

CURRICULUM VITAE

ABDEL-RAHMAN AL-QAWASMI



Dr. Abdel-Rahman Al-Qawasmi

- **PROFESSION** : Electronics & Communication **Associate** Professor
- **NATIONALITY**: Jordanian
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- **HOME ADDRESS** : Kingdom of Saudi Arabia Al-Majmaah City Tel No.: . +966-531404525 E- Mail: telecomjo@gmail.com
- **EDUCATION** : B.S. & M.Sc. Radio & Electronics Engineer Kiev University of Civil Aviation, Ukraine 1994 "**Study and Design of a Receiver of Discrete Wide-band Signals with Frequency Modulation**". Ph.D. Telecommunications: Kiev University of Civil Aviation, Ukraine 1999 "**Enhancement the effectiveness of Mobile telecommunication systems of civil Aviation based on improvement of the quality of Demodulators of wide-band signals**"

KEY EXPERIENCE

- 1/9/2011-Now (Majmaah University): Associate professor in Electrical Department/College of Engineering
- Director of Computer Centre
- 24/5/2010-31/8/2011 (Philadelphia University): Associate professor in Communication and Electronics Engineering Department.
- 1/9/2001-24/5/2010 (Philadelphia University): Assistant professor in Communication and Electronics Engineering Department.
- 1/9/2005-1/9/2010 (Philadelphia University): Chairman of Communication and Electronics Department.
- 1/7/2000-1/5/2001 (Queen Alia Airport): Communication Engineer

OTHER EXPERIENCE (Al-Majmaah University)

- Member of Study plans and Program Unit in Vice Rector of Educational Affairs
- Coordinator of Advising Academic unit
- **Head of Quality Center**
- **Coordinator of Study Plans and Programs unit:**
- Coordinator of study plans committee
- Member of QA unit
- Member of Scientific Engineering club
- Member of Study program committee
- Member of Faculty strategy plan committee
- Member of University Self-Evaluation for Academic Accreditation

OTHER EXPERIENCE (Philadelphia University)

- Quality Assurance (QA) coordinator (2005-2010).
- Member of Distance E-learning Deanship.
- Chairman of Organizing Committee of the 6th International Philadelphia Engineering Conference (2006).
- Chairman of Communications & Signal Processing Conference. IEEE SSD'8 Jordan 2008
- Member of program committee of SSD'9
- Chairman of Communications & Signal Processing Conference. IEEE SSD'10 Jordan 2010.
- Chairman of Advisory committee (2003-2005)
- Member of Culture Philadelphia Newspaper (2009)

- Chairman of Examination Committee (2008)
- Member of Faculty Council (2003-2010)
- Member of Foreign Language council (2009)

PROFESSIONAL MEMBERSHIP

- Member of Jordanian Engineering Association since 1994-until now.
- Member of IEEE association (Communication and Signal Processing)

UNDERGRADUATE EXPERIENCE

Teaching experience (Majmaah University):

- Control Systems
- Power Systems
- Electrical Measurements
- Digital Communications
- Wireless Communications
- Optical Communications
- Biomedical Control Systems
- Medical Analogue Signal Processing
- Wireless Communications and Networks

Teaching experience (Philadelphia University):

- Engineering Mathematics 1
- Engineering Analysis 1 (Differential Equation)
- Engineering Analysis 3(Complex analysis)
- Communication I
- Optical Communications
- Electric Circuit Lab
- Digital Communications
- Engineering Project
- Mobile Communications
- Communications II
- Communication Engineering
- Analogue Communications
- Communication Networks
- Signal Analysis & Processing
- Digital Signal Processing
- Digital Communications Lab
- Special Topics in Communications
- Analogue Communications Lab

Supervised Project: Philadelphia University: over 70 Engineering projects in the area of Communications and Electronics Engineering. The main Projects are:

- Automatic Wireless Irrigation System Using Solar System.
- Wireless Temperature Measuring System
- Home automation System.
- Wireless Control multifunction System.
- Water level Control using Ultrasonic Waves.
- Wireless Irrigation System using PC.
- Digital Filters Simulation and Design.

Majmaah University:

- Wireless Temperature communication system using ZigBee Technology
- IR control system for various purposes.

POSTGRADUATE EXPERIENCE

Supervisor of Master Thesis titled: Information Exchange using Bluetooth Network through WLAN. (Mutah University)
External Examiner of number of Master Thesis discussed at State Universities in Jordan.

LANGUAGES: Arabic , English and Russian

SKILLS: VB Programming, Web Design and Microsoft Certificated

TRAINING AND SEMINAR

- ICDL Certificate (2002)
- Distance Learning Certificate (UNISCO-2010)
- Enhanced Academic Research English Language program (England 2003)
- Many certificates related to teaching, research and management.

Awards:

- Best Instructor in Engineering Faculty 1432/1433 (Philadelphia University)
- Best Instructor in College of Engineering (Majmaah University)

Published Papers (Books, Journals and Conferences):

Book: One book published titled: Differential Equations: Engineering Applications (2011 First Edition)

Chapter in book: Chapter 7 "Discrete Wavelet Transform & Linear Prediction Coding Based Method for Speech Recognition via Neural Network", By K.Daqrouq, A.R. Al-Qawasmi, K.Y. Al Azzawi and T. Abu Hilal, DOI: 10.5772/20978. <http://www.intechopen.com/>

Journals:

