



Home Address:

P.O. Box 3210
Irbid 21110, Jordan
Tel. (Cell.): +962-799-980638
Email: mistarihi@just.edu.jo

Office Address:

Electrical Engineering Department
Jordan University of Science and Technology
P.O. Box 3030
Irbid 22110, Jordan
Tel. (Office): +962-2-7201000, Ext. 22477
Fax: +962-2-7201074

Education

- Ph.D. in Electrical Engineering
University of Minnesota, Minneapolis, MN, USA 10/2005
Thesis: Optimization of Contrast Sensitivity and Specificity Of Post-Beamforming Volterra Filters for Contrast-Assisted Nonlinear Pulse-Echo Ultrasonic Imaging
- M.E.E. in Electrical Engineering
University of Minnesota, Minneapolis, MN, USA 10/2005
- M.S. in Electrical Engineering
Jordan University of Science and Technology, Irbid, Jordan 10/1996
Thesis: Optimization of Distributed Detection Systems
- B.Sc. in Electrical Engineering
Jordan University of Science and Technology, Irbid, Jordan 06/1992

Research and Area of Interest

Digital signal processing, image processing, ultrasound imaging, image processing and MATLAB based detection of cancer, digital signal processing for communications, signal processing based harmonic reduction at distribution power lines, wireless communications and mobile networks, performance evaluation of wireless communication systems over fading channels, security of wireless systems, WiMAX, wireless Ad Hoc networks, wireless sensor networks, and wireless body area networks.

Professional Experience

- 09/08/2021 – Present, Professor, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 11/16/2020, Promoted to Professor, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 09/08/2019 – 09/07/2021, Associate Professor, sabbatical leave at the Electrical Engineering Department, The American University of the Middle East (AUM), Egaila, Kuwait.
- 09/29/2014 – 09/07/2019, Associate Professor, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 09/29/2014, Promoted to Associate Professor, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 11/21/2006 – 09/29/2014, Assistant Professor, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 11/21/2006, Promoted to Assistant Professor, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 11/15/2005 – 11/21/2006, Full Time Lecturer, at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.
- 08/31/2004 – 08/30/2005, Teaching Assistant (TA), at the Electrical and Computer Engineering Department, University of Minnesota, Minneapolis, MN, USA.
- 05/01/2002 – 08/30/2004, Research Assistant (RA), at the Electrical and Computer Engineering Department, University of Minnesota, Minneapolis, MN, USA.
- 12/16/1997 – 12/31/2000, Head of the Measurement & Calibration Laboratory, Royal Scientific Society, Amman, Jordan. During this period and under my supervision the Lab got an accreditation from the PTB, Germany.
- 01/01/1996 – 12/15/1997, Calibration Engineer, Measurement & Calibration Laboratory, Royal Scientific Society, Amman, Jordan.
- 05/01/1995 – 12/31//1995, Testing and Quality Control Engineer, Testing and Quality Control Laboratory, Royal Scientific Society, Amman, Jordan.
- 04/16/1994 – 04/31/1995, Research Engineer, Photovoltaics (PV) Division, Renewable Energy Research Center (RERC), Royal Scientific Society, Amman, Jordan. Major work during this period: Research in the field of PV projects funded by national and international programs, Performance Evaluation of PV Systems, Solar Radiation Measurements and Evaluation, Design of Solar PV Systems.
- 09/1992 – 06/1994, Teaching Assistant (TA) at the Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.

Awards

- 06/2001, Ph.D. Scholarship from Jordan University of Science and Technology, Irbid, Jordan.

Courses Taught

B.Sc. Courses

1. EE 204 Introduction to Linear Systems
2. EE 210 Circuits I
3. EE 212 Electric Circuit Analysis
4. EE 213 Electrical Circuits Lab.
5. EE 220 Introduction to Electronics
6. EE 260 Signals and Systems Analysis
7. EE 303 Principles of Electrical Engineering (non EE students)
8. EE 305 Numerical Methods for Engineers
9. EE 310 Electric Circuits II
10. EE 320 Electronic Circuits
11. EE 321 Fundamentals of Electronics (non EE students)
12. EE 322 Electronic Circuits Lab.
13. EE 341 Measurement Systems & Sensors.
14. EE 360 Random Signal Analysis
15. EE 420 Digital Electronic Circuits
16. EE 422 Digital Electronic Circuits Lab.
17. EE 435 Power Electronics
18. EE 440 Control Systems
19. EE 442 Instrumentation & Control Systems Lab.
20. EE 450 Communication Systems
21. EE 460 Digital Signal Processing
22. EE 480 Power Systems
23. EE 485 Power Systems Analysis
24. EE 524 RF Communication Circuits
25. EE 525 Electronic Circuit Design
26. EE 551 Digital Communications
27. EE 559 Wireless and Mobile Communications
28. EE 575 Communication Networks
29. EE 565 Digital Speech Processing
30. EE 566 Digital Image Processing
31. EE 591 Graduation Project I
32. EE 592 Graduation Project II

M.Sc. Courses

1. EE 720 RF Circuit Design of Wireless Systems
2. EE 768 Digital Signal Processing for Communications
3. EE 772 Wireless Systems Security
4. EE 775 Performance Analysis of Communications Networks
5. EE 790 Seminar
6. EE 795 Seminar in Wireless Communications

Undergraduate courses I am interested in to teach

1. EE 345 Introduction to Microcontrollers
2. EE 346 Microcontrollers Lab.
3. EE 470 Microcontrollers & Embedded Systems
4. EE 472 Microcontrollers & Embedded Systems Lab.
5. EE 532 Renewable Energy Systems
6. EE 540 Robotics
7. EE 541 Sensors & Actuators
8. BME 313 Medical Electronics I
9. BME 314 Medical Electronics II
10. BME 460 Medical Imaging Systems
11. BME 563 Diagnostic & Therapeutic Ultrasound
12. BME 565 Magnetic Resonance Imaging

Workshops

1. Testing and Evaluation
2. Modern University Teaching Methods
3. Excellence in scientific research: from idea to application
4. Statistical analysis using SPSS
5. Quality Matters Rubric

Activities, Services, and committees

1. Secretary of the EE Department's Council for three years.
2. Head of the EE Department's Social Committee for ten years.
3. EE Department Graduation Project Coordinator for three years.
4. EE Department practical training and internship coordinator for one year.
5. Member of the EE Department's ABET Accreditation Committee for two years.
6. On the defense committee of more than 50 Master students at JUST and at other universities.
7. Experience in developing course curriculum (B.Sc. & M.Sc.) as per accreditation and international standards.
8. Member of the University Committee for sitting the rules and establishing the measurement and calibration center at JUST for one year.
9. Member of the accreditation and quality assurance commission for higher education institutions (AQACHEI) committees for accrediting engineering programs in public and private universities in Jordan.
10. Member of the accreditation and quality assurance commission for higher education institutions (AQACHEI) committees to raise general and specific absorptive capacities in in public and private universities in Jordan.
11. Member of the accreditation and quality assurance commission for higher education institutions (AQACHEI) committees for preparing, writing and evaluating university competence exam.

