animation
ELEN 201, Electrical Circuits
ELEN 204, Electrical Engineering Lab I
CPEN 201, Computer Organization

Independent Studies

Underwater Robot Prototype
Scene Analysis

Target Tracking
 Object Recognition
 Image Compression
 GPS-based Navigation for Mobile Robots
 Sensor-based Navigation for Mobile Robots
 Advanced Graphics
 Robotics
 Neural Networks and Radial basis Functions

Visiting Faculty

NED University of Engineering & Technology, Karachi – Pakistan (Summer 2021)
 CISE102 Machine Learning (MS(AI) Core course)

Institute of Space Technology, Islamabad-Pakistan (Summer 2004, 2005)

Image Processing: Hands-on Course
 LabVIEW Short course.
 Electrical Circuits II (for students and professionals)

Hamdard Institute of Information Technology, Karachi-Pakistan (FALL 2002)

Image Processing and Computer Vision, *for MS(IT) class*

Part-Time Visiting Lecturer (CIS Department) University of Massachusetts, Dartmouth (FALL 2000)

CIS-431 Human Computer Interactions.

Lecturer (EE Dept.) Sep. 1997-Dec. 1998

Research Assistant (EE Dept.) June 95-June 1997

King Fahd University of Petroleum & Minerals

Dhahran, Saudi Arabia
 EE-433: Process Control
 EE-432: Digital Control
 EE-303: Advanced Electronics
 EE-380: Analog Control
 EE-201: Basic Circuit Theory

Lab Instructor (EE Dept.) November 94-June 95

N.E.D. University of Engineering & Technology

Karachi, Pakistan.
 EE-261: Logic Design and Switching Theory
 EE-321: Instrumentation

Part-Time Instructor Sep. 2000-May 2001

South Coast Learning Networks, New Bedford, Massachusetts-USA

Computers for Seniors, WINDOWS (Level 01, 02), Webpage Design

- | | |
|----------------------|--|
| Book | Digital Image Processing: An Algorithmic Approach with MATLAB , CRC Press USA, October 2009. |
| Book Chapters | <p>Qidwai, U., and Qidwai, U., “Deconvolution technique for enhancing and classifying the retinal images”, Chapter 12 in “Computer Vision in Medical Imaging”, edited by C.H. Chen; World Scientific Publishing, ISBN: 978-981-4460-93-4, January 2014, pp. 209-227.</p> <p>Manandhar, P., Chen, C.H., Coskun, A., and Qidwai, U., “An automated robust segmentation method for Intravascular ultrasound images”, Chapter 20 in Frontiers of Medical Imaging, World Scientific Publishing, 2014, pp. 407-426.</p> <p>Salahuddin, T., and Qidwai, U., “Machine Learning Approach for Quantification of Neuropathy using Confocal Microscopy Images of the Human Cornea”, Chapter 3.2, Computational Intelligence and Image Processing in Medical Applications, World Scientific Publishing Series in Computer Vision, 2022, pp. 77-104. https://doi.org/10.1142/9789811257452_0006</p> <p>Qidwai, U., and Al-Ali, A., “PCA and Binary Particle Swarm Optimization (BPSO) in ANFIS for Rule-Base Reduction for Low-Dimensional Data”, Chapter 5, Pattern Recognition and Computer Vision in</p> |

the New AI Era (PRCVAIEra), World Scientific Publishing; edited by C.H. Chen, to be published in first quarter of 2025.

Patents

US Patent No. 9600698

Projected Patent Issue/Grant Date: 21-MAR-2017

Title: BEHAVIOR-BASED SOURCE MONITORING SYSTEM AND METHOD THEREOF

Inventors: Dr. Uvais Qidwai; Dr. Adnan Abu-Dayya, Dr. Osama Kubbar

Applicant: Qatar University QSTP-B

Research Publications (Journals)

1. Moursi, A., Aboumadi, A., Qidwai, U., "AI-Based Breast Cancer Detection System", Information, March 2025.
2. Al-Ali, A., and Qidwai, U., "Intelligent Rule Reduction for Improved ANFIS Performance in Classification", Lecture Notes in Networks and Systems (LNNS) Vol. 1088, No. 1, September 2024, pp. 285-293. DOI: <https://doi.org/10.1007/978-3-031-70018-7>.
3. Al-Ali, A., Qidwai, U., Kamran, S., "Predicting Infarction Growth Rate II using ANFIS-based Binary Particle Swarm Optimization Technique in Ischemic Stroke", MethodsX, September 2023, <https://doi.org/10.1016/j.mex.2023.102375>.
4. Qidwai, U., Qidwai, Umair, Sivapalan, T., and Ratnarajan, G., "iMIGS: An Innovative AI Based Prediction System for Selecting the Best Patient-Specific Glaucoma Treatment", MethodsX, May 2023.
5. Ahmed, A., Aziz, S., Qidwai, U., Alrazeq, A., and Sheikh, J., "Performance of artificial intelligence models in estimating blood glucose level among diabetic patients using non-invasive wearable device data", Computer Methods and Programs in Biomedicine Update, Vol. 3, No. 100094, 2023. <https://doi.org/10.1016/j.cmpbup.2023.100094>
6. Alban, A., Alhaddad, A., Al-Ali, A., So, W., Connor, O., Ayesh, M., Qidwai, U., and Cabibihan, J., "Heart Rate as a Predictor of Challenging Behaviours among Children with Autism from Wearable Sensors in Social Robot Interactions", Robotics 2023, Vol. 12, No. 2, P. 55; <https://doi.org/10.3390/robotics12020055> [Q1, IF:2.9]
7. Ahmed, A., Aziz, S., Abd-Alrazaq, A., Qidwai, U., Farooq, F., and Sheikh, J., "Wearable AI Reveals the Impact of Intermittent Fasting on Stress Levels in School Children During Ramadan", Healthcare Transformation with Informatics and Artificial Intelligence, 2023, pp. 291-294.
8. Mutlu, O., Salman, H., Al-Thani, H., El-Menyar, A., Qidwai, U., and Yalcin, H., "How does hemodynamics affect rupture tissue mechanics in abdominal aortic aneurysm: Focus on wall shear stress derived parameters, time-averaged wall shear stress, oscillatory shear index, endothelial cell activation potential, and relative residence time", Computers in Biology and Medicine, January 26, 2023, 106609, ISSN 0010-4825, <https://doi.org/10.1016/j.combiomed.2023.106609>. [IF = 6.7, Q1] (<https://www.sciencedirect.com/science/article/pii/S0010482523000744>)
9. Khan, H., Hashir, M., Alam, U., Atiq, M., Qidwai, U., and Qazi, S., "Dataset of usage pattern and energy analysis of an Internet of Things-enabled ceiling fan", Data in Brief, February 1, 2023. [IF: 1.38, Q3]
10. Ahmed, A., Aziz, S., Qidwai, U., Farooq, F., Shan, J., Subramanian, M., Chouchane, L., ElNatour, R., Abd-Alrazaq, A., Pandas, S., and Sheikh, J., "Wearable Artificial Intelligence for assessing the physical activity in High School Children", Sustainability, Vol. 15, No. 1, page. 638; <https://doi.org/10.3390/su15010638>. [IF: 3.9, Q1]
11. Aziz, S., Ahmed, A., Abd-Alrazaq, A., Qidwai, U., Farooq, F., and Sheikh, J., "Estimating Blood Glucose Levels Using Machine Learning Models with Non-Invasive Wearable Device Data", Healthcare Transformation with Informatics and Artificial Intelligence, 2023, pp. 283-286
12. Qidwai, Uvais, Qidwai, Umair, Raja, M., and Burton, B., "Smart AMD prognosis through cellphone: an innovative localized AI-based prediction system for anti-VEGF treatment prognosis in nonagenarians and centenarians", SN International Ophthalmology, Vol. 42, No. 6, June 2022, pp. 1749-1762. DOI:10.1007/s10792-021-02171-8. [IF: 2.08, Q1]
13. Salahuddin, T., and Qidwai, U., "Machine Learning Approach for Quantification of Neuropathy using Confocal Microscopy Images of the Human Cornea", Computational Intelligence and Image Processing in Medical Applications, 2022, pp. 77-104
14. Al-Mohammed, H., Al-Ali, A., Yaacoub, E., Qidwai, U., Abualsaud, K., Rzewuski, S., "Machine Learning Techniques for Detecting Attackers During Quantum Key Distribution in