- Al-Qawasmi A.K. "Analysis of Noise Immunity of Telecommunication Systems with Multi-Position Signals". Problems of Avionics.-K.: KIUCA, 1997-Page 175-179.
- Al-Qawasmi A.K. "Analytical Compare for Digital Communication Systems with Multi-Position Signals". Problems of Avionics.-K.: KIUCA, 1997.-Page.190-195.
- Al-Qawasmi A.K. "The effect of frequency-time mismatching on the effectiveness of wide-band signals". Bestnik.-K.: KIUCA, 1999.
- E-learning course in analysis and signal processing. Ave-sienna Virtual University.
- Al-Qawasmi A.K., Ibrahim Abu-Isbeih "The Effectiveness of CDMA and TDMA using Spread Spectrum Digital Communication System with M-ary FSK", i- manager's Journal on Future Engineering and Technology, Vol. 3, No. 2, November 2007-January 2008, Page 35-40 <http://www.imanagerpublications.com/engineeringtech.htm> , ISSN: 0973- 2632
- Mikhled Alfaouri Khaled Daqrouq, Ibrahim N. Abu-Isbeih, Emad F. Khalaf
- Abdel-Rahman Al-Qawasmi, and Wael Al-Sawalmeh "Quality Evaluation of Reconstructed Biological Signals", American Journal of Applied Sciences, 6(1) 187-193, 2009, USA. http://www.scipub.org/scipub/detail_issue.php?V_No=208&j_id=ajas ISSN 1546-9239
- Ayman Al-Lawama, Abdel-Rahman Al-Qawasmi and Omar Al-Ayasrah " Optimum Control Using Signal Processing in Integrated Aerospace Navigation Systems", Word Scientific and Engineering Academy and Society; WSEAS Transactions on Communications ISSN: 1109-2742, 11(7) November 2008, <http://www.worldses.org/journals/communications/communications-2008.htm>
- Abdel-Rahman Al-Qawasmi and Khaled Daqrouq "ECG Signal Enhancement Using Wavelet Transform" Word Scientific and Engineering Academy and Society; WSEAS Transactions on Biology and Biomedicine, ISSN: 1109-9518. Issue 2, Volume 7, April 2010
- Abdel-Rahman Al-Qawasmi, Omar Al-Ayasrah and Ayman Al-Lawama " Forward Transmission over a Multipath Faded Channel in a DS CDMA System" Word Scientific and Engineering Academy and Society; WSEAS Transactions on circuits and systems. ISSN: 1109-2734. Issue 2, Volume 8, February 2009. <http://www.worldses.org/journals/circuits/circuits-2009.htm>
- Wael Al-Sawalmeh, Khaled Daqrouq, Abdel-Rahman Al-Qawasmi, Tareq Abu Hilal, " The Use of Wavelets in Speaker Feature Tracking Identification System Using Neural Network", WSEAS TRANSACTIONS on SIGNAL PROCESSING, Issue 5, Volume 5, May 2009. ISSN: 1790-5052. Pages 167-177.
- Abdel-Rahman Al-Qawasmi, Ayman Al-Lawama, " The Stabilization of AC Voltage: The need for stabilization, its special feature, some design aspects ", International Journal of Recent Trends in Engineering Vol. 2, No. 1, Nov 2009, ISSN 1797-9617.
- Omar Daoud, Abdel-Rahman Al-Qawasmi and Khaled Daqrouq, "Modified PCA Speaker Identification Based System Using Wavelet Transform and Neural Networks ", International Journal of Recent Trends in Engineering Vol. 2, No. 1, Nov 2009, ISSN 1797-9617.
- K. Daqrouq¹, Emad Khalaf¹, A. Al-Qawasmi¹, and T. Abu Hilal², "Wavelet Formants Speaker Identification Based System via Neural Network ", International Journal of Recent Trends in Engineering Vol. 2, No. 1, Nov 2009, ISSN 1797-9617.
- A.-R Al-Qawasmi and O.Daoud "An OFDM Free Access Technique Using Gold Sequence", European Journal of Scientific Research , ISSN 1450-216X Vol.37 No.4 (2009), pp.552-560, © EuroJournals Publishing, Inc. 2009, <http://www.eurojournals.com/ejsr.htm>
- Wael Al-Sawalmeh, Khaled Daqrouq, Omar Daoud and Abdel-Rahman Al-Qawasmi "Speaker Identification System-based Mel Frequency and Wavelet Transform using Neural Network Classifier", European Journal of Scientific Research Vol 41 Issue 4. © EuroJournals Publishing, Inc. 2009, <http://www.eurojournals.com/ejsr.htm>
- K. Daqrouq, A. Al-Qawasmi, O. Daoud, W. Al-Sawalmeh "Self-Organizing Map Weights and Wavelet Packet Entropy for Speaker Verification", International Journal of Circuits, Systems and Signal Processing. Pp 12-20. <http://www.naun.org/wseas/cms.action?id=3032>
- M. ABU SHATTAL and ABDEL-RAHMAN AL-QAWASMI "The Effect of Interference on Bluetooth Data Exchange over WLAN", WSEAS Transactions on Communications ISSN: 1109-2742 . **Issue 10, Volume 11, October 2012**

Conferences:

- Al-Qawasmi A.K., K. Daqrouq "The Wavelet Transform Based Compression Method using Zero Position coding". The 6th International Philadelphian Engineering Conference: Philadelphia University, 2006-Page 506-510. <http://www.philadelphia.edu.jo/engineering/time.pdf>
- Al-Qawasmi A.K., A. Al-Lawama "Storing Digital Data Using Zero-Compression Algorithm", IEEE-SPIE ,Proceedings of SPIE ,Volume 6937, Photonics Applications in Astronomy, Communications, Industry, and High-Energy Physics Experiments 2007, (Dec. 28, 2007) <http://spiedl.aip.org/getabs/servlet/GetabsServlet?prog=normal&id