Technical Program Committee (TPC)

1. IEEE 36th International Conference on Microelectronics (ICM 2024), Hamad Bin Khalifa University, Doha Qatar, December 14-17, 2024.
2. IEEE 35th International Conference on Microelectronics (ICM 2023), Khalifa University, Abu Dhabi, UAE, December 17-20, 2023.
3. IEEE 33rd International Conference on Microelectronics (MIEL), Nis, Serbia, October 16-18, 2021.
4. IEEE 25th International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2015), Hong Kong, China, August 30-September 2, 2015.
5. The First International Conference on Wireless Communications and Computing Networks (WCCN2015), Beijing, China, July 20-21, 2015.
6. 2015 International Conference on Single Processing & Data Mining (ICSPDM' 2015), Istanbul, Turkey, 26-28 July 2015.
7. 2014 International Conference on Wireless Communications and Signal Processing (WCSP 2014), Hefei, China, 23-25 October 2014.
8. 2nd International Conference on Telecommunication Systems and Networks (MIC-Telecom 2014), Istanbul, Turkey, 19-21 December 2014.
9. 6th International Conference on Communications, Signals and Coding (MIC-CSC2013), Amman, Jordan, 23-25 August 2013.
10. IEEE International Conference on Control System, Computing and Engineering (ICCSCE 2012), Penang, Malaysia, 23-25 November 2012.
11. 5th International Conference on Communications, Propagation, and Electronics (MIC-CPE2012), Istanbul, Turkey, 3-5 February 2012.
12. 5th International Conference on Communications, Networking and Information Technology (MIC-CNIT2011), Dubai, UAE, 16-18 December 2011.
13. 1st International Conference on Biomedical Engineering, Electronics and Nanotechnology (MIC-BEN2011), Amman, Jordan, 9-11 September 2011.

Reviewer for the following Journals:

1. IET Image Processing.
2. Medical Image Analysis, Elsevier.
3. Journal of Real-Time Image Processing (JRTIP), Springer.
4. Computers and Electrical Engineering, Elsevier.
5. IET Communications.
6. AEU - International Journal of Electronics and Communications, Elsevier.
7. Transactions on Emerging Telecommunications Technologies (ETT), Wiley.
8. International Journal of Communication Systems, Wiley.
9. Wireless Personal Communications, Springer.
10. Ad Hoc Networks, Elsevier.
11. Computer Networks, Elsevier.
12. Journal of Network and Computer Applications, Elsevier.
13. Wireless Networks, Springer.
14. Mobile Networks and Applications, Springer.
15. Ad Hoc & Sensor Wireless Networks, Old City Publishing.

Master Thesis I supervised:

1. Bayan Abdullah Odat, "A Novel Cluster-based Speed-aware Routing Protocol for Vehicular Ad-hoc Networks," Jordan University of Science and Technology, JUST, Irbid, Jordan, expected June 2024.
2. Mira Ismail Maaytah, "A New Efficient Routing Protocol for Vehicular Adhoc Networks," Jordan University of Science and Technology, JUST, Irbid, Jordan, expected June 2024.
3. Mohammad Abo Aqoulah, "Hybrid THz/mmWave Transmission Scheme with Adaptive Combining for Mobile Networks," Jordan University of Science and Technology, JUST, Irbid, Jordan, June 2023.
4. Razan Adnan Shatnawi, "The Analysis of Device-to-Device Communication System Operating in Underlying Cellular Networks on Multiple Bands over Nakagami-m Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, March 2021.
5. Areen Mahmoud Abedrabbo, "Performance Analysis of 5G Heterogeneous Networks Under the Impact of Aggregate Interference Over Nakagami-m Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, August 2020.
6. Ayat Al-Rjoob, "Physical Layer Security in Spectrum Sharing Systems with Transmitter-Receiver Pairs Cooperation," Jordan University of Science and Technology, JUST, Irbid, Jordan, January 2020.
7. Arwa Sh. Aqel "Performance Analysis of Relay-Assisted Cooperative Diversity Systems using Best-Path Selection Technique over Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2019.
8. Shaima' S. Abidrabbu "Performance Analysis of Resource Allocation in Cognitive Radio Networks (CRNs) using Game Theoretic Approach over Nakagami- m Fading Channel," Jordan University of Science and Technology, JUST, Irbid, Jordan, July 2019.
9. Ayyam A. Saddouq "Physical-Layer Security in Cooperative Wireless Networks with Multiple Relays Over α - μ Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, January 2019.
10. Lama N. Ibrahim "Performance Analysis of Dual Hop Amplify-and-Forward Cognitive Relay Networks with Interference Power Constraints over Mixed Fading Channels for End User Mobile," Jordan University of Science and Technology, JUST, Irbid, Jordan, August 2016.
11. Islam M. Tanash, "Physical-Layer Security in Cooperative Wireless Networks with Multiple Relays Over Nakagami-m Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, July 2016.
12. Mohammad F. Mohaisen "Bit Error Rate Analysis of Relay-Based Cooperative Diversity Networks over Alpha-Mu (α - μ) Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2014.
13. Moawiah M. Alhulayil "Performance Analysis of Amplify-and-Forward Cognitive Relay Networks with Interference Power Constraints Over Nakagami-m Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, October 2014.
14. Rami R. Bani Hani, "Conflict Based Matrix Optimization for Network Coding Enhancement," Jordan University of Science and Technology, JUST, Irbid, Jordan, May 2014.
15. Nedal R. Altaradeh, "A novel Approach for CMOS Invertor Modeling in Sub – 100 Nanoscale," Jordan University of Science and Technology, JUST, Irbid, Jordan, March 2013.
16. Emad S. Al-Nawafah, "Determining the Number of Active Sensor Nodes for Efficient Power and Area Coverage Aware Protocol in Wireless Sensor Networks," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2012.
17. Muath A. Wahdan, "Prediction of Efficient Adaptive Energy-Based on Algorithm for Tracking Target in Wireless Sensor Networks," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2012.
18. Maiss M. Al-Khasawneh, "Performance of Chaotic Signals in Cooperative Communication System Over Multipath Fading Channels," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2012.

19. Rami F. Mohaisen, "Performance Analysis of Relay-based Cooperative Diversity over Multipath Fading Channels with Interference," Jordan University of Science and Technology, JUST, Irbid, Jordan, July 2012.
20. Monir H. Abughalwa, "Comparison of Analytical and Simulated BER Performance of Uplink CDMA-SFBC Systems," Jordan University of Science and Technology, JUST, Irbid, Jordan, May 2011.
21. Mohammad S. Marei, "WiMAX Performance Analysis and Bandwidth Management," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2010.
22. Zaid S. Al-Talib, "Wireless Charging for Wireless Sensor Networks Using Broadcast Frequencies," Jordan University of Science and Technology, JUST, Irbid, Jordan, April 2010.
23. Ahmad J. M. Qudaimat, "Dynamic Addressing for Mobile Ad-HOC Networks," Jordan University of Science and Technology, JUST, Irbid, Jordan, January 2010.
24. Mazen Oqauly, "Current Harmonic Reduction at Distribution Busbar Using Neural Network Technique," Jordan University of Science and Technology, JUST, Irbid, Jordan, December 2008.

