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INSTRUCTION AND RESEARCH INTEREST	My teaching and research interests are in the areas of: Electrical and communication engineering, microwave and small satellite design, fiber optics modeling, and Detection and demodulation of AM signals using 2D spectral surface.
EDUCATIONAL ATTAINMENT	<p>PhD in Radio Engineering and Television Systems/Multichannel Communication Odessa National Academy of Telecommunications, Ukraine-Odessa Jun 1998 Dissertation: <i>The Analysis and Synthesis of the Telecommunication System with Polynomial Signals</i></p> <p>M.S. and B.S Multichannel communication Odessa National Academy of Telecommunications, Ukraine-Odessa, . Jun 1994 Thesis: Optical Fibers Linking Between Amman – Ramtha</p>
ACADEMIC EXPERIENCE	<p>Associate Professor (B), Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka,16/9/2017 to present</p> <p>Chair of Communication Department Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka, 19/9/2017 –20/9/2018.</p> <p>Associate Professor (B), Taif University /Faculty of Engineering- Electrical Department since 19/1/2014 to 1/6/2017.</p> <p>Associate Professor (B), Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka,22/9/2013 to 18/1/2014</p> <p>Associate Professor (B), Jerash University, Sabbatical Leave Department of Communication and Electronics Engineering 1/10/ 2012 to 30/9/2013</p> <p>Dean, Faculty OF Engineering, Jerash University 1/10/2012 to 30/9/2013.</p> <p>Rapporteur of the Committee of Space Engineering Research Center Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka, 2011 to 2014.</p> <p>Dean's Assistant for Associate Degree Affairs Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka, 10/10/2010 –11/9/2011</p> <p>Dean's Assistant for high studies affairs Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka, 30/9/2009 –30/9/2010</p> <p>Chair of Electrical Engineering Department Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka, 13/10/2008 -30/9/2009</p>

Assistant professor for Undergraduate Courses

Electronics, Electrical Circuits, Digital Fundamental, Analog Communications , Digital Communications, Electromagnetics I & II, Satellite Communications, Antenna and Wave Propagation, Signals, Systems and transforms.

Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka, 05/10/06 – 14/06/2011

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Associate Professor

Al-Balqa' Applied University/Faculty of Engineering Technology Amman-Marka , 14/06/2011 to Present

Chair of the Industry Outreach & Graduate Follow Department

Al-Balqa' Applied University/Huson University College Irbid-Huson 05/04/05-05/10/2006