- IoT Networks With Application to Railway Scenarios," in IEEE Access, vol. 9, October 2021, pp. 136994-137004. doi: 10.1109/ACCESS.2021.3117405.
15. Al-Ali, A., Elharrouss, O., Qidwai, U., and Al-Maadeed, S., "ANFIS-net for Automatic detection of COVID-19", NATURE Scientific Reports, 27th August 2021. [IF: 4.379, Q1]
 16. Salahuddin, T., Petropoulos, I., Ferdousi, M., Ponirakis, G., Asghar, O., Alam, U., Kamran, S., Mahfoud, Z., Efron, N., Malik, R., and Qidwai, U., "Artificial Intelligence Based Classification of Diabetic Peripheral Neuropathy from Corneal Confocal Microscopy Images", Diabetes Care, Vol. 44, July 2021. [IF: 16.02, Q1]
 17. Salahuddin, T., and Qidwai, U., "Modified Deep Segmentation: Evaluation of Loss Functions for Segmentation of Corneal Nerves Images", accepted in International Journal of Integrated Engineering, March 20, 2021.
 18. Salahuddin, T., and Qidwai, U., "Computational methods for automated analysis of corneal nerve images: Lessons learned from retinal fundus image analysis", Computers in Biology and Medicine, Vol. 119, April 2020. <https://doi.org/10.1016/j.combiomed.2020.103666>. [IF: 2.79, Q1]
 19. Sheikh, S., and Qidwai, U., "Using MobileNetV2 to Classify the Severity of Diabetic Retinopathy", International Journal of Simulation Systems, Science & Technology, Vol. 21, No. 2, March 2020, pp. 16.1-16.6.
 20. Salahuddin, T., and Qidwai, U., "Classification of Corneal Nerve Images Using Machine Learning Techniques", International Journal of Integrated Engineering, Vol. 11, No. 3, September 2019, pp. 1-9. [IF: 1.02, Q3]
 21. Ali, R., Qidwai, U., Ilyas, S. K., Akhtar, N., Alboudi, A., Ahmed, A., Inshasi, J., "Adaptive Neuro-Fuzzy Inference System for Prediction of Surgery Time for Ischemic Stroke Patients", International Journal of Integrated Engineering, Vol. 11, No. 3, September 2019, pp. 60-69. [IF: 1.02, Q3]
 22. Qidwai, U., Kashem, S., and Connor, O., "Humanoid Robot as a Teacher's Assistant: Helping Children with Autism to Learn Social and Academic Skills", Journal of Intelligent & Robotic Systems, August 2019, pp. 1-12. [IF: 2.2, Q1]
 23. Kashem, S., Jawed, S., Ahmed, J., and Qidwai, U., "Design and implementation of a Quadraped Amphibious Robot using Duck Feet", Robotics, Vol. 8, No. 3, September 2019. <https://doi.org/10.3390/robotics8030077> [IF: 1.5, Q3]
 24. Qidwai, U., Ajimsha, S., and Shakir, M., "Role of EEG and EMG combined Virtual Reality gaming system in facial palsy rehabilitation: a case study", Journal of Bodyworks and Movement Therapies, February 2019, pp. 425-431. <https://doi.org/10.1016/j.jbmt.2019.02.012> [IF: 0.69, Q1]
 25. Qidwai, U., Chaudhry, J., Janjua, N., Jabbar, S., and Khalid, S., "Using Casual Reasoning for Anomaly Detection Among ECG Live Data Streams in Ubiquitous Healthcare Monitoring Systems", Journal of Ambient Intelligence and Humanized Computing, October 2018. <https://doi.org/10.1007/s12652-018-1091-x> [IF: 1.9, Q1]
 26. Akbar, A., Qidwai, U., and Jahanshahi, M., "An Evaluation of Image Based Structural Health Monitoring Using Integrated UAV Platform", Structural Control and Health Monitoring, Vol. 26, No. 1, October 2018. [IF: 3.74, Q1]
 27. Kamran, S., Salam, A., Akhtar, N., Alboudi, A., Kamran, K., Singh, R., Amir, N., Inshasi, J., Qidwai, U., Malik, R., and Shuaib, A., "Factors that can help select the timing for decompressive hemicraniectomy for malignant MCA stroke", Translational Stroke Research Journal, March, 2018, pp. 1-8. [IF: 5.847, Q1]
 28. Awan, R., Sirinukunwattana, K., Epstein, D., Jefferyes, S., Qidwai, U., Aftab, Z., Mujeeb, I., Snead, D., and Rajpoot, N., "Glandular Morphometrics for Objective Grading of Colorectal Adenocarcinoma Histology Images", Nature Scientific Reports, 4 Dec, 2017. Web Link: <https://www.nature.com/articles/s41598-017-16516-w> [IF: 4.525, Q1]
 29. Abdelbarr, M., Chen, Y., Jahanshahi, M., Masri, S., Shen, W., and Qidwai, U., "3D dynamic displacement-field measurement for structural health monitoring using inexpensive RGB-D based sensor", Smart Materials and Structures, Vol. 26, November 2017, pp. 125016-125038. [IF: 3.547, Q1]
 30. Kamran, S., Akhtar, N., Alboudi, A., Kamran, K., Ahmad, A., Inshasi, J., Salam, A., Shuaib, A., and Qidwai, U., "Prediction of infarction volume and infarction growth rate in acute ischemic stroke", NATURE Scientific Reports, Vol. 7, Article 7565, August 2017. Web Link: <https://www.nature.com/articles/s41598-017-08044-4> [IF: 4.525, Q1]
 31. Jahanshahi, Shen, W., Mondal, T., Abdulbarr, M., Masri, S., and Qidwai, U., "Reconfigurable Swarm Robotic Systems for Structural Health Monitoring: A Brief Review",

- International Journal of Intelligent Robotics and Applications, Vol. 1, No. 3, June 2017. Pp. 287-305. Web link: <https://link.springer.com/article/10.1007/s41315-017-0024-8> [IF: 0.29, Q2]
32. Shakir, M., Qidwai, U., Malik, A., and Kamel, N., "Electroencephalography Simulation Hardware for Realistic Seizure, Preseizure and Normal Mode Signal Generation", *Journal of Medical Imaging and Health Informatics*, Vol. 5, 2015, pp. 1–7. [IF: 0.549, Q4].
 33. Shakir, M., Qidwai, U., Malik, A., and Kamel, N., "Embedded wearable EEG seizure detection in ambulatory state", *International Journal of Simulation: Systems, Science and Technology*, Vol. 15, No. 3, June 2014, pp. 1-6. [IF: 0.2, Q4]
 34. Qidwai, U., and Shakir, M., "Real-Time Patient monitoring system with Filter Bank and Fuzzy Classifier for Severe Cardiac Arrhythmia Detection and Notification System", *International Journal of Bioscience, Biochemistry, and Bioinformatics*, Vol. 3, No. 6, November 2013, pp. 588-592.
 35. Qidwai, U., and Shams, W., "A Source-Discrimination Approach for Detection of ASD Using EEG Data", *International Journal of Bioscience, Biochemistry, and Bioinformatics*, Vol. 3, No. 5, September 2013, pp.492-496.
 36. Qidwai, U., and Shakir, M., "Filter Bank Approach to Critical Cardiac Abnormalities Detection using ECG data under Fuzzy Classification", *International Journal of Computer Information Systems & Industrial Management Applications (ISSN: 2150-7988)*, 2013, Vol. 5, pp. 405-412.
 37. Chaudhry, J., Qidwai, U., and Lee, M., "Dynamic Health Level 7 Packetizer for on-the-fly Integrated Healthcare Enterprises (IHE) in Disaster Zones", *Lecture Notes in Computer Science* 7666, December 2012, pp. 432-438.
 38. Rittenhouse, R. G., Lee, M., Chaudhry, J., and Qidwai, U., "Power and Task Management in Wireless Body Area Network Based Medical Monitoring Systems", *Lecture Notes in Computer Science* 7666, December 2012, pp. 404-414.
 39. Chaudhry, J., and Qidwai, U., "Performance Evaluation of TCP and UDP traffic in IEEE 1451 compliant Healthcare Infrastructure", *Lecture Notes in Computer Science* 7666, December 2012, pp. 396-403.
 40. Shams, W., Wahab, A., and Qidwai, U., "Detecting Different Tasks Using EEG-Source-Temporal Features", *Lecture Notes in Computer Science* 7666, December 2012, pp. 380-387.
 41. Shams, W., Wahab, A., and Qidwai, U., "Fuzzy Model for Detection and Estimation of the Degree of Autism Spectrum Disorder", *Lecture Notes in Computer Science* 7666, December 2012, pp. 372-379.
 42. Qidwai, U., and Shakir, M., "Fuzzy Classification-Based Control of Wheelchair Using EEG Data to Assist People with Disabilities", *Lecture Notes in Computer Science* 7666, December 2012, pp. 458-467.
 43. Qidwai, U., and Qidwai, U., "Blind deconvolution and Retinal abnormality detection in blurred retinal images", *Journal of Medical Imaging and Health Informatics, USA*, Vol. 1, No. 4, December 2011, pp. 307-316.
 44. Godil, S. S., Shamim, M. S., Enam, S. A., Qidwai, U., Qadeer, M., and Sobani, Z., "Cranial Reconstruction After Decompressive Craniectomy: Prediction of Complications Using Fuzzy Logic", *Journal of Craniofacial Surgery*, Vol. 22, No. 4, July 2011, pp. 1307-1311.
 45. Qidwai, U., "Fun to Learn: Project-based Learning in Robotics for Computer Engineer", *ACM Inroads: SIGCSE Bulletin*, Vol. 2, No. 1, March 2011, pp. 42-46.
 46. Godil, S. S., Shamim, M. S., Enam, S. A, and Qidwai, U., "Fuzzy logic: A "simple" solution for complexities in neurosciences?", *Surgical Neurology International*, Vol. 24, No. 10, pp. 881-895, December 2010.
Open Access URL: <http://www.tandfonline.com/doi/pdf/10.1080/08839514.2010.514229>
 47. Qidwai, U., Shamim, MS., and Enam, SA., "Fuzzy Predictor for Failed Back Surgery Syndrome", *International Journal of Applied Artificial Intelligence*, Vol. 24, No. 10, December 2010, pp. 881-895.
 48. Shamim MS, Enam SA, Qidwai U. Fuzzy Logic in Neurosurgery: Predicting poor outcomes after lumbar disc surgery in 501 consecutive patients. *Surgical Neurology* 2009. Dec 72(6): 565-572.
 49. Qidwai, U., "Autonomous Corrosion Detection in Gas pipelines: A Hybrid-Fuzzy Classifier Approach using Ultrasonic Nondestructive-Evaluation Protocols", *IEEE Transactions on Ultrasonics, Ferromagnetics, and Frequency Control*, Vol. 56, No. 12, December 2009, pp. 2650-2665.