Selected Graduation Projects I supervised:

Jordan University of Science and Technology, JUST, Irbid, Jordan

1. Smart patient bed.
2. Wireless voice controlled wheelchair.
3. Walking stick for blind people using ultrasonic sensor.
4. Anesthesia control system with infusion pump using respiratory and heartbeat rate.
5. Smart home automation system.
6. Fire alarm and warning system with Smoke, Temperature Sensor using Arduino.
7. Accident Detection and warning System & Rescue System for Ambulance.
8. Far field RF signals energy harvesting system.
9. Ultrasonic radar speed meter.
10. Line follower coordinate driven robot car.
11. Industrial security robot with the motion detection system.
12. Fire-fighting robot with water jet spray remotely operated by Android.
13. Voice controlled robotic vehicle with long distance speech recognition.
14. Wireless operated surveillance robot with night vision wireless camera.
15. Live human detection and alerting robot in war fields and disaster areas.
16. Solar cell voice recognition robotic car.
17. High efficiency battery charger for Photovoltaic Power Systems.
18. Maximum power point tracking for electric car solar charging stations.
19. Solar powered Arduino based automated irrigation system.
20. Solar powered Arduino weather station.

American University of the Middle East (AUM), Egaila, Kuwait.

1. Vehicle tracking & accident detection and warning system.
2. Wireless voice controlled wheelchair.
3. Non-contact infrared thermometer with IR temperature sensor.
4. Line follower robot with IR sensor & microcontroller.

Projects I am interested in to supervise

1. Image processing and MATLAB based verification of signature.
2. Image processing and MATLAB based detection of kidney stone.
3. Image processing and MATLAB based detection of skin cancer.
4. Image processing and MATLAB based detection of lung cancer.
5. Image processing and MATLAB based detection of liver tumor.

Book Chapters

1. Arwa S. Aqel, and Mamoun F. Al-Mistarihi, “Performance Evaluation of Multi-hop Multi-branch AF Relaying Cooperative Diversity Network,” Proceedings of the Second International Conference on Advances in Computing Research (ACR’24), Lecture Notes in Networks and Systems, Springer, vol 956, ISBN-13: 978-3-031-56949-4, pp. 479-493, doi.: 10.1007/978-3-031-56950-0_40, 2024.
2. Mamoun F. Al-Mistarihi, Arwa S. Aqel, and Khalid A. Darabkh, “BER Analysis in Dual Hop Differential Amplify-and-Forward Relaying Systems with Selection Combining Using M-ary Phase-Shift Keying over Nakagami-m Fading Channels,” *Internet of Things, Smart Spaces, and Next Generation Networks and Systems, NEW2AN 2019, ruSMART 2019, NsCC 2019, Lecture Notes in Computer Science, Springer*, ISBN-13: 978-3030308582, pp. 688-699, doi.: 10.1007/978-3-030-30859-9_60, 2019.
3. Mamoun F. Al-Mistarihi, Rami Mohaisen, and Khalid A. Darabkh, “Closed-form Expression for BER in Relay-Based DF Cooperative Diversity Systems over Nakagami-m Fading Channels with Non-Identical Interferers,” *Internet of Things, Smart Spaces, and Next Generation Networks and Systems, NEW2AN 2019, ruSMART 2019, NsCC 2019, Lecture Notes in Computer Science, Springer*, ISBN-13: 978-3030308582, pp. 700-709, doi.: 10.1007/978-3-030-30859-9_61, 2019.
4. Islam M. Tanash, Mamoun F. Al-Mistarihi, and Amer M. Magableh, “Physical-Layer Security for DF Two-Way Dual-Hop Cooperative Wireless Networks over Nakagami-m Fading Channels,” *Internet of Things, Smart Spaces, and Next Generation Networks and Systems, NEW2AN 2017, ruSMART 2017, NsCC 2017, Lecture Notes in Computer Science, Springer*, ISBN-13: 978-3319673790, pp. 258-269, doi: 10.1007/978-3-319-67380-6_24, 2017.
5. Islam M. Tanash, Amer M. Magableh, and Mamoun F. Al-Mistarihi, “Physical-Layer Security for DF Two-Way Full-Duplex Cooperative Wireless Networks over Rayleigh Fading Channels,” *Internet of Things, Smart Spaces, and Next Generation Networks and Systems, NEW2AN 2017, ruSMART 2017, NsCC 2017, Lecture Notes in Computer Science, Springer*, ISBN-13: 978-3319673790, pp. 270-279, doi: 10.1007/978-3-319-67380-6_25, 2017.
6. Rami Mohaisen, and Mamoun F. Al-Mistarihi, “Performance Evaluation of Bit Error Rate in Relay-Based Cooperative Diversity Systems over Rayleigh Fading Channels with Interference,” *Wired/Wireless Internet Communications, WWIC 2013, Lecture Notes in Computer Science Series, Springer*, ISBN-13: 978-3642384004, pp. 241-250, doi: 10.1007/978-3-642-38401-1_19, 2013.

Journal Papers

1. Khalid A. Darabkh, Mamoun F. Al-Mistarihi, and Bayan A. Odat, “Leveraging fog computing and software-defined networking for a novel velocity-aware routing protocol with election and handover thresholds in VANETs,” *Journal of Supercomputing, Springer*, vol. 81, doi.: 10.1007/s11227-024-06883-3, 2025.