INDUSTRIAL EXPERIENCE**Chief of Exchangers and Equiping (Powering) Division**

Custom Department/Ministry of Finance –Jordan
02/2001 to 5/2002

Engineer at the Telecommunication Directorate working field VSAT

Custom Department /Ministry of Finance –Jordan
1999 to 2002

JOURNAL PUBLICATIONS

1. Al-Dwairi, M., Synthesis Of Optimum Signals In Class Polynomials, *Information And Communication* – Odessa USAT 1996 , P. 228-230.
 2. I.P. Panfilov and Al-Dwairi, M. The Quantization Noise Influence On The Accuracy Of Spectral Zero Crossing Analysis *“Ukrainian Scientific Institute of Radio and TV. 1996. NO. 7”*, P. 34-37
 3. Panfilov, I.P., Fleyta, Y.V and Al-Dwairi, M. Synthesis Of Spectral Systems For Information Transmission *“Ukrainian Scientific Institute of Radio and TV. 1997 No. 1(9)”*, P. 79-81.
 4. Akram A. Moustafa, Ziad A. Alqadi, Majed Aldwairi, Analysis of Standard Edge Detectors and Class Ratio Detector Methods *International Review on Computers and Software - July 2009 – Papers*
 5. Ziad Alqadi, Majed Aldwairi, Akram Mustafa, True Color Image Enhancement Using Morphological Operations, *Praise Worthy Prize (accepted)*
 6. Ziad Alqadi, Majed Aldwairi, Akram Mustafa, Genetic Algorithm For Cypher Analysis. *Journal of Computer Science (accepted)*
 7. Majed Aldwairi ,Ziad Alqadi, Low-Cost Multilevel Modulation Formats For 100gbps Transmission With Direct Detection *International Review Of Physics Praise Worthy Prize Vol. 3 N.5 October 2009*
 8. *Majed O. Al-Dwairi, Ziad A. Alqadi, Amjad A. AbuJazar and Rushdi Abu Zneit*, Optimized True-Color Image, Processing , *World Applied science (accepted)* 2010
 9. Majed Omar Al-Dwairi, Majdi T. Oraiqat, Ziad AlQadi, Mustafa Majed Bdair ,Evaluation of Alamouti Space-Time Coding with Virtual Antenna Arrays. *World Applied science* 11 (2): 127-131, 2010 ISSN 1818-4952 © IDOSI Publications, 2010
 10. Akram A. Moustafa, Ziad A. Alqadi, Majed Aldwairi and Saleh Alomar, Practical Approach To Genetic Algorithm Cryptanalysis, *International Review On Computers And Software, November Vol. 4 N.6, 2009*
 11. Majed Omar Al-Dwairi, Multilevel Modulation Technique Based On Duo-Binary Transmission And Quaternary-Duo-Binary Transmission In Non-Linear Regime, *World Applied Sciences Journal* 17 (2): 239-242, 2012 ISSN
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12. Majed Omar Al-Dwairi, Dmitriy E. Skopin, Multilevel Modulation Formats and Polarization Multiplexing for 100Gbps Transmission with Direct Detection for Low-Cost transmission, *International Journal on Communication Antenna and Propagation (IRECAP)* ISSN 2039-5086 Vol. 3 N.1 February 2013, pages 9-15
13. Majed Omar Al-Dwairi, Dmitriy E. Skopin, Detection and Demodulation of AM Signals Using two Dimensional Spectral Surface, *International Journal on Information Technology (IREIT)*, Vol 1.N.2 March 2013 pages 90-95 ISSN 2281-2911
14. Majed O. Dwairi, Mohamed S. Soliman, Jawdat S. Alkasassbeh "An Improvement the Cell Phone Design Technology to Avoid the Space Coverage Problem" *International Journal of Control, Automation and Systems*, pp.1-6, January, 2016.
15. Mohamed S. Soliman, and Majed O. Dwairi, Iman I. M. Abu Sulayman, Sami H. A. Almalki, "A Comparative Study for Designing and Analyzing Wi-Fi MSP Antenna with different EM Simulation Software Techniques" *International Journal on Communications Antenna and Propagation (IRECAP)*, praise worthy prize publications 6(2) pp 90-94, February 2016 (indexed in Elsevier Bibliographic Database - SCOPUS)
16. Ziad A. Alqadi, **Majed Omar Al-Dwairi¹**, Hatim Zain², and Mohamed S. Soliman, "ZJICD algorithm for JPEG image compression/decompression" *Elixir Digital Processing* **94 (2016) 40368-40374**,
17. Mohamed S. Soliman, and Majed O. Dwairi, Iman I. M. Abu Sulayman, Sami H. A. Almalki, "Towards the Design and Implementation a Smart Home Automation System Based on Internet of Things Approach" *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 12, Number 11 (2017) pp. 2731-2737 © Research India Publications. <http://www.ripublication.com>
18. Majed O. Dwairi, Mohamed S. Soliman, Ahmad Alahmadi, Sami H. A. Almalki, and Iman I. M. Abu Sulayman, "Design and Performance Analysis of Fractal Regular Slotted-Patch Antennas for Ultra-Wideband Communication Systems", *Wireless Personal Communications*, Springer, <https://doi.org/10.1007/s11277-019-06123-5> 2019.
19. Mohamed S. Soliman, Majed O. Dwairi, Iman I. M. Abu Sulayman, "The Effect of the Ground Slots up on the Bandwidth Performance for UWB Antenna", *International Journal of Engineering Research and Technology*. ISSN 0974-3154, Volume 12, Number 2 (2019), pp. 227-230,
20. Majed O Al-Dwairi, Amjad Y Hendi, Mohamed S Soliman, Ziad A Alqadi. "A new method for voice signal features creation", *International Journal of Electrical and Computer Engineering (IJECE)*, Vol. 9, No. 5, October 2019, pp. 4092~4098, DOI: 10.11591/ijece.v9i5.pp4092-4098.
21. Amjad Y. Hendi, Majed O. Dwairi, Ziad A. Al-Qadi, and Mohamed S. Soliman, "A Novel Simple and Highly Secure Method for Data Encryption-