50. Qidwai, U. "Infrared Image Enhancement using H_{∞} bounds for surveillance applications", *IEEE Transactions on Image Processing*, Vol. 17, No. 8, August 2008, pp. 1274-1282.
51. Qidwai, U., "A LAMP-LEGO Experience of motivating minority students to study Engineering", *ACM Inroads: SIGCSE Bulletin*, Vol. 39, No. 4, December 2007, pp. 41-44.
52. Qidwai, U., and Raquib, F., "Fuzzy MRI Analyzer: A perception-based methodology to quantify human observation", *Engineering Journal, Qatar University*, Vol. 19, pp. 59-68, 2006.
53. Belkhouch, F., Gocan, I., and Qidwai, U., "Chaotic gray-level image transformation", *Journal of Electronic Imaging*, Vol. 14, No. 4, 2005, p. 43001.
54. Yang, C., Kim, Y., Qidwai, U., and Wilson, A., "Related Strength Properties of 3D Fabrics", *Textile Research Journal*, Vol. 74, No. 7, pp. 634-639, 2004.
55. Qidwai, U., and Bettayeb, M., "A Hybrid Least Squares-GA Based Algorithm for Harmonic Estimation", *IEEE Transactions on Power System Delivery*, Vol. 18, No. 2, pp. 377-382, April 2003.
56. Ray, M., and Qidwai, U., "Reduced-Dimensional Radial Basis Neural Network for Monitoring Haemodialysis", *Haemodialysis International*, Vol. 7, No. 1, January 2003.
57. Qidwai, U., and Chen, C. H., "2D- H_{∞} -Based Deconvolution for Image Enhancement with Applications to Ultrasonic NDE", *IEEE Signal Processing Letters*, Vol. 9, No. 5, pp. 157-159, May 2002.
58. Qidwai, U., and Chen, C. H., "Recent trends in 2D blind deconvolution for nondestructive evaluation", *Tamkang Journal of Science and Engineering*, Vol. 5, No. 1, pp. 49-58, March 2002.
59. Qidwai, U., and Chen, C. H., "Blind- H_{∞} deconvolution for ultrasonic C-scans: 1-D approach", *Journal of NDE*, Vol. 21, No. 2, pp. 40-46, June 2001.
60. Qidwai, U., and Chen, C. H., "Blind Enhancement for Ultrasonic C-Scans using Recursive 2-D H_{∞} -Based State Estimation and Filtering", *"INSIGHT", Journal of British Institute of Nondestructive Testing*, Vol. 44, No. 11, November 2000, pp. 737-741.
61. Qidwai, U., and Bettayeb, M., "An Improved Electronic Scheme for Harmonic Elimination", *Arabian Journal of Science and Engineering*, Vol. 25, No. 1B, April 2000, pp. 15-30.
62. Qidwai, U., Costa, A. H., and Chen, C. H., "Detection of Ultrasonic NDE signals using Time-Frequency Analysis", *"INSIGHT"; Journal of British Institute of Nondestructive Testing*, Vol. 41, No. 11, November 1999, pp. 700-703.
63. Qidwai, U., and Bettayeb, M., "A New Flux-Based Scheme for Harmonic Elimination", *Electric Machines and Power Systems*, Vol. 27, No. 9, pp. 955-966, 1999.
64. Qidwai, U., and Bettayeb, M., "Recursive Estimation of Power System Harmonics", *Electric Power System Research*, Vol. 47, pp. 143-152, 1998.
65. Qidwai, U., and Bettayeb, M., "A new robust scheme for harmonic elimination", *Electric Power System Research*, Vol. 43, pp. 45-51, 1997.

Research Publications (Conferences)

1. Solanki, A., Thornto, R., Hasan, S., and Qidwai, U., "GNAPing on the Job: Attacking and Defending Facial Detection on Edge Devices", *SoutheastCon25*, March 2025.
2. Qidwai, U., Elhanafy, M., Hasan, S., Al-Ali, A., Erradi, A., and Moursi, A., "An Innovative Testbed for Intrinsic Hardware Attacks in IoT Network", *IEEE International Conference on Microelectronics*, December 2024.
3. Moursi, A., M. Tahar, Hamad, M., Alansi, H., Qidwai, U., "NABATEQ™: The Real Time Smart Plant Health Monitoring System", *IEEE International Conference on Computer and Applications (ICCA)*, December 2024.
4. Al-Ali, A., and Qidwai, U., "Intelligent Fuzzy Decision-Making: Enhancing ANFIS Efficiency for Low-Dimensional Data Interpretation", *6th International Conference on Intelligence and Fuzzy Systems (INFUS)*, July 2024.
5. Shams, W., and Qidwai, U., "Linear Classifier Approach to Detect Alpha Partial Modulation for Brain Computer Interface", *7th IEEE/EMB Conference on Biomedical Engineering and Sciences (IECBES)*, December 2022, Malaysia.
6. Qidwai, Umair A., Qidwai, Uvais A., and Ratnarajan, G., "Smart app to predict best personalized minimally invasive glaucoma treatment (iMIGS)", *European Glaucoma Congress*, June 2022, Athens-Greece, Poster No. P4.07. p.113, [<https://egs2022.org/wp-content/uploads/2022/06/egs2022-abstract-0531.pdf>]
7. Alkhazendar, I., Zubair, M., and Qidwai, U., "Smart Hardware Trojan Detection System" *Intelligent Systems Conference (IntelliSys)*, September 2022, Amsterdam, The Netherlands.

8. Ayesh, M., and Qidwai, U., "Detection and Collection of Waste Using a Partially Submerged Aquatic Robot", Intelligent Systems Conference (IntelliSys), September 2022, Amsterdam, The Netherlands.
9. Abdulkader, S., and Qidwai, U., "A Review on PPG Compression Techniques and Implementations", IECBES Malaysia, March 2021.
10. T. Salahuddin and U. Qidwai, "Evaluation of Loss Functions for Segmentation of Corneal Nerves," 2020 IEEE-EMBS Conference on Biomedical Engineering and Sciences (IECBES), 2021, pp. 533-537, doi: 10.1109/IECBES48179.2021.9398843.
11. Wakjira, T., Ibrahim, M., Sajjad, B., Qidwai, U., and Ebead, U., "Shear capacity of reinforced concrete deep beams using genetic algorithm", 3rd International Conference on Civil Engineering and Architecture (ICCEA 2020), June 2020, France.
12. Shaikh, S., and Qidwai, U., "Smartphone-based Diabetic Retinopathy Severity Classification using Convolution Neural Networks", IntelliSys 2020, September 2020, Amsterdam Holland.
13. Bhati, A., Bouras, A., and Qidwai, U., "Deep learning based identification of DDoS attacks in industrial application", WS4 World Conference on Smart Trends in Systems, Security and Sustainability, London UK, July 2020.
14. Shaikh, S., and Qidwai, U., "Classification of the Stages of Diabetic Retinopathy Using MobileNetV2 in a Smart-phone Based Application", UKSimm 2020, March 2020, London UK.
15. Hussein, E., Qidwai, U., and Almeer, M., "Emotional Stability Detection Using Convolutional Neural Networks", IEEE International Conference on Informatics, IoT, and Enabling Technologies, February 2020.
16. Al-Naimi, N., and Qidwai, U., "IoT Based On-The-Fly Visual Defect Detection in Railway Tracks", IEEE International Conference on Informatics, IoT, and Enabling Technologies, February 2020.
17. Sariya, M., and Qidwai, U., "Real-Time Heart Murmurs Detection and Classification by Smart Digital Stethoscope", The Third International Computational Science and Engineering Conference (ICSEC19), October 21, 2019, Qatar.
18. Salahuddin, T., Malik, R., Al-Maadeed, S., Ilyas, S., Petropoulos, I., and Qidwai, U., "Smart Neuropathy Detection using Machine Intelligence: Filling the Void Between Clinical Practice and Early Diagnosis", World Conference in Smart Secure and Sustainable Systems, United Kingdom, July 2019.
19. Chaudhry J., Qidwai U., Miraz M.H., "Securing Big Data from Eavesdropping Attacks in SCADA/ICS Network Data Streams through Impulsive Statistical Fingerprinting", Emerging Technologies in Computing, ICETIC 2019, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 285. July 2019, DOI https://doi.org/10.1007/978-3-030-23943-5_6
20. Qidwai, U., "Fuzzy Data to Crisp Estimates: Helping the neuro-surgeon making better treatment choices for Stroke Patients", 5th IEEE/EMB Conference on Biomedical Engineering and Sciences (IECBES), December 2018, Malaysia. {Invited Talk}
21. Qidwai, U., and Connor, O., "A General Purpose Game Module for Children with Autism Spectrum Disorder", 5th IEEE/EMB Conference on Biomedical Engineering and Sciences (IECBES), December 2018, Malaysia. {Special Session}
22. Salahuddin, T., Qidwai, U., "Neuro-Fuzzy Classifier for Corneal Nerve Images", 5th IEEE/EMB Conference on Biomedical Engineering and Sciences (IECBES), December 2018, Malaysia.
23. Ali, R., Qidwai, U., Kamran, S., "Use of combination of PCA and ANFIS in infarction volume growth rate prediction in Ischemic Stroke", 5th IEEE/EMB Conference on Biomedical Engineering and Sciences (IECBES), December 2018, Malaysia.
24. Mahgoub, A., Sofi, A., and Qidwai, U., "Arrhythmia Classification using DWT-Coefficient Energy Ratios", 5th IEEE/EMB Conference on Biomedical Engineering and Sciences (IECBES), December 2018, Malaysia.
25. Qidwai, U., Akbar, A., and Maqbool, M., "Robotic MFL Probe Design for Inspection in Structural Health Monitoring System", 8th IEEE International Conference on Control System, Computing and Engineering, Malaysia, November 2018.
26. Qidwai, U., Ijaz, A., and Akbar, A., "Coordinated Robotic System for Structural Health Monitoring", Qatar Foundation Annual Research Conference, March 2018.
27. Qidwai, U., and Ijaz, A., "Robotic Probe-positioning System for Structural Monitoring", Qatar Foundation Annual Research Conference, March 2018