2. Khalid A. Darabkh, Mamoun F. Al-Mistarihi, and Mera I. Al-Maaitah, "Next-generation routing for autonomous vehicle networks based on innovative clustering: integrating SDN and fog computing along with AODV upon failure," *Journal of Supercomputing*, Springer, vol. 81, doi.: 10.1007/s11227-024-06880-6, 2025.
3. Fadi Nessir Zghoul, Wafaa Migdadi, Mamoun F. Al-Mistarihi, "Optimizing power consumption in novel electrical design for single ended comparator circuit," *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 15, no. 1, pp. 208-223, doi.: 10.11591/ijece.v15i1.pp208-223, 2025.
4. Ayat M. Al-Rjoob, Ahmad A. Ababnah, Mamoun F. Al-Mistarihi and Khalid A. Darabkh, "Physical-layer security for primary users in 5G underlay cognitive radio system via artificial-noise-aided by secondary users," *International Journal of Computers and Applications*, doi.:10.1080/1206212X.2024.2380666, 2024.
5. Arwa Sh. Aqel, and Mamoun F. Al-Mistarihi, "Performance Analysis of Dual-Hop Dual-Branch Amplify-and-forward Relaying Cooperative Diversity System Using Best-Path Selection Technique over Nakagami-m Fading Channels," *Transactions on Emerging Telecommunications Technologies (ETT)*, Wiley, doi: 10.1002/ett.4877, 2023.
6. Lama N. Ibrahim, Mamoun F. Al-Mistarihi, Mahmoud A. Khodeir, Moawiah Alhulayil, and Khalid A. Darabkh, "Best Relay Selection Strategy in Cooperative Spectrum Sharing Framework with Mobile-Based End User," *Applied Sciences*, MDPI, vol. 13, issue 14, doi.: 10.3390/app13148127, 2023.
7. Moawiah Alhulayil, Mamoun F. Al-Mistarihi, and Mohammad M. Shurman, "Performance Analysis of Dual-Hop AF Cognitive Relay Networks with Best Selection and Interference Constraints," *Electronics*, vol. 12, no. 1, 124; doi.: 10.3390/electronics12010124, 2023.
8. Mahmoud A. Khodeir, Mamoun F. Al-Mistarihi, and Lama N. Ibrahim, "Performance Evaluation of Cognitive Relay Networks for End User Mobile Over Mixed Realistic Channels," *IET Communications*, vol. 17, issue 2, pp. 228-245, doi:10.1049/cmu2.12528, 2023.
9. Areen M. Abidrabbu, and Mamoun F. Al-Mistarihi, "Performance analysis of 5G heterogeneous networks under the impact of aggregate interference over Nakagami-m fading channels," *Transactions on Emerging Telecommunications Technologies (ETT)*, Wiley, doi: 10.1002/ett.4524, 2022.
10. Mamoun F. Al-Mistarihi, Mariam M. Harb, Khalid A. Darabkh, and Arwa Sh. Aqel, "On the Performance Analysis of Dual Hop Relaying Systems Using Differential Amplify-and-Forward Along with Post-Detection Selection Combining Techniques over Nakagami-m Fading Channels," *Transactions on Emerging Telecommunications Technologies (ETT)*, Wiley, doi.:10.1002/ett.4065, 2020.
11. Mamoun F. Al-Mistarihi, Rami Mohaisen, and Khalid A. Darabkh, "Performance evaluation of decode and forward cooperative diversity systems over Nakagami-m fading channels with non-identical interferers," *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 10, no. 5, pp. 5316-5328, doi.:10.11591/ijece.v10i5. pp5316-5328, 2020.
12. Abdoul Rjoub, Mamoun Al-Mistarihi, and Nedal Al Taradeh, "Accurate leakage current models for MOSFET nanoscale devices," *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 10, no. 3, pp. 2313-2321, doi.:10.11591/ijece.v10i3. pp2313-2321, 2020.
13. Mamoun F. Al-Mistarihi, Rami Mohaisen, and Khalid A. Darabkh, "Performance of Relay-Based Decode and Forward Cooperative Diversity Systems over Rayleigh Fading Channels with Non-Identical Interferers," *IET Communications*, vol. 13, issue 19, pp. 3135-3144, doi: 10.1049/iet-com.2019.0129, 2019.
14. Mamoun F. Al-Mistarihi, Islam M. Tanash, Fedaa Yaseen, and Khalid A. Darabkh, "Protecting Source Location Privacy in a Clustered Wireless Sensor Networks against Local Eavesdroppers," *Mobile Networks and Applications*, Springer, doi: 10.1007/s11036-018-1189-6, 2018.
15. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, Sharhabeel H. Alnabelsi, and Rami R. Bani Hani, "A Novel Network Coding Approach: Packets Conflict Based for Matrix Optimization," *Journal of Theoretical and Applied Information Technology*, vol. 95, no. 20, pp. 5580-5594, 2017.

16. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, "Dynamic Distribution of Security Keys and IP Addresses Coalition Protocol for Mobile Ad Hoc Networks," *Automatika, Journal for Control, Measurement, Electronics, Computing and Communications, Taylor & Francis*, vol. 57, no. 4, pp. 1020-1034, doi:10.7305/ automatika.2017.12.1233, 2017.
17. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, and Moawiah Alhulayil, "Performance Analysis of Amplify-and-forward Cognitive Relay Networks with Interference Power Constraints Over Nakagami-m Fading Channels," *IET Communications*, vol. 10, issue 5, pp. 594-605, doi:10.1049/iet-com.2014.1182, 2016.
18. Mamoun F. Al-Mistarihi, Rami Mohaisen, Ashraf Sharaqa, Mohammad M. Shurman, and Khalid A. Darabkh, "Performance evaluation of multiuser diversity in multiuser two-hop cooperative multi-relay wireless networks using maximal ratio combining over Rayleigh fading channels," *International Journal of Communication Systems, Wiley*, vol. 28, issue 1, pp. 71-90, doi:10.1002/dac.2640, 2015.
19. Moad Y. Mowafi, Mamoun F. Al-Mistarihi, and Mohammad S. Marei, "Cognitive Radio Based Bandwidth Allocation Scheme for WiMAX Networks," *Journal of Communications*, vol. 7, no. 10, pp. 758-764, doi:10.4304/jcm.7.10.758-764, 2012.
20. Khalid A. Darabkh, Shereen S. Ismail, Mohammad Al-Shurman, Iyad F. Jafar, Eman Alkhader, and Mamoun F. Al-Mistarihi, "Performance Evaluation of Selective and Adaptive Heads Clustering Algorithms over Wireless Sensor Networks," *Journal of Network and Computer Applications, Elsevier*, vol. 35, pp. 2068-2080, doi:10.1016/j.jnca.2012.08.008, 2012.
21. Mamoun F. Al-Mistarihi, Mohammad Al-Shurman, and Ahmad Qudaimat, "Tree Based Dynamic Address Autoconfiguration in Mobile Ad-Hoc Networks," *Computer Networks, Elsevier*, vol. 55, pp. 1894-1908, doi:10.1016/j.comnet.2011.01.019, 2011.
22. Mamoun F. Al-Mistarihi, and Rami Mohaisen, "Performance Analysis of Multiuser Diversity in Multiuser Two-Hop Decode-and-Forward Cooperative Multi-Relay Wireless Networks," *International Journal of Electronics and Communication Engineering*, vol. 5, no. 12, pp. 1630-1634, doi: 10.5281/zenodo.1335186, 2011.