22. Majed O. Al-Dwairi, Amjad Y. Hindi, Ziad A. AlQadi," An efficient and highly secure technique to encrypt-decrypt color image", Engineering, Technology & Applied Science Research, Vol. 9, No. 3, 2019, pp. 4165-4168.
 23. Majed O. Al-Dwairi," A Planar UWB Semicircular-Shaped Monopole Antenna with Quadruple Band Notch for WiMAX, ARN, WLAN, and X-Band", International Journal of Electrical and Computer Engineering (IJECE), Vol. 10, No1, February 2020, DOI: 10.11591/ijece.v10i1.pp908-918
 24. Amjad Y. Hindi, Majed O. Dwairi, Ziad A. Alqadi," A novel technique for data steganography", Engineering, Technology & Applied Science Research, Vol. 9, No. 6, December 2019, pp. 4942-4945.
 25. Majed O. Al-Dwairi, Amjad Hindi, Mohamed S. Soliman, and Mohammad F. Aljafari." A compact UWB monopole antenna with penta band notched characteristics", TELKOMNIKA Telecommunication, Computing, Electronics and Control, Vol. 18, No. 2, April 2020, pp622-630.
 26. Dr. Amjad Hindi, Dr. Majed Omar Dwairi, Prof. Ziad Alqadi, "Creating Human Speech Identifier using WPT", International Journal of Computer Science and Mobile Computing, Vol 9, No.2, Feb. 2020, pp. 117-123.
 27. Dr. Amjad Hindi, Dr. Majed Omar Dwairi, Prof. Ziad Alqadi, "Analysis of Fingerprint Minutiae to form Fingerprint Identifier" , International Journal of Computer Science and Mobile Computing, Vol. 9, No.2, Feb. 2020, pp. 38-48.
 28. Dr. Amjad Hindi, Dr. Majed Omar Dwairi, Prof. Ziad Alqadi, "Creating Human Speech Identifier using WPT", International Journal of Computer Science and Mobile Computing, Vol. 9, No. 2, Feb. 2020, pp.117-123.
 29. Prof. Ziad Alqadi Dr. Mohammad S. Khrisat Dr. Amjad Hindi Dr. Majed Omar Dwairi, "USING SPEECH SIGNAL HISTOGRAM TO CREATE SIGNAL FEATURES", International Journal of Engineering Technology Research & Management, Vol.4, No.3, Mart 2020, pp. 144-153.
 30. International Journal of Engineering Technology Research & Management, "Analysis of Procedures used to build an Optimal Fingerprint Recognition System", International Journal of Computer Science and Mobile Computing, Vol.9, No.2, Feb. 2020, pp. 21-37.
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1. Majed Al-Dwairi, SIMULATION OF A DIGITAL FIBER OPTIC COMMUNICATION SYSTEM, Proceedings of the VIIIth International Conference CADSM 2005 February 23-26,2005 Lviv-Polyana, UKRAINE.
 2. Majed Al-Dwairi and Eduard A. Sukachov, ANALYSIS OF THE CHANGING RELATIONS SIGNAL INTERFERENCE WHILE MOVING THE MOBILE STATION, International Conference on Communication, Computer and Power ICCCP'05 February 14-16,2005 Muscat, Sultanate of Oman.
 3. Vladimir Kornichuk and Majed Omar Al-Dwairi, MODELING WDM OPTICAL NETWORKS IN SIMULINK , Proceedings of the VIIIth International Conference CADSM 2005 February 23-26,2005 Lviv-Polyana, UKRAINE.
 4. Vladimir Kornichuk and Majed Omar Al-Dwairi, MODELLING OF OPTOELECTRONIC CIRCUITS. The 6th Jordanian International Electrical and Electronics Engineering Conference, Ammam- Jordan, 14-16 March 2006.
 5. Oleg E. Plyatsek and Majed Omar Al-Dwairi, SINGLE-ARGUMENT FAMILY OF CONTINUOUS EFFECTIVELY COMPUTED WAVELET TRANSFORMS . International IEEE EAST-WEST DESIGN & TEST WORKSHOP (EWDTW'06), Sochi, Russia, 15-19 September 2006.
 6. Hazem Al-Otum and Majed Al-Dwairi, Image Compression Based on Color Morphological Pyramidal Decomposition. International Symposium on Signal Processing and its Applications "ISSPA 2007"UAE,Sharja12-15/2/2007.
 7. Annika Dochan, Majed Omar Al-Dwairi,, and Werner Rosenkranz, Optimization of Cost Effective Multilevels-ASK Modulation Format under the Constraint of Chromatic Dispersion ,2010 Optical Society of America OCIS codes: (060.4080, Modulation); (060.2330, Fiber optics communications)2009
 8. Majed Al-Dwairi, Evaluation of Multilevel Modulation Formats for 100Gbps Transmission with Direct Detection, ICBCBBE 2013 : International Conference on Bioinformatics, Computational Biology, and Biomedical Engineering, Kualalumpur, Malaysia August 22-23, 2013