28. Qidwai, U., and Akbar, A., "Image Stitching System with Scanning Microscopy for Histopathological Applications", Qatar Foundation Annual Research Conference, March 2018.
29. Qidwai, U., Ijaz, A., and Akbar, A., "Robotic Probe Positioning System for Structural Health Monitoring", 7th IEEE International Conference on Control System, Computing and Engineering, Malaysia, November 2017. (DOI: 10.1109/ICCSCE.2017.8284423)
30. Tahir, A., and Qidwai, U., Pre-processing of Phonocardiogram signals using Fuzzy Least Square Estimates", International Conference on Research & Innovations in Computer Engineering and Computer Science, Malaysia, August 2017.
31. Chaudhry, J., Qidwai, U., Miraz, M., Ibrahim, A., and Valli, C., "Data Security among ISO/IEEE 11073 Compliant Personal Healthcare Devices through Statistical Fingerprinting", 9th IEEE GCC Congress, Bahrain, May 2017.
32. Akbar, A., and Qidwai, U., "Coordinated Robotic System for Structural health Monitoring", International Conference on Advances in Sustainable Construction Materials and Civil Engineering Systems, United Arab Emirates, April 2017. Web Link:
<https://doi.org/10.1051/mateconf/201712001003>
33. Qidwai, U., Akbar, A., "Image Stitching System with Scanning Microscopy for Histopathological Applications", IEEE/EMB Conference on Biomedical Engineering and Science, Malaysia, December 2016.
34. Qidwai, U., Kamran, S., Al-Sulaiti, S., Ahmad, G., and Hegazy, A., "Intelligent Integrated Instrumentation Platform for Monitoring Long-term Bedridden Patients", IEEE/EMB Conference on Biomedical Engineering and Science, Malaysia, December 2016.
35. Qidwai, U., Khattab, A., and Azmy, S., "Fuzzy-Wavelet classifier for Seizure detection using EEG signals", International Conference on Computers and Applications, UAE, September 2016.
36. Akbar, M. A., Qidwai, U., Jahanshahi, M., Masri, S., and Shen, W., "Progressive image stitching algorithm for vision based automated inspection", IEEE International Conference on Machine Learning and Cybernetics, S. Korea, July 2016.
37. Qidwai, U., Ilyas, S., Al-Sulaiti, S., Ahmad, G., and Hegazy, A., "Monitoring DVT Cuffs for Long-Term Operation: A Fuzzy Approach", 12th IEEE International Colloquium on Signal Processing and its Applications, Malaysia, March 2016.
38. Awan, R., Rajpoot, N., Aloraidi, N., and Qidwai, U., "How Divided is a Cell? Eigenphase Nuclei for Classification of Mitotic Phase in Cancer Histology Images", IEEE International Conference on Biomedical and Health Informatics, USA, February 2016.
39. Qidwai, U., Ilyas, S., Al-Sulaiti, S., Ahmad, G., and Hegazy, A., "Monitoring DVT Cuffs for Long-Term Operation: A Fuzzy Approach", 12th IEEE International Colloquium on Signal Processing and its Applications, Malaysia, March 2016.
40. Tahir, A., and Qidwai, U., "Humanoid Robots for children with Autism: Experiences with Robosapien and NAO", 4th Arab Conference on Robotics and Artificial Intelligence", Qatar, February 2016.
41. Qidwai, U., Shakir, M., Bahameish, M., "Real-time Robotic Avatar control using Fuzzy Gaze-classification for people with disability", 5th IEEE International Conference on Control System, Computing and Engineering, Malaysia, November 2015.
42. Qidwai, U., Sharafuddin, A., "Can Immersive type of Virtual Reality bring EMG Pattern Changes Post Facial Palsy?", The Science and Information Conference, London, UK, July 2015.
43. Shakir, M., Saleh, M., and Qidwai, U., "Single-Multiple Pixel Controller: Design of Applications with Low Cost and Multiple Controls", 4th IEEE International Conference on Informatics, Electronics, and Vision, Japan June 2015.
44. Qidwai, U., Al-Sulaiti, S., Shuaib, A., Ahmed, N., and Ilyas, S., "Fuzzy functionality-monitor for Deep Veins Thrombosis (DVT) cuffs", 24th European Stroke Conference, May 2015.
45. Qidwai, U., and Sadia, M., "Mapping Human Heuristics into intelligent detection of Cancerous Cells in Histopathological Analysis.", Biomedical and Biostatistical Analysis for Cancer Genomic Research, Qatar, April 2015.
46. Qidwai, U., "Using Course Projects to Tackle Social Problems: Use of Robots for children with ASD", International Forum on Engineering Education, Sharjah, UAE, March 2015.
47. Qidwai, U., and Sadia, M., "Color-based Fuzzy Classifier for Automated Detection of Cancerous Cells in Histopathological Analysis", IEEE/EMB Conference on Biomedical Engineering and Science, Malaysia, December 2014.

48. Qidwai, U., and Zahid, A., "Fuzzy-EMG-Based Assistive Interface for Children with Spinal-Muscular-Atrophy", IEEE/EMB Conference on Biomedical Engineering and Science, Malaysia, December 2014.
49. Qidwai, U., Shakir, M., Hakouz, W., and Musa, N., "Wirelessly Controlled Mimicing Humanoid Robot: Assisting Children with ASD in learning Focused and Coordinated Behaviors", 11th ACS/IEEE International Conference on Computer Systems and Applications, Qatar, November 2014.
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51. Guo, D., Patil, A., Hock, F., Qidwai, U., and Shakir, M., "A wearable cuff-less blood pressure monitor based on body sensor network and artificial neural network", International research Conference on Engineering and Technology (IRCET), Indonesia, June 2014.
52. Qidwai, U., and Shakir, M., "Coiflet-based Fuzzy classifier for defect detection in industrial LNG/LPG tanks", 2nd Artificial Intelligence and Fuzzy logic Conference (AIFL 2014), April 2014, Dubai, UAE.
53. Shakir, M., Qidwai, U., Malik, A. S., and Kamel, N., "Detection of Partial Seizure: An Application of Fuzzy Rule System for Wearable Ambulatory Systems", International Conference on Intelligent and Advanced Systems (ICIAS), Malaysia, June 2014.
54. Qidwai, U., Maqbool, M., and Shakir, M., "Deconvolution of Defect signatures from MFL Data: Coiflet-based modeling approach with applications in Industrial NDT", 2nd ScienceOne International Conference on Information Technology, 2014, Dubai UAE.
55. Khan, S., Qidwai, U., Muhammad, H., and Qidwai, Umair, "Retinal Image Enhancement Using Laplacian Pyramidal Multiscaling", IEEE TenSymp, Malaysia, April 2014. IEEE TenSymp, Malaysia, April 2014.
56. Shakir, M., Qidwai, U., Malik, A. S., and Kamel, N., "Embedded Rule-based Seizure Detection Ambulatory System from Real Epileptic Data", IEEE TenSymp, Malaysia, April 2014.
57. Khan, A., Mohamed, A., Al-Hajiri, S., Al-Shammari, H., Qidwai, U., Mujeeb, I., and Rajpoot, N., "A Hardware based System for Scoring of Hormone Receptors in Breast Cancer Histopathology Slides", Middle Eastern Conference on Bimedical Engineering, February 2014, Qatar.
58. Shakir, M., Qidwai, U., Malik, A. S., and Kamel, N., "Rule-Base Platform for Embedded Wearable EEG Seizure Detection in Ambulatory State", 5th International Conference on Intelligent Systems, Modeling, and Simulation, January 2014, Malaysia.
59. Qidwai, U., Shakir, M., and Malik, A., "Embedded Fuzzy Classifier for Detection and Classification of Preseizure state using Real EEG data", 15th International Conference on Biomedical Engineering, IFMBE Proceedings Vol. 43, 2014, pp. 411-415.
60. Qidwai, U., Shakir, M., Malik, A., and Kamel, N., "Fuzzification of epileptic data: an application for prediction and identification of partial seizure", 2nd International Conference on Computer Engineering and Mathematical Systems, Malaysia, December 2013.
61. Qidwai, U., "A wearable sensing system in HL7 environment for detecting critical cardiac abnormalities/arrhythmias", 4th International e-Health Conference, Pakistan, November 2013.
62. Qidwai, U., Hassan, E., Halabi, R., and Shakir, M., "Device Interface for people with mobility impairments", 7th IEEE GCC Conference, Doha, Qatar, November 2013.
63. Qidwai, U., Shakir, M., and Connor, O., "Robotic toys for Autistic children: Innovative tools for teaching and treatment", 7th IEEE GCC Conference, Doha, Qatar, November 2013.
64. Shams, W., Wahab, A., Qidwai, U., and Fakhri, I., "Emotion Recognition Model Using Source-Temporal Features and Fuzzy Classifier", 20th International Conference on Neural Information Processing (ICONIP), Korea, November 2013.
65. Qidwai, U., Shakir, M., Malik, A., and Kamel, N., "Parametric Modeling of EEG Signals with Real Patient Data for Simulating Seizures and Pre-Seizures", International Conference on Human Computer Interface (ICHCI), India, August 2013.
66. Qidwai, U., Chaudhry, J., and Shakir, M., "Ubiquitous Monitoring System for Critical Cardiac Abnormalities", 3rd IEEE/EMBS Conference on Biomedical Engineering & Science, Malaysia, December 2012.
67. Qidwai, U., Riley, R., and El-Sayed, S., "Attracting students to the Computing disciplines: A case study of a robotic Contest", 6th International Forum of Engineering Education, Malaysia, November 2012.