Journal Papers under review

1. Jehad Ababnen, Mamoun F. Al-Mistarihi, and Eman Khraisat, "Design of Linear Phase Infinite Impulse Response Filter Using Differential Evolution Algorithm ith Application to Electrocardiogram,"
2. Moawiah Alhulayil, Mohammad Abo Aqoulah, Miguel Lopez-Benitez, and Mamoun F. Al-Mistarihi, "Hybrid THz/mmWave Transmission Scheme in URLLC Communications,"
3. Razan A. Shatnawi, Mahmoud A. Khodeir, Mamoun F. Al-Mistarihi, and Eyad T. Al-Zuraiqi, "The Analysis of Device-to-Device Communication System Oprating in Underlying Cellular Networks on Multiple Bands Over Nakagami-m Fading Channels,"
4. Arwa Sh. Aqel, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, "Evaluation of Multi-Hop Multi-Branch AF Relaying Cooperative Network Performance Over Nakagami-m Fading Channels Using Best-Path Selection Combining Technique,"
5. Ayat Al-Rjoob, Ahmad Ababneh, and Mamoun F. Al-Mistarihi, "Secure 5G Coordinating Spectrum Sharing System with Cooperation Transmitter and Receiver Pairs,"
6. Ayyam Sadouk, Mamoun F. Al-Mistarihi, Mahmoud A. Khodeir, and Khalid A. Darabkh, "Performance Analysis of Physical Layer Security of Relay-Based Decode-and-Forward Half-Duplex Two-way Cooperative Diversity Systems over Alpha-Mu Fading Channels,"

Journal Papers ready to submit

1. Mahmoud A. Khodeir, Mamoun F. Al-Mistarihi, and Shaima Abidrabbu, "Performance Analysis of Resource Allocation in Cognitive Radio Networks using Game Theoretic Approach,"
2. Mahmoud A. Khodeir, Mamoun F. Al-Mistarihi, and Shaima Abidrabbu, "The Performance Analysis of

- Non-Cooperative Joint Rate and Power Control Game over Nakagami-m Fading Channel,”
3. Mamoun F. Al-Mistarihi, Rami Mohaisen, and Khalid A. Darabkh, “Performance Analysis of Relay-based Decode-and-Forward Cooperative Diversity Systems over Nakagami-m and Rayleigh Fading Channels with the Presence of Non-Identical Interference,”
 4. Mamoun F. Al-Mistarihi, Amer M. Magableh, Rami Mohaisen, and Moawiah Alhulayil, “Performance Evaluation of Relay-Based Cooperative Diversity Systems Over Mixed Fading Channels with Interference Near both the Relay and the Destination,”
 5. Islam M. Tanash, Amer M. Magableh and Mamoun F. Al-Mistarihi, “An Integration of Source and Jammer for Physical Layer Security of Relay-Based Decode-and-Forward Half-Duplex Two-way Cooperative Diversity Systems over Nakagami-m Fading Channels,”
 6. Islam M. Tanash, Mamoun F. Al-Mistarihi, and Amer M. Magableh, “Physical-Layer Security of Relay-Based Decode-and-Forward Full-Duplex Two-Way Cooperative Wireless Networks over Rayleigh Fading Channels,”
 7. Ayyam Sadouk, Mamoun F. Al-Mistarihi, and Mahmoud A. Khodeir, “Performance Analysis of Physical Layer Security of Relay-Based Decode-and-Forward Full-Duplex Two-Way Cooperative Wireless Networks over Alpha-Mu Fading Channels,”
 8. Mamoun F. Al-Mistarihi, and Arwa Sh. Aqel, “Performance Analysis of Physical Layer Security of Relay-Based Decode-and-Forward Full-Duplex Two-Way Cooperative Wireless Networks over Nakagami-m Fading Channels,”
 9. Amer M. Magableh, Mamoun F. Al-Mistarihi, and Mohammad Mohaisen, “Bit Error Rate Analysis of Relay-Based Cooperative Diversity Networks over Alpha-Mu Fading Channels,”
 10. Mamoun F. Al-Mistarihi, Amer M. Magableh, and Maiss M. Al-Khasawneh, “Performance of Chaotic Signals in Cooperative Communication System Over Multipath Fading Channels,”

Conference Papers

1. Khalid A. Darabkh, Mamoun F. Al-Mistarihi, and Bayan A. Odat, “Integrating Software Defined Network and Fog Computing for a Novel Routing Protocol in Vehicular Ad-Hoc Networks,” *Proc. of the 7th International Conference on Advanced Communication Technologies and Networking (CommNet 2024)*, Rabat, Morocco, December 4-6, 2024.
2. Ayam Saddouq, Mamoun F. Al-Mistarihi, Mahmoud A. Khodeir, and Khalid A. Darabkh, “Enhancing Physical-Layer Security in Full-Duplex Cooperative Wireless Networks over $\alpha - \mu$ Fading Channels,” *Proc. of the 7th International Conference on Advanced Communication Technologies and Networking (CommNet 2024)*, Rabat, Morocco, December 4-6, 2024.
3. Razan A. Shatnai, Mahmoud A. Khodeir, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, “Power Savings of Device-to-Device (D2D) Communication System Using Several Bands 5G Underlying Cellular Networks,” *Proc. of the 32nd International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2024*, doi.:10.23919/SoftCOM62040.2024.10721826, Bol (island of Brac), Split, Croatia, September 26-28, 2024.
4. Ayat M. Alrjoob, Ahmad A. Ababnah, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, “Enhanced 5G Device-to-Device (D2D) Security in Spectrum Sharing System,” *Proc. of the 32nd International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2024*, doi.:10.23919/SoftCOM62040.2024.10721885, Bol (island of Brac), Split, Croatia, September 26-28, 2024.
5. Ayat M. Alrjoob, Ahmad A. Ababnah, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, “Securing Primary Users in IoT 5G Cognitive Radio Networks,” *Proc. of the 32nd International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2024*, doi.:10.23919/SoftCOM62040.2024.10721968, Bol (island of Brac), Split, Croatia, September 26-28, 2024.
6. Ayam Saddouq, Mamoun F. Al-Mistarihi, Mahmoud A. Khodeir, and Khalid A. Darabkh, “Physical-Layer Security for Cooperative Wireless Networks over Alpha-Mu Fading Channels,” *Proc. of the 8th International Conference on Information Technology, Information Systems and Electrical Engineering, ICITISEE-2024*, Grand Keisha Yogyakarta, Indonesia, August 29-30, 2024.