 9. Iman I. M. Abu Sulayman, Sami H. A. Almalki, Mohamed S. Soliman, and Majed O. Dwairi "A Comparative Study for Designing and Analyzing Wi-Fi MSP Antenna with different EM Simulation Software Techniques" Accepted in PIERS 2016 (Progress In Electromagnetics Research Symposium), China, July 2016
 10. Sami H. A. Almalki, Iman I. M. Abu Sulayman, Mohamed S. Soliman, and Majed O. Dwairi "Design and Performance Analysis of Patch Antenna for Microwave Radio-Frequency Energy Harvesting System" Submitted to ICEAA-IEEE APWC (International Electromagnetic Conference in Advanced Applications – IEEE Antenna and Propagation in Wireless Communication), Cairns, Australia, September 2016.
 11. Majed O. Dwairi1, Mohamed S. Soliman, Ahmad A. Alahmadi, Iman I. M. Abu Sulayman, and Sami H. A. Almalki "Design Regular Fractal Slot-antennas for Ultra-wideband Applications" PIERS 2017 (Progress In Electromagnetics Research Symposium), St Petersburg, RUSSIA, 22-25July 2017.
 12. Majed O. Dwairi1, Mohamed S. Soliman, Ahmad A. Alghamdi." Enhanced Bandwidth Performance for Monopole Ultra-wideband Patch Antenna for Super-wideband Applications" Accepted in PIERS 2017 (Progress In Electromagnetics Research Symposium), Singapore, November 2017.
 12. Iman I. M. Abu Sulayman, Sami H. A. Almalki, Mohamed S. Soliman, and Majed O. Dwairi "Designing and Implementation of Home Automation System Based on Remote Sensing Technique with
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	<p>Arduino Uno Microcontroller”, 2017 9th IEEE-GCC Conference and Exhibition (GCCCE).</p> <p>13. Sami H. A. Almalki, Iman I. M. Abu Sulayman, Mohamed S. Soliman, and Majed O. Dwairi,” Designing Reliable Dual Mode Real-Time Home Automation System Based on Very High-Speed Description Language, 2017 9th IEEE-GCC Conference and Exhibition (GCCCE).</p> <p>14. M.S. Soliman , M.O. Dwairi , A.A. Alahmadi , Design and Performance Analysis of an UWB Patch Antenna with Enhanced Bandwidth Characteristics, : 12th European Conference on Antennas and Propagation (EuCAP 2018)</p> <p>15. Mohamed S Soliman, Majed O Al-Dwairi, Amjad Y Hendi, Ziad Alqadi,” A Compact Ultra-Wideband Patch Antenna withDual Band-Notch Performance for WiMAX /WLAN Services, 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT),9-11 April Amman-Jordan 2019</p> <p>16. Majed O Al-Dwairi, Amjad Y Hendi, Mohamed S Soliman, Mahdi A Nisirat, Design of A Compact Ultra-Wideband Antenna for Super-Wideband Technology, 13th European Conference on Antennas and Propagation (EuCAP 2019),31 March-6April, Krakow-Poland</p>
TRAINING AND COURSES	<ol style="list-style-type: none"> Design and Measurement of RF and Microwave Circuit Course Organized by Al -Huson Univ. College with Universite de Paris sud , Held at Al Balqa University, 16-19 Dec. 2003 Arabic Training Course for Programming Industry Arab Union for Technical Education Al Balqa Applied University / Al Huson Univ. College, Jordan, 14-18 Sept. 2003 Mastering Microsoft Visual Basic 6 Fundamental Microsoft Certified Technical Educational Center, 2003 1303 E-Government Organized by Ministry of Finance, Custom Dept. Amman-Jordan, 21 Oct. 2000 Custom Report Surveillance System Technical Maintenance Amman- Jordan, 09-11 Sept. 2001 Novel Networking Organized by the Ministry of Finance, Custom Dept. Amman-Jordan, 16 – 27 Oct.1999
INTERNATIONAL EXPERIENCE	<p>Based on the Science and Technology Cooperation Between Jordanian Higher Counsel for Science and Technology (HCST) and German Research Foundation (Deutsche Forschungsge meinschaft DFG). I spend at Faculty of Engineering, Christian-Albrechts University of Kiel/Chair for Communications six months (9/6-6/9/2008) and (15/6-15/9/2009).</p>
TECHNICAL SKILLS	<p>Antenna design, HFSS, CST, IE3D, and FEKO. MMANA-GAL Antenna simulating program Modulating Fiber Optics, And Electronic Circuit Design MATLAB/simulink, CircuitMaker, Electronic WorkBench.</p>
REFERENCES	<p>Prof. Abdalla Al-Zoubi President of Al-Balqa Applied University Email: al-alzoubi@bau.edu.jo</p>

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PERSONAL INFORMATION

Place & Date of Birth

Amman – 10/12/1968

Marital Status

Married with four children

Nationality

Jordanian

Current Position

Associated Professor