68. Chaudhry, J., and Qidwai, U., "On Critical Point Avoidance among Mobile Terminals in Healthcare Monitoring Applications", International Conference on Open Systems (ICOS), Kuala Lumpur- Malaysia, 21-24 October 2012, pp. 1-5.
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70. Qidwai, U., and Shakir, M., "Embedded System Design with Filter Bank and Fuzzy Classification Approach to Critical Cardiac Abnormalities Detection", IEEE Symposium on Industrial Electronics and Applications, Indonesia, September 2012.
71. Qidwai, U., and Shakir, M., "Ubiquitous Arabic Voice Controlled Device to assist people with disabilities", 4th International conference on Intelligent and Advanced Systems (ICIAS), June 2012, Malaysia.
72. Qidwai, U., and Khan, H., "Fuzzy Control for VTOL/STOL Problem", 2nd International Conference on Aerospace Science & Engineering (ICASE 2011), December 2011, Pakistan.
73. Qidwai, U., and Abueidah, S., "Time Frequency Analysis of MFL signals", 2nd International Conference on Aerospace Science & Engineering (ICASE 2011), December 2011, Pakistan.
74. Qidwai, U., and Shakir, M., "Fuzzy Detection of Critical Cardiac Abnormalities using ECG data: A ubiquitous approach", IEEE 11th Hybrid Intelligent Systems Conference, December 2011, Malaysia.
75. Qidwai, U., Maqbool, M., Alam, M., and Kserawi, S., "Time-Frequency based Signal Restoration for Laser-Ultrasound signals with applications in NDT", IEEE International Symposium on Industrial Electronics and Applications, Malaysia, September 2011, pp. 348-353.
76. Qidwai, U., "Project based Learning in Engineering Education: A Boe-bot experience", International KBIE Conference Bahrain, January 2011.
77. Qidwai, U., Maqbool, M., "A Qualitative study on Laser Ultrasonic Inspection: Is it detrimental to the surface properties of Duplex Steel?", DICE, December 2010, Pakistan.
78. Qidwai, U., and Qidwai, U., "Blind Restoration of Fluorescein Angiography images", IEEE International conference on Digital Image Computing Techniques and Applications, December 2010, Australia.
79. Qidwai, U., and Qidwai, U., "Blind Deconvolution for Retinal Image Enhancement", 2010 IEEE EMBS Conference on Biomedical Engineering & Sciences (IECBES 2010), November 2010, Malaysia.
80. Qidwai, U., Rahmatalla, H., and Maqbool, M., "The effect of laser ultrasonic inspection on surface properties of UNS S31803, Duplex Stainless Steel: A qualitative study using image processing", Duplex Stainless Steel Conference, Beaune, France, October 2010.
81. Qidwai, U., and Salah, F., Arabic Speech-Controlled Wheelchair: A Fuzzy Scenario, IEEE International Conference on Information Science and Signal Processing Applications (ISSPA), May 2010, Malaysia.
82. Qidwai, U., and Maqbool, M., "Image Deconvolution for Enhancing IR images in order to Detect Defects in Metallic Plates", IEEE International Symposium on Signal Processing and Information Technology, Ajman-UAE, December 2009.
83. Qidwai, U., and Bettayeb, M., "Fuzzy Time Frequency Classifier for NDT Applications", IEEE International Symposium on Signal Processing and Information Technology, Ajman-UAE, December 2009.
84. Qidwai, U., and Malluhi, Q., "Finding trends in historical traffic data: an Image Processing approach", 13th Gulf Engineering Forum, Kuwait, October 2009.
85. Qidwai, U., "Fuzzy Blind-Spot Scanner for Automobiles", IEEE International Symposium on Industrial Electronics and Applications (ISIEA), October 2009, Malaysia.
86. Qidwai, U., "Laser-Ultrasound and related Mathematical modeling with Applications to NDT", 1st International Conference on Aerospace Science & Engineering, August 2009, Pakistan.
87. Qidwai, U., "Soft Guidance of Robots: A Fuzzy Approach", 1st International Conference on Aerospace Science & Engineering, August 2009, Pakistan.
88. Qidwai, U., and Maqbool, M., "On hybrid-Fuzzy classifier design: an empirical modeling scenario for corrosion detection in Gas pipelines", 6th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA-08), April 2008, Doha, Qatar.
89. Qidwai, U., Bettayeb, M., and Yamani, A., "Defect Deconvolution using 4th order Statistics for Ultrasonic Nondestructive Testing", IEEE ICSPC-07, Dubai, November 2007.

90. Qidwai, U., Shamim, S., Raquib, F., and Ather, M., "Failed back-surgery syndrome prediction using Fuzzy inference System", IEEE ICSPC-07, Dubai, November 2007.
91. Qidwai, U., Bettayeb, M., and Yamani, A., "Defect Deconvolution using 3rd order Statistics for Ultrasonic Nondestructive Testing" IEEE ISSPA-07, Sharjah, February 2007.
92. Qidwai, U., Maqbool, M., and Jamil, M., "Fuzzy Mapping of Human Heuristics for Defect Classification in gas pipelines using Ultrasonic NDE", IEEE ISSPA-07, Sharjah, February 2007.
93. Qidwai, U., "Fuzzy Expert System for defect identification in gas pipelines using ultrasonic NDE", International Bhurban Conference on Applied Science and Technology, Bhurban, Pakistan, January 2007.
94. Qidwai, U., Maqbool, M., and Al-Fantazi, A., "Fuzzy classifier for corrosion detection in Gas pipelines using ultrasonic pulses", 25th Egyptian Corrosion Conference, Ein El-Sukhna, Egypt, December 2006.
95. Belkhouche, F., Singh, B., Qidwai, U., Rastgoufard, P., and Belkhouche, B., "On the approximation of the state equations of nonlinear permanent magnet synchronous motors", Proceedings of IEEE ISIE 2006, Montreal (Canada) - July 9 to 13, 2006.
96. Qidwai, U., "Motivating students to study Engineering: a Lego-LAMP experience", 4th International Forum on Engineering Education (IFEE), Sharjah, U.A.E., April, 2006.
97. Qidwai, O., Haider, T., and Qidwai, U., "Multi-membership Fuzzy Time-Critical routing", International Conference on Computer & Communication Engineering, Malaysia, May 2006.
98. Wong, C., and Qidwai, U., "Intelligent Surround Sensing using Fuzzy Inference System (ISSFIS)", 4th IEEE International Conference on Sensors, Irvine, California, USA, Oct 31-Nov 1, 2005.
99. Wong, C., and Qidwai, U., "Intelligent Sensor network for Obstacle Avoidance Strategy (ISOAS)", 4th IEEE International Conference on Sensors, Irvine, California, USA, Oct 31-Nov 1, 2005.
100. Reasor, J., Wong, C., and Qidwai, U., "Towards a GPS-based autonomous vehicle", 62nd IEEE Vehicular Technology Conference (VTC), Dallas-USA, September 2005.
101. Iqbal, R., and Qidwai, U., "Component-based Fuzzy Geometrical configuration classifier", North American Fuzzy Information Processing Society (NAFIPS), Michigan-USA, June 2005.
102. Qidwai, U., and Reasor, J., "Improved GPS-based navigation for autonomous robotic vehicle", International Bhurban Conference on Applied Science and Technology, Bhurban, Pakistan, June 2005.
103. Iqbal, R., and Qidwai, U., "Boosted Human-centric Hybrid Classifier", 43rd ACM Southeastern Conference, Kennesaw, Georgia, March 2005.
104. Qidwai, U., "LMS-based enhancement for IR-images with applications to surveillance", Annual Symposium of SPIE/IS&T; Image Processing: Algorithms and Systems IV, San Jose, California, January 2005.
105. Qidwai, U., and Qidwai, O., "IR image enhancement using Recursive Weighted Least Square Estimator", IEEE SCONEST, Karachi, Pakistan, December 2004.
106. Iqbal, R., and Qidwai, U., "On the Selection of Fuzzy Classifiers Using AdaBoost", IEEE SCONEST, Karachi, Pakistan, December 2004.
107. Wong, C., and Qidwai, U., "Vehicle collision avoidance system (VCAS)", *IEEE Sensors 2004*, October 24-27 2004.
108. Qidwai, U., and Curtis, H., "EWS for Macular degeneration", IEEE e-Tech, Karachi, Pakistan, August 2004, pp. 121-125.
109. Belkhouche, F., Qidwai, U., Gokcen, I., and Joachim, D., "Binary Image Transformation Using Two-Dimensional Chaotic Maps", IEEE International Conference on Pattern Recognition, August 2004, pp. 823-826.
110. Qidwai, U., and Bettayeb, M., "Deconvolution of Ultrasonic NDT signals using N4SID algorithm for defect identification", 10th IEEE International Conference on Electronics, Circuits and Systems, Sharjah, U.A.E, December 2003.
111. Ray, M., and Qidwai, U., "Artificial intelligence approach to determine minimum dose of haemodialysis", International Joint Conference on Neural Networks, Portland, Oregon, July 2003.
112. Ray, M., and Qidwai, U., "Machine Learning in Medicine: Calculating the minimum dose of Haemodialysis using Neural Networks", IEEE Region 5 Technical Conference, New Orleans, April 2003, pp 23-27.

113. Belkhouche, F., and Qidwai, U., "Binary Image coding using 1D chaotic maps", IEEE Region 5 Technical Conference, New Orleans, April 2003, pp. 39-42.
114. Ray, M., and Qidwai, U., "Reduced Dimensional Radial basis neural network for monitoring haemodialysis", Annual Dialysis Conference, 9th International Symposium of Haemodialysis, Seattle, March 2003.
115. Belkhouche, F., and Qidwai, U., "Image encoding using chaotic maps and strange attractors", Proceedings of SPIE/IS&T; Image Processing: Algorithms and Systems II, Vol. 5014, Santa Clara, California, January 2003, pp. 1-8.
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117. Qidwai, U., and Chen, C. H., "C-scan enhancement using recursive subspace deconvolution", *AIP Conference Proceedings*, Vol. 615, No. 1, May 25, 2002, pp. 655-661.
118. Qidwai, U., and Gottlieb, S., "An efficient hole-filling algorithm for C-scan enhancement", *AIP Conference Proceedings*, Vol. 615, No. 1, May 25, 2002, pp. 662-669.
119. Yamani, Bettayeb, Qidwai, and Mohandes, "High Resolution Impulse Response Extraction for Defect Classification". Proceedings of the 1st Middle East Nondestructive Testing Conference. Bahrain, pp. 129-130, September 24-26, 2001.
120. Qidwai, U., and Chen, C. H., "Blind Image Restoration for Ultrasonic C-Scan using Constrained 4th order cumulants", *ASME Congress*, New York, November 2001.
121. Qidwai, U., and Chen, C. H., "Blind Image Restoration for Ultrasonic C-Scan using Constrained 2D-HOS", *Proceedings IEEE ICASSP, Utah*, May 2001, No. 6, pp. 3405-3408.
122. Qidwai, U., and Chen, C. H., "Hybrid 2D H_∞ -Based Blind Enhancement for Ultrasonic C-Scans", *Proceedings of the 39th Annual Conference of British Institute of Non Destructive Testing*, Buxton, England, pp. 137-142, September 2000.
123. Qidwai, U., and Chen, C. H., "Blind Image-Deconvolution for Ultrasonic C-Scans", *RQNDE*, Iowa, July 2000, pp. 579-586.
124. Yamani, A., Bettayeb, M., and Qidwai, U., "High resolution Impulse response extraction for defect classification", *6th International conference on Composites Engineering*, Orlando, pp. 911 -912, 1999.
125. Qidwai, U., Bettayeb, M., Yamani, A., and Chen, C. H., "GUI-Based Toolbox in MATLAB for Ultrasonic NDE Defect Identification", *RQNDE*, Proceedings Vol. 19A, July 1999, pp. 757-764.
126. Qidwai, U., Costa, A. H., and Chen, C. H., "Time-Frequency-Based Defect Identification and Classification for Ultrasonic NDE Signals", *RQNDE*, Proceedings Vol. 19A, July 1999, pp. 717-724.
127. Qidwai, U., and Chen, C. H., " H_∞ Deconvolution for defect identification for Ultrasonic NDE signals", *Review of the progress in Quantitative Nondestructive Evaluation (RQNDE)*, Proceedings Vol. 18A, pp. 719-725, Utah, July 1998.
128. Qidwai, U., and Bettayeb, M., "An overview of advanced control technologies in process industry", *Technical Exchange Workshop for Arabian-American Oil Company ARAMCO*, Saudi Arabia, 1998.
129. Qidwai, U., "A new micro stepping technique for stepper motors", *IEEE student symposium*, Bahrain, May 1996. Distinction: Best Paper Award.
130. Qidwai, U., and Bari, I., "An Intelligent process controller in Networking Environment", *IEEEP Student Symposium*, Karachi, 1993. Distinction: Silver medal.

Projects

Qatar University (September 2005-Present) **Funded Research**

1. Railway Track Inspection System (Qatar Rail)
2. Audio Steganography (BeIN)
3. UV Robotic Disinfectant for OT (HMC Qatar, Indus Hospital Pakistan)
4. Wearable sensory system for athletes for muscular performance evaluation.
5. Hyperbaric hood for Covid19 patients (HMC Qatar)
6. RoboDoc: Remotely controlled physician interface (NED Pakistan)
7. Robotic Attendant for OT (HMC Qatar)
8. Post-stroke Rehabilitation devices with Virtual Reality and robotic technologies (Rumaillah hospital, Qatar).
9. Seizure Volume Prediction using Stroke Registry data at HMC.

10. Autonomous Robotic Car.
11. NAO Robot for children with ASD (Shafallah Center, TNG School, Al-Awsaj Academy)
12. Innovative reconfigurable robots for Industrial Inspections (NPRP) Qatar.
13. Intelligent Instrumentation Integration Platform for long-term patients monitoring (AHS grants HMC) Qatar, 2016-2017.
14. Sleep Apnea study for Stroke risk prediction (AHS grants HMC) Qatar, 2016-2017.
15. Fire-fighting robot (2013-2014) Qatar University
16. NAO Robot Toolkit (2013-2015) Qatar University
17. Robotic Toys for Autistic Children (2012-2013) Qatar University.
18. Kinect-based humanoid interface (2012-2013) Qatar University.
19. Novel Biomarkers for predicting colorectal cancer using Toponome Imaging System (2012-2015) National Priority Research Program (NPRP) Qatar.
20. Arabic speech-controlled interface design for patients with special needs. Mada Center Qatar.
21. Behavior-based Personnel Monitoring system using RFID tags and Compatible sensors. (2010-2012) Qatar University's Wireless Innovation Center.
22. Towards a Wearable and WBAN-based Health Monitoring and Automatic Diagnosis System for Low-Cost Personal Healthcare in Qatar. (2010-2013) National Priority Research Program (NPRP) Qatar.
23. Characterization of Corrosion resistance material for Innovative food processing. (2010-2012) National Priority Research Program (NPRP) Qatar.
24. Underwater LAN for sensor data transfer (2010-2011) Qatar University.
25. LNG Tank Inspection Robot design (2009-2012) National Priority Research Program (NPRP) Qatar.
26. Innovative Non-contact Industrial Inspection System (2008-10) National Priority Research Program (NPRP) Qatar.
27. Crawler Robot for automated Ultrasonic inspection of metallic sheets (2008-2009) Qatar University
28. Swarm Robots for Localization and Mapping (2008-09) Qatar University.
29. Internet-Based Home Surveillance System (2008-09) Qatar University.

Undergraduate Research Program (UREP) of Qatar National research Fund (QNRF)

1. PC-Based Mobile Dexterous robot (2006-08)
2. PC-Based Surveillance Helicopter (2006-08)
3. Intelligent Blind-spot Sensing system for automobiles (2006-08)
4. Positron Beam System Automation (2007-08)
5. Fuzzy autonomous surveillance blimp (2008-09)
6. Intelligent Alarm Management System (2007-08)
7. Arabic speech-based Robotic wheelchair (2008-09)

Tulane University (June 2001-May 2005)

1. IR Image Enhancement (Louisiana Board of Reagents 2002-2005)
2. Intelligent Vehicle for Terrain Navigation Project.
3. Ship and Tank simulator design.
4. Medical Informatics applied to Haemodialysis process modeling.

University of Massachusetts Dartmouth (2000-2001)

1. Advanced Laser Ultrasonic Imaging Lab (DURIP funded) was setup for research and academic purposes.

KFUPM, Saudi Arabia (1997-1998)

1. Defect detection using Ultrasonic NDE (SABIC, KACST {Petrochemical divisions})
2. Harmonic Estimation (SABIC {Petrochemical Division}) (Distinction: Best Research project for the year 1999, KFUPM)

Awards

Best Poster Award, (ICIOT Qatar, February 2020)

Two Best Paper Awards, IECBES Malaysia, December 2018.

Excellence in Innovation Award, CSE Department, May 2018.

Gold Award (ITEX 2016), Malaysia, May 2016.

Excellence Award (Imagine Cup), College of Engineering, May 2014.

TNG Education Award, TNG School Annual Awards, December 2013.
Excellence in Research Award: College of Engineering, Qatar University. July 2010.
Best Researcher of the year Award: CSE Department, Qatar University. 2009.
Community Services Award: Pakistani Engineers Forum Qatar. June 2009.
Best Researcher of the year Award: CSE Department, Qatar University. 2008.

Additional professional activities

1. *Reviewer for Journal of Computer Methods and Programs in Biomedicine, 2018.*
2. **Research Affiliate: *Qatar University KINDI Labs.***
3. **Research Affiliate: *Qatar University Wireless Innovation Center***
4. **Research Affiliate: *Qatar University Gas Processing Center***
5. **Research Affiliate: *Qatar University Center for Advanced Materials***
6. *Member of the Editorial Board of International Journal on Applied Computing.*
7. *Consultant for some private companies in Pakistan working on applied industrial and Public projects.*
8. *Coordinator for Computer Engineering Program at Computer Science & Engineering Department, Qatar University (January 2008-July 2009)*
9. Member Organizing Committee of 19th International Conference on Neural Information Processing (ICONIP), Qatar, November 2012.
10. Reviewer for University of Sharjah Journal of Pure and Applied Sciences, Sharjah, UAE, 2004-2008.
11. Reviewer for 6th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA-08), April 2008, Doha, Qatar.
12. Member Technical Program committee for IEEE International Conference on Signal Processing and Communications, Dubai 2007.
13. Reviewer for IEEE Transactions on Fuzzy Signals and Systems, 2007.
14. Reviewer for International Symposium on Signal Processing and its Applications (ISSPA), Sharjah-UAE, 2007.
15. Reviewer for Arab Science and Technology Foundation, 2006.
16. Member Organizing Committee for 15th international conference on Neural Information Processing (ICONIP), November 2008, Doha, Qatar.
17. Reviewer for International Journal of Computation and Information Sciences, 2005-06.
18. Reviewer for 13th IEEE International Conference on Electronics, Circuits and Systems, Nice, France, 2006.
19. Reviewer for International Symposium on Knowledge Communication and Conferences (KCC), Florida, USA, 2006.
20. Reviewer for IEEE Communications Magazine, 2006.
21. Reviewer for 4th International Forum on Engineering Education, Sharjah-UAE, 2006.
22. Book Reviewer for “Signals and Systems” by Kamen and Heck, Prentice Hall Publishing Inc., USA, 2004.
23. Technical Reviewer for IEEE Journal on Automation and Soft-computing, 2004.
24. Technical Reviewer for IEEE Conference on Decision and Control, May 2003.
25. Organizing member for the Robotics Contest Committee, IEEE Region 5 Technical conference, New Orleans, LA, April 2003.
26. NSF Panel Reviewer March-May 2002, March 2003.
27. ASME Congress, November 2001, Session Chair for the session on Novel Signal Processing Techniques”
28. Joint-Local arrangements Chair for IEEE Neural Network Symposium, September 2001.

Professional membership

- Member ACM USA
- Member of the IEEE USA
- Member Machine Intelligence Research (MIR) Labs USA.
- Director, ASNT Board Qatar.
- Member American Society of Nondestructive Testing (ASNT)
- Member of Pakistani Engineers Forum, Qatar.
- Member of Pakistan Engineering Council (PEC), Pakistan.

Graduate Thesis Supervision

“PCA-PBSO-ANFIS: A new Fuzzy Inference System with reduced fuzzy rule base”, Ph.D.(Computing), Qatar University. Student Name: Afnan Al-Ali, Status: 2024.
“Diabetic Retinopathy Classification using Deep Learning”, MS(EE), Qatar University, Student Name: Sarah Shaikh, Status: 2020.

“An Efficient PPG Compression Technique for wearable Health Devices”, MS(CE), Qatar University, Student Name: Seba Abulkader. Status 2020.

“Machine Learning for Infarct Volume Prediction in Stroke Patients”, MS(CE), Qatar University. Student Name: Rahma Ali. Status: 2019.

“Neuro-Fuzzy Classifier for Pathologic Neuropathy”, MS(CE), Qatar University. Student Name: Tooba Salahuddin. Status: 2020.

“Emotion Recognition in Video Stream”, MS(CE), Qatar University. Student Name: Elaf Sayed. Status: 2020.

“Machine Learning for Cyber Security”, MS(CE), Qatar University. Student Name: Akilesh Bhati. Status: 2020.

“Design of PMU Based Real Time Fuzzy Logic SVC Damping Controller To Enhance Inter- Area Oscillation Damping”, MS(EE), Qatar University. Student Name: Sami Abueida. Status: Completed in Spring 2016.

**Senior
Design
Project
Advising**

Qatar University

1. Autonomous underwater vehicle (MSDP 2024-2025)
2. Research grade facility for Hydroponic Experiments (MSDP 2024-2025)
3. Autonomous Golf-Cart (SDP 2024-2025)
4. AI-based plant monitoring system. (SDP 2023-2024)
5. ICU Assistant Robot (SDP 2023-2024)
6. Intelligent Hydroponic System (SDP 2022-2023)
7. Autonomous Campus Cart (MSDP 2021-2022)
8. Electrical Racing Car (MSDP 2021-2022)
9. Model Cube-sat trainer (2021-2022)
10. HazBot (2020-21)
11. Smart OT Lights (2019-2020)
12. Smart On-campus Shuttle System (2019-2020)
13. VR based IoT arm-rehabilitation system. (2018-2019)
14. Companion Robot for children with ASD. (2018-2019)
15. VR based Remote exercise machine for patients with Fibromyalgia. (2017-2018)
16. Driverless Car. (2017-2018)
17. Smart bed for long-term stroke monitoring (2015-2016)
18. Humanoid Assistant robot (2014-2015)
19. Humanoid robotic system HCI design. (2013-2014) Qatar University.
20. Firefighting Robot (2013-2014) Qatar University.
21. IR-based Assistive device for people with disabilities. (2012-13)
22. Beacon-based target detection using android application interface. (2012-2013)
23. Image Analysis System for Pathological Systems (2012-2013)
24. Smart Cot (2011-2012)
25. Crawler Robot for industrial NDT applications (2011-2012)
26. Intelligent Toys for Autistic kids (2011-2012)
27. Remote monitoring of utility meters (2010-2011)
28. Underwater Remotely Controlled Robotic Vehicle (2009-2010)
29. Speech-Operated Wheel chair (2008-09)
30. Vision-Assisted Service Robot (2007-08)
31. LabVIEW-Based Interfacing of Positron Tube setup (2007-08)
32. PC-Based R/C Helicopter Robot (2006-07)
33. PC-Based EOD Robot (2006-07).
34. Electronic Workbench under LabVIEW environment (2006-07)
35. Wearable Foetal Monitor (2005-06).

Tulane University

1. Sub-coetaneous sensor for early warnings of constraint heart failure. (2004-05)
2. Autonomous blimp. (2004-05)

3. Remotely Controlled Robots. (2003-05)
4. Dexterous Robots. (2003-04)
5. Robotic Cars. (2003-05)
6. Customer Survey using radio-connected PDAs. (2002-03)
7. Web-based Air conditioner controller and monitor. (2002-03)
8. Web-based voting system with system security. (2002-03)
9. Virtual Tour of the EECS Department, Tulane University. (2001-02)

University of Massachusetts, Dartmouth

Autonomous Surveillance Blimp. [2000-01]

KFUPM, Saudi Arabia

MATLAB based liquid level indicator and controller. [1998]

**Community
activities**

American Boy Scout Association (Qatar Chapter)

Scout Master (Troop 400) June 2016 - present

Den Leader (Cubs Pack 400) 2016-2017

Merit Badge Counselor (Troop 970) 2015-2016

Den Leader (Cubs pack 3947) 2015-2016.

Qatar University

- Contests and Students Event Committee Chair. (2019 - present)
- Member, Qatar University Intellectual Property Assessment Committee (IPAC) 2016-present.
- ACM Club Computing Contest [Organizer]
- Conducting Robotics clubs in local schools.
- Computing Contest Committee (Computer Engineering Program) [Member]
- Curriculum and Quality Assurance Committee (Computer Engineering Program) [Member]
- Events and Contests committees (Computer Science & Engineering Department) [Member]
- Senior Design Committee. (Computer Science & Engineering Department) [Member]
- Qatar University Robotics Group. [Member]

Tulane University

- Quality Assurance Committee for ABET preparation (Electrical Engineering and Computer Engineering Programs) [Member]
- Digital Hobby Group. [Chair]
- Faculty advisor for IEEE (Tulane Chapter), IGDA (Tulane Chapter), MSA (Tulane Chapter).

University of Massachusetts, Dartmouth

President of the Intramural Sports Committee (2000-2001) Received *Bill Gathright Award for Leadership Excellence* (May 2001).

Active member of the International Student Office. Received the *Community Services Award* (May 2001)

**Workshops/
Seminars
delivered**

1. Applied AI in Healthcare and Medicine (19th Knowledge Forum, Pakistan Academy of Engineers, August 5, 2023)
2. iOph: Smart Techniques and Strategies for Ophthalmologists – An AI perspective (Invited talk at 2022 IEEE Day EMBS Chapters Torch Relay Public Webinar, October 4, 2022)
3. Intelligent classifier of lung images for detecting COVID-19 patients (Invited talk at IECBES Malaysia, March 2021)
4. Lightweight mobile Deep learning system for retinopathy classification (Invited talk at IECBES Malaysia, March 2021)
5. Computing in Covid-19: Lessons learned at Qatar University (Keynote at IEEE EMBS Webinar, Malaysia, August 2020)
6. Infarction Volume Prediction, (Invited talk at IECBES, Malaysia, December 2018)
7. Robotic toys for children with Autism, (Invited talk at Autism Symposium, HBKU Qatar, 4th April 2018)
8. Softcomputing in Healthcare; Some recent findings (Seminar, CSE Department, Qatar University, February 22, 2018)

9. Softcomputing in Healthcare; Some recent findings (Keynote speaker at 2nd International Electrical Engineering Conference, Karachi, May 2017)
10. Histomorphometric profiling of Colon cancer (Speaker at 'Research Outcome Seminar' by QNRF, Doha, Qatar, November 2016)
11. Autism: Can Technology Help? (Speaker at Technical Seminars' event by Pakistan Engineers Forum, Doha, Qatar, April 2016)
12. Robotic toys: Fun tools for assisting learning in children with ASD (Speaker at Qatar University Autism Awareness Event, April 2016)
13. Intelligent position monitoring system for long-term bed ridden patients, Workshop on Medical Imaging and Machine Vision (Qatar University, KINDI Center, December 2015)
14. 28.8 k to 1 G, Seminar on Smart Cities (Pakistan Engineers Forum Qatar, November 2015)
15. Online Short course on Digital Image Processing (NED University Karachi, March 2015).
16. Assistive Wheelchair (TechShare, November 2014, Qatar).
17. NI Platform for Robotics, Vision, and Embedded Systems Applications (Invited Guest Speaker at NI-Days Annual Conference, Beirut-Lebanon, May 17, 2014)
18. Wearable Health Monitoring for Cardiac and Cranial Abnormalities, (Remote Monitoring over Sustainable Wireless Networks Workshop, March 30, 2014, Qatar University).
19. Robotics in structural health inspections for civil and industrial structures (Guest speaker at Seminar on Research in Construction Industry in Qatar, Qatar Green Building Council Qatar and Pakistan Engineers Forum, March 25, 2014)
20. Robotics at Computer Science & Engineering Department, Qatar University (ACM Computing Club, December 2013)
21. Wave Motion (Pakistani Education Center, June 2013)
22. Electricity and magnetism (Pakistani Education Center, May 2013)
23. Engineering & Technology in Assistive Solutions for people with disabilities (Technical Seminar, Pakistan Engineers Forum, April 2013)
24. EEG-controlled wheelchair (Mada Research Forum, March 2013)
25. Wearable heart monitoring system (Graduate Seminar, Qatar University, March 2013)
26. Robotic Inspection of LNG tanks (Asset Integrity Management (AIM) Symposium, Qatar University, December 2012)
27. Ubiquitous Monitoring System for Critical Cardiac Abnormalities (Qatar Foundation Annual Research Forum, 2012)
28. System Identification Techniques for Industrial NDT Applications (Seminar, CSE Department, Qatar University, March 2012)
29. LabVIEW (Biomedical Engineering Department Workshop, NED University, Karachi, July 2011)
30. Whats and Hows of Laser Ultrasonic Inspection (GPC Colloquium, Qatar University, May 2011)
31. Application of Digital Image Deconvolution in Diagnosing Retinopathy in Occluded Retinal Images due to Ocular Opacities (Seminar, CSE Department, Qatar University, November 2010)
32. Hands-on LabVIEW; Building a simple DAQ System (Workshop, NED University of Engineering and Technology, Karachi, Pakistan, July 2010)
33. Soft guidance of Robots (Seminar, NED University of Engineering and Technology, Karachi, Pakistan, July 2010)
34. Renewable Energy and its Implementation in Pakistan (Technical Seminar, Pakistan Engineers Forum Qatar, November 2009)
35. Laser Ultrasonic NDT (Key note speech, International Conference on Aerospace Science & Engineering, Pakistan, August 2009)
36. Soft guidance of Robots (Key note speech, International Conference on Aerospace Science & Engineering, Pakistan, August 2009)
37. Advanced LabVIEW Applications (Hands-on workshop, NED University of Engineering and Technology, Karachi, Pakistan, July 2009)
38. Time-Frequency Analysis (Workshop, NED University of Engineering and Technology, Karachi, Pakistan, August 2009)
39. Failed Back Surgery Syndrome Prediction with Fuzzy Inference System (Contributed talk, International Conference on Modeling of Complex Systems, Carnegie-Melon University Doha, May 2009).
40. Robotics; Introduction and importance in Education (Seminar, IEEE students branch at Qatar University, October 2008)

41. Digital Image Processing and its Applications (Seminar, FAST, Karachi, Pakistan, August 2008)
42. Robotics (Students' Q & A session, NED University of Engineering and Technology, Karachi, Pakistan, July 2008)
43. Digital Image Processing (Seminar, NED University of Engineering and Technology, Karachi, Pakistan, August 2007)
44. IR Image Enhancement using H_∞ bounds for surveillance applications (Contributed talk, 1st Qatar University Research Forum, April 2008)
45. Hands-on LabVIEW: Applied DSP, Machine Vision, and Industrial Instrumentation (Tutorial, 6th ACS/IEEE International Conference on Computer Systems and Applications, Doha-Qatar, April 2008)
46. Mathematical modeling for defects in metallic structures (Contributed talk, 2nd Doha Applied Mathematics and Computational Sciences Conference, March 2008).
47. Ultrasonic Nondestructive Evaluation for Defect Classification in Metallic Structures: Mapping Human Expertise for Optimal Operation (Seminar, NESCOM Pakistan, February 2008)
48. Ultrasonic NDT: Basics and Recent Trends (Workshop, Institute of Space Technology, Islamabad, Pakistan, February 2008)
49. Digital Image Processing (3-day workshop, Sir Syed University of Engineering and Technology, Karachi, Pakistan, August 2007)
50. Fuzzy defect-classifier for ultrasonic NDE in pipes (Seminar, Institute of Space Technology, Islamabad, Pakistan, August 2007)
51. Fuzzy Logic: Introduction and Real world applications (Invited talk at IEEE International Conference on Information & Emerging Technologies, Karachi, July 2007).
52. Fuzzy mapping of human heuristics for Ultrasonic Non-destructive testing of pipelines' welding defects (Carnegie-Melon University, Doha, Qatar, April 2007)
53. Career Choices (Seminar, Pakistani Education Center under Pakistani Engineers Forum, Doha-Qatar, April 2007)
54. Ultrasonic NDT for Petroleum Pipelines (1st Ultrasonic research Group Workshop, Sharjah University, Sharjah, U.A.E, March 2007)
55. Advanced Signal Processing In LabVIEW (Tutorial, ISSPA, Sharjah, February 2007)
56. LabVIEW (3-day workshop, Qatar University, Doha, Qatar, September 2006)
57. LabVIEW and Instrumentation Training (10-day workshop, NED University of Engineering and Technology, Karachi, Pakistan, July 2006)
58. MATLAB and Simulink Workshop (5-day workshop, Sir Syed University of Engineering and Technology, Karachi, Pakistan, August 2006)
59. Digital Image Processing (5-day workshop, Institute of Space Technology, Islamabad, Pakistan, August 2006)
60. Robotics: What, How, Where to? (Seminar, Pakistani Engineers Forum, Doha-Qatar, March 2006)
61. Introduction to LabVIEW (Seminar Qatar University, November 2005, March 2006)
62. Robotics (3-day workshop, NED University of Engineering and Technology, Karachi, Pakistan, January 2006)
63. LabView Applications (Short course Institute of Space Technology, Islamabad, Pakistan, June 2005)
64. LabView-based image acquisition (Seminar, NED University of Engineering and Technology, Karachi, Pakistan, August 2005)
65. Digital Image Enhancement Training (Short course, Institute of Space Technology, Islamabad, Pakistan, August 2005)
66. Hands-on LabView (Short course SUPARCO, Karachi, Pakistan, July 2005)
67. LabView Applications (Short course Institute of Space Technology, Islamabad, Pakistan, June 2005)
68. Optical mapping filter for IR image enhancement for surveillance applications (Seminar, LUMS, Lahore, Pakistan, June 2005)
69. Digital Image Processing (5-day workshop, NED University of Engineering and Technology, Karachi, Pakistan, May 2005)
70. Digital Image Processing (Seminar, University of Engineering and Technology, Lahore, Pakistan, August 2004)
71. Infrared Image Enhancement (Seminar, Center for Advanced Scientific Education, Islamabad, Pakistan, August 2004)

72. Digital Image Processing (Seminar, NED University of Engineering and Technology, Karachi, Pakistan, August 2004)
73. Medical Informatics: Applications of DSP in Clinical Problems (Seminar, University of Sharjah, UAE, May 2004)
74. Recent Trends and Future direction in Robotics (Seminar, University of Sharjah, UAE, May 2004)
75. Medical Informatics: Applications of DSP in Clinical Problems (Seminar, NED University of Engineering and Technology, Karachi, Pakistan, September 2002)
76. Recent Trends and Future direction in Robotics (Seminar, Institute of Industrial and Electronics Engineering, Karachi, Pakistan, September 2002)
77. Probabilistic vs. Fuzzy Logic: Which one is better for the Design? (Keynote speech at IEEE Region 10 Annual Student's Conference SCONEST, Karachi, Pakistan, September 2002)
78. Image Processing (5 day workshop, Hamdard Institute of Information Technology, Karachi, Pakistan, September 2002)
79. Recent Trends and Future direction in Robotics (Seminar, Hamdard Institute of Information Technology, Karachi, Pakistan, August 2002)
80. 2D techniques for Blind Deconvolution of Ultrasonic C-Scans (University of Michigan, Dearborn, April 2001)
81. 2D techniques for Blind Deconvolution of Ultrasonic C-Scans (Tulane University, Louisiana, March 2001)
82. Blind Deconvolution of Ultrasonic C-Scans using HOS (ECE Colloquia, ECE Department at UMass Dartmouth, January 26, 2001)
83. Blind Deconvolution of Ultrasonic C-Scans (Seminar, NNJC at ECE Department at UMass Dartmouth, November 2000)
84. Blind Deconvolution of Ultrasonic C-Scans (Seminar, NNJC at ECE Department at UMass Dartmouth, October 2000)
85. Blind Deconvolution of Ultrasonic C-Scans (Seminar, NNJC at ECE Department at UMass Dartmouth, September 2000)
86. Blind Restoration for Ultrasonic C-Scans (Sigma-Xi exhibit, May 8-9, 2000, UMass Dartmouth)
87. Blind Deconvolution of Ultrasonic C-Scans (Seminar, NNJC at ECE Department at UMass Dartmouth, March 2000)
88. Ultrasonic NDE (Demonstration, ATMC at UMass Dartmouth, June 1999).
89. Deconvolution in Ultrasonic NDE (Seminar, NNJC at ECE Department at UMass Dartmouth, February 1999).
90. Ultrasonic NDE (Workshop, KFUPM, Saudi Arabia, May 1998).
91. MATLAB (Workshop, NED University, Karachi, Pakistan, 1997).
92. Theory of Voltage Collapse (Seminar, EE Dept., KFUPM, 1996).
93. Introduction to MATLAB (Seminar, NED University, Karachi, Pakistan, 1996).

Latest update March 03, 2025