7. Khalid A. Darabkh, Mamoun F. Al-Mistarihi, and Mera I. Al-Maaitah, "A Yet Powerful Routing Protocol for Vehicular Ad-hoc Networks (VANETs) Utilizing Software Defined Network (SDN) and Fog Computing," *Proc. of the 8th International Conference on Information Technology, Information Systems and Electrical Engineering, ICITISEE-2024*, Grand Keisha Yogyakarta, Indonesia, August 29-30, 2024.
8. Mohaisen, R., Al-Mistarihi, M.F., Darabkh, K.A., "Outage Probability Evaluation for Relay-Based DF Cooperative Diversity Systems with Multipath Fading Channels and Non-Identical Interferers," *Proc. 5th IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE)*, doi: 10.1109/ICRAIE51050.2020.9358336, Jaipur, India, December 01-03, 2020.
9. Mohaisen, R., Al-Mistarihi, M.F., Darabkh, K.A., "Bit-Error Rate Analysis of Relay-Based DF Cooperative Diversity Systems Considering Multipath Fading Channels Along with Non-Identical Interferers," *Proc. 7th NAFOSTED Conference on Information and Computer Science (NICS)*, doi: 10.1109/NICS51282.2020.9335855, Ho Chi Minh City, Vietnam, November 26-27, 2020.
10. Mamoun F. Al-Mistarihi, Rami Mohaisen, and Khalid A. Darabkh, "BER Analysis in Relay-Based DF Cooperative Diversity Systems Over Rayleigh Fading Channels with Non-Identical Interferers Near the Destination," *Proc. International Conference on Advanced Communication Technologies and Networking, CommNet 2019*, doi: 10.1109/COMMNET.2019.8742388, Rabat, Morocco, April 12-14, 2019.
11. Razan F. Shatnawi, Duaa Sh. Almomani, Mamoun F. Al-Mistarihi, and Mahmoud A. Khodeir, "On the secrecy outage probability of a Physical Layer with Maximal Ratio Combining over Mixed Fading Channels," *Proc. IEEE 9th International Conference on Information and Communication Systems, ICICS 2018*, doi: 10.1109/IACS.2018.8355468, Jordan University of Science and Technology, Irbid, Jordan, April 3-5, 2018.
12. Hamzah A. Yaseen, Mohammad Alsalam, Abdallah Jarwan, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, "A Secure Energy-Aware Adaptive Watermarking System for Wireless Image Sensor Networks," *Proc. The 15th International Multi-Conference on Systems, Signals and Devices, SSD 2018*, doi: 10.1109/SSD.2018.8570457, Hammamet, Tunisia, March 19 – 22, 2018.
13. Islam M. Tanash, Fedaa Yaseen, Mamoun F. Al-Mistarihi, Basheer Al-Duwairi, and Mohammad Shurman, "Source Location Privacy in a Cluster-Based Wireless Sensor Networks against Local Adversary," *Proc. IEEE 8th International Conference on Information and Communication Systems, ICICS 2017*, doi: 10.1109/IACS.2017.7921996, Jordan University of Science and Technology, Irbid, Jordan, April 4-6, 2017.
14. Lama N. Ibrahim, Mahmoud A. Khodeir, and Mamoun F. Al-Mistarihi, "Outage Probability for End User Mobile in Cognitive Relay Networks Over Mixed Fading Channels," *Proc. IEEE 8th International Conference on Information and Communication Systems, ICICS 2017*, doi: 10.1109/IACS.2017.7921987, Jordan University of Science and Technology, Irbid, Jordan, April 4-6, 2017.
15. Mahmoud A. Khodeir, Mamoun F. Al-Mistarihi, Razan Shatnawi and Laila Al Saleh, "Security Enhancement Using Maximal Ratio Combining Diversity Over Nakagami-m Fading," *Proc. 14th Annual IEEE Consumer Communications & Networking Conference, CCNC 2017*, doi: 10.1109/CCNC.2017.8013421, Las Vegas, Nevada, USA, January 8-11, 2017.
16. Mariam M. Harb, and Mamoun F. Al-Mistarihi, "Dual Hop Differential Amplify-and-Forward Relaying with Selection Combining Cooperative Diversity over Nakagami-m Fading Channels," *Proc. IEEE 8th International Conference on Communication Software and Networks, ICCSN 2016*, pp. 225-228, Beijing, China, doi: 10.1109/ICCSN.2016.7586654 June 4-6, 2016.
17. Lama N. Ibrahim, Mamoun F. Al-Mistarihi, and Mahmoud A. Khodeir, "On the Outage Probability in Cognitive Amplify-and-Forward Relaying Systems over Mixed Fading Channels for End User Mobile," *Proc. IEEE 8th International Conference on Communication Software and Networks, ICCSN 2016*, pp. 221-224, Beijing, China, doi: 10.1109/ICCSN.2016.7586653 June 4-6, 2016.
18. Suzan Al-Zoubi, Rami Mohaisen, Mamoun F. Al-Mistarihi, Sari M. Khatalin and Mahmoud A. Khodeir, "On the Outage Probability of DF Relay Selection Cooperative Wireless Networks over Nakagami-m

- Fading Channels,” *Proc. IEEE 7th International Conference on Information and Communication Systems, ICICS 2016*, Jordan University of Science and Technology, Irbid, Jordan, doi: 10.1109/IACS.2016.7476108 April 5-7, 2016.
19. Muneer M. Al-Zu'bi, Mamoun F. Al-Mistarihi, and Faeik T. Al-Rabee, “Performance analysis of MIMO system over α - μ fading channel for full scheduling scheme,” *Proc. 9th Jordanian International Electrical and Electronics Engineering Conference, JIEEEEC2015*, doi: 10.1109/JIEEEEC.2015.7470741, Amman, Jordan, October 12-14, 2015.
 20. Mohammed S. Aloqlah, Ibrahim E. Atawi, and Mamoun F. Al-Mistarihi, “On the Performance of Fixed-Gain Amplify-and-Forward Dual-Hop Relay Systems with Beamforming Under k - μ Shadowed Fading,” *Proc. IEEE 25th International Symposium on Personal, Indoor and Mobile Radio Communications, IEEE PIMRC 2015*, Hong Kong, China, doi: 10.1109/PIMRC.2015.7343409 August 30-September 2, 2015.
 21. Mohammed S. Aloqlah, Ibrahim E. Atawi, and Mamoun F. Al-Mistarihi, “Further Performance Results for Energy Detector Operating over k - μ Shadowed Fading,” *Proc. IEEE 25th International Symposium on Personal, Indoor and Mobile Radio Communications, IEEE PIMRC 2015*, Hong Kong, China, doi: 10.1109/PIMRC.2015.7343382 August 30-September 2, 2015.
 22. Rami Mohaisen, Mamoun F. Al-Mistarihi, Amer M. Magableh, and Ashraf H. Sharaqa, “Outage Probability Analysis in Relay-Based DF Cooperative Diversity Systems with Relay & Destination Interferers,” *Proc. 38th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015*, Opatija, Croatia, doi: 10.1109/MIPRO.2015.7160324, May 25-29, 2015.
 23. Amer M. Magableh, Mamoun F. Al-Mistarihi, Rami Mohaisen, and Ashraf H. Sharaqa, “BER Analysis in Relay-Based DF Cooperative Diversity Systems with Relay & Destination Interferers,” *Proc. 38th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015*, Opatija, Croatia, doi: 10.1109/MIPRO.2015.7160323, May 25-29, 2015.
 24. Mamoun F. Al-Mistarihi, Amer M. Magableh, and Maiss M. Al-Khasawneh, “Closed Form Expression of Outage Probability in DCSK Cooperative Communication Systems over Nakagami-m Fading Channels,” *Proc. 38th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015*, Opatija, Croatia, doi: 10.1109/MIPRO.2015.7160325, May 25-29, 2015.
 25. Mohammad Shurman, Mamoun F. Al-Mistarihi, and Moawiah M. Alhulayil, “Outage Probability of Dual-Hop Amplify-and-Forward Cognitive Relay Networks Under Interference Power Constraints Over Nakagami-m Fading Channels,” *Proc. 38th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015*, Opatija, Croatia, doi: 10.1109/MIPRO.2015.7160326, May 25-29, 2015.
 26. Moawiah M. Alhulayil, Mamoun F. Al-Mistarihi, and Mohammad Shurman, “Outage Probability of Amplify-and-Forward Underlay Cognitive Relay Networks with Selection Diversity over Nakagami-m Fading Channels,” *Proc. 38th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015*, Opatija, Croatia, doi: 10.1109/MIPRO.2015.7160327, May 25-29, 2015.
 27. Muath A. Wahdan, Mamoun F. Al-Mistarihi, and Mohammad Shurman, “Static Cluster and Dynamic Cluster Head (SCDCH) Adaptive Prediction-Based Algorithm for Target Tracking in Wireless Sensor Networks,” *Proc. 38th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015*, Opatija, Croatia, doi: 10.1109/MIPRO.2015.7160342, May 25-29, 2015.
 28. Ali M. Hayajneh, Mahmoud A. Khodeir, and Mamoun F. Al-Mistarihi, “Incremental-Relaying Cooperative-Networks using Dual Transmit Diversity and Decode and Forward Relaying Scheme with Best Relay Selection,” *Proc. 37th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2014*, Opatija, Croatia, May 26-30, 2014.

29. Rami Mohaisen, Mamoun F. Al-Mistarihi, and Ashraf Sharaqa, "Closed-form Expression for Outage Probability in Relay-Based Cooperative Diversity Systems over Nakagami Fading Channels with Interference," *Proc. 37th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2014*, Opatija, Croatia, May 26-30, 2014.
30. Mohammad Shurman, Bilal Al-Shua'b, Mohammad Alsaedeem, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, "N-BEB: New Backoff Algorithm for IEEE 802.11 MAC Protocol," *Proc. 37th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2014*, Opatija, Croatia, May 26-30, 2014.
31. Muneer M. Al-Zu'bi, Mamoun F. Al-Mistarihi, and Mahmoud A. Khodeir "Performance Analysis of Mobile WiMAX Communication using Directional Antenna over Fading channel," *Proc. IEEE 5th International Conference on Information and Communication Systems, ICICS 2014*, Jordan University of Science and Technology, Irbid, Jordan, April 1-3, 2014.
32. Muneer M. Al-Zu'bi, Mahmoud A. Khodeir, and Mamoun F. Al-Mistarihi, "Modeling and Design of an Infrared-based Identification (IRID) System-Tag and Reader Design," *Proc. IEEE 5th International Conference on Information and Communication Systems, ICICS 2014*, Jordan University of Science and Technology, Irbid, Jordan, April 1-3, 2014.
33. Mohammad Shurman, Noor Awad, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, "LEACH Enhancements for Wireless Sensor Networks Based on Energy Model," *Proc. IEEE 11th International Multi-Conference on Systems, Signals & Devices, SSD 2014*, Castelldefels-Barcelona, Spain, February 11 - 14, 2014.
34. Mohammad Shurman, Mohammad Alfawares, Mamoun F. Al-Mistarihi, and Khalid A. Darabkh, "A Collaborative Reputation Approach to Avoid Misbehaving Nodes in MANETs," *Proc. IEEE 11th International Multi-Conference on Systems, Signals & Devices, SSD 2014*, Castelldefels-Barcelona, Spain, February 11 - 14, 2014.
35. Muawiah Hlayel, Ali M. Hayajneh, Mamoun F. Al-Mistarihi, Mohammad Shurman, and Khalid A. Darabkh, "Closed-form Expression of Bit Error Rate in Dual-Hop Dual-Branch Mixed Relaying Cooperative Networks with Best-Path Selection over Rayleigh Fading Channels," *Proc. IEEE 11th International Multi-Conference on Systems, Signals & Devices, SSD 2014*, Castelldefels-Barcelona, Spain, February 11 - 14, 2014.
36. Amer M. Magableh, Mamoun F. Al-Mistarihi, and Maiss M. Al-Khasawneh, "Performance Evaluation of Bit Error Probability in DCSK Cooperative Communication Systems over Nakagami-m Fading Channels," *Proc. IEEE 11th International Multi-Conference on Systems, Signals & Devices, SSD 2014*, Castelldefels-Barcelona, Spain, February 11 - 14, 2014.
37. Mamoun F. Al-Mistarihi, Amer Magableh, and Rami Mohaisen, "Closed-form Expression for Outage Probability in Relay-Based Cooperative Diversity Systems over Multipath Fading Channels with Interference," *Proc. IEEE 11th International Multi-Conference on Systems, Signals & Devices, SSD 2014*, Castelldefels-Barcelona, Spain, February 11 - 14, 2014.
38. Abdoul Rjoub, Nedal R. Al-Taradeh, and Mamoun F. Al-Mistarihi, "Gate leakage current accurate models for nanoscale MOSFET transistors," *Proc. 24th International Workshop on Power and Timing Modeling, Optimization and Simulation (PATMOS)*, doi.: 10.1109/PATMOS.2014.6951880, Palma de Mallorca, Spain, 29 September 29 - 01 October 01, 2014.
39. Mamoun F. Al-Mistarihi, Abdoul Rjoub, and Nedal R. Al-Taradeh, "Drain Induced Barrier Lowering (DIBL) Accurate Model for Nanoscale Si-MOSFET Transistor," *Proc. IEEE International Conference on Microelectronics, IEEE ICM 2013*, Beirut, Lebanon, December 15-18, 2013.
40. Nedal R. Al-Taradeh, Abdoul Rjoub, and Mamoun F. Al-Mistarihi, "Accurate Modeling for CMOS Inverter Overshooting time in Nanoscale Paradigm," *Proc. IEEE International Conference on Microelectronics, IEEE ICM 2013*, Beirut, Lebanon, December 15-18, 2013.
41. Abdoul Rjoub, Nedal R. Al-Taradeh, and Mamoun F. Al-Mistarihi, "Accurate Subthreshold Leakage Model for Nanoscale MOSFET Transistor," *Proc. IEEE International Conference on Electronics, Circuits, and Systems, IEEE ICECS 2013*, Abu Dhabi, UAE, December 8-11, 2013.

42. Amer Magableh, Mamoun F. Al-Mistarihi, and Rami Mohaisen, "Closed-form Expression for Bit Error Rate in Relay-Based Cooperative Diversity Systems over Multipath Fading Channels with Interference," *Proc. 9th International Wireless Communications and Mobile Computing, IWCMC 2013*, doi.: 10.1109/IWCMC.2013.6583617, Sardinia, Italy, July 1-5, 2013.
43. Abdoul Rjoub, Mamoun F. Al-Mistarihi, and Nedal R. Al-Taradeh, "Backscattering Coefficient Accurate Model for Nanoscale Si- MOSFET Transistor," *Proc. 12th edition of Faible Tension Faible Consommation (FTFC), IEEE FTFC 2013*, Paris, France, June 20-21, 2013.
44. Rami Mohaisen, and Mamoun F. Al-Mistarihi, "Closed-form Expression for Outage Probability in Relay-Based Cooperative Diversity Systems over Rayleigh Fading Channels with Interference," *Proc. 3rd International Conference on Communications and Information Technology, ICCIT 2013*, Beirut, Lebanon, June 19-21, 2013.
45. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, Khalid A. Darabkh, "Merging Dynamic Address Autoconfiguration and Security Key Protocols in Mobile Ad Hoc Networks," *Proc. 36th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2013*, Opatija, Croatia, May 20-24, 2013.
46. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, and Zaid A. Alomari, "MAC Layer Back-off Algorithm for Ad hoc Networks," *Proc. 36th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2013*, Opatija, Croatia, May 20-24, 2013.
47. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, Amr N. Mohammad, Khalid A. Darabkh, and Ahmad A. Ababnah, "Hierarchical Clustering Using Genetic Algorithm in Wireless Sensor Networks," *Proc. 36th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2013*, Opatija, Croatia, May 20-24, 2013.
48. Abdoul Rjoub, Mamoun F. Al-Mistarihi, and Nedal R. Al-Taradeh, "Recent Transport Models in Nanoscale MOSFET Transistor - Study and Analysis," *Proc. 8th Jordanian International Electrical & Electronics Engineering Conference, JIEEEEC 2013*, Amman, Jordan, April 16-18, 2013.
49. Mamoun F. Al-Mistarihi, Abdoul Rjoub, and Nedal R. Al-Taradeh, "Transport Mobility and Injection Velocity Model for Nanoscale MOSFET Transistor," *Proc. 8th Jordanian International Electrical & Electronics Engineering Conference, JIEEEEC 2013*, Amman, Jordan, April 16-18, 2013.
50. Nedal Al-Taradeh, Abdoul Rjoub, Mamoun F. Al-Mistarihi, "Modeling in Nanoscale CMOS technology: Challenges and Design Requirements," *Proceedings of the International Conference on Solar energy for MENA region (INCOSOL 39)*, Amman, Jordan, October 2012.
51. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, and Salah Harb, "An Energy-Efficient Coverage aware Clustering Mechanism for Wireless Sensor Networks," *Proc. 5th International Conference on Communications, Computers and Applications (MIC-CCA2012)*, Istanbul, Turkey, October 12-14, 2012.
52. Mohammad M. Shurman, Mamoun F. Al-Mistarihi, and Shehab A. Nasser, "Hard Handover Optimization in Mobile WiMAX Networks," *Proc. 5th International Conference on Communications, Computers and Applications (MIC-CCA2012)*, Istanbul, Turkey, October 12-14, 2012.
53. Mamoun F. Al-Mistarihi, Moad Y. Mowafi, and Mohammad S. Marei, "An Optimum Scheme for WiMAX Bandwidth Management Using Dynamic Channel Allocation," *Proc. 35th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2012*, pp. 538-541, Opatija, Croatia, May 21-25, 2012.
54. Moad Y. Mowafi, Mamoun F. Al-Mistarihi, and Mohammad S. Marei, "A Dual Usage of Cognitive Radio in Managing the WiMAX Bandwidth," *Proc. 35th Jubilee International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2012*, pp. 548-551, Opatija, Croatia, May 21-25, 2012.
55. Mamoun F. Al-Mistarihi, Ashraf Sharaqqa, Rami Mohaisen, Omar Abu-Alnadi, and Hani Abu-Seba, "Performance Analysis of Multiuser Diversity in Multiuser Two-Hop Amplify and Forward Cooperative Multi-Relay Wireless Networks," *Proc. 35th Jubilee International Convention on Information and*

Communication Technology, Electronics and Microelectronics, MIPRO 2012, pp. 647-651, Opatija, Croatia, May 21-25, 2012.

56. Mamoun F. Al-Mistarihi, Mohammad S. Marei, and Abdelrahman A. Ijjeh, "A Multi-user Detection Scheme For Chaotic-Based Wireless Communication Systems Using Adaptive Filters And Regression Methods," *Proc. International Conference on Communications, Computing and Control Applications, CCCA'11*, Hammamet, Tunisia, March 3-5, 2011.
57. Mohammad Al-Shurman, Mamoun F. Al-Mistarihi, and Ahmad Qudaimat, "Network Address Assignment in Mobile Ad-Hoc Networks," *Proc. International Congress on Ultra Modern Telecommunications and Control Systems, ICUMT2010*, Moscow, Russia, pp. 287 – 294, October 18-20, 2010.
58. Mamoun F. Al-Mistarihi, "Quadratic Pulse Inversion Ultrasonic Imaging (QPI): A Two-Step Procedure for Optimization of Contrast Sensitivity and Specificity," *Proc. International Conference on Medical Image and Signal Computing, ICMISC 2010*, Rome, Italy, pp. 429-434, April 28-30, 2010.
59. Mamoun F. Al-Mistarihi, "Separable Implementation Of The Second Order Volterra Filter (SOVF) In Xilinx Virtex-E FPGA," *Proc. 18th International Conference On Field Programmable Logic And Applications, FPL 2008*, Heidelberg, Germany, pp. 531-534, September 8-10, 2008.
60. Mamoun F. Al-Mistarihi, "Post Beamforming Adaptive Second Order Volterra Filter (ASOVF) for Pulse-Echo Ultrasonic Imaging," *Proc. 15th European Signal Processing Conference, EUSIPCO 2007*, Poznan, Poland, pp. 1073-1077, September 3-7, 2007.
61. Mamoun F. Al-Mistarihi, and Emad S. Ebbini, "Quadratic Pulse Inversion Ultrasonic Imaging (QPI) Analysis and Design of Quadratic Kernel in the Frequency Domain to reduce tissue component introduced by motion," *Proc. IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2006*, Toulouse, France, vol. 2, pp. 1144-1147, May 15-19, 2006.
62. Mamoun F. Al-Mistarihi, and Emad S. Ebbini, "Quadratic Pulse Inversion Ultrasonic Imaging (QPI) Detection of Low-level Harmonic Activity of Microbubble Contrast Agents," *Proc. IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2005*, Philadelphia, USA, vol. 2, pp. 1009-1012, March 18-23, 2005.
63. Mamoun F. Al-Mistarihi, Pornchai Phukpattaranont, and Emad S. Ebbini, "A two-step procedure for optimization of contrast sensitivity and specificity of post- beamforming Volterra filters," *Proc. IEEE Ultrasonics Symposium*, Montreal, Canada, pp. 978-, August 23-27, 2004.
64. Mamoun F. Al-Mistarihi, Pornchai Phukpattaranont, and Emad S. Ebbini, "Post-Beamforming Third-Order Volterra Filter (THOVF) for Pulse-Echo Ultrasonic Imaging," *Proc. IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2004*, Montreal, Canada, vol. 3, pp. 97-100, May 17-21, 2004.
65. Pornchai Phukpattaranont, Mamoun F. Al-Mistarihi, and Emad S. Ebbini, "Post-Beamforming Volterra Filters for Contrast-Assisted Ultrasonic Imaging: In-Vivo Results," *Proc. IEEE Ultrasonics Symposium*, Honolulu, HI, USA, pp. 1191-1194, October 5-8, 2003.

Languages

Fluent in both spoken and written English and Arabic.

References

Available upon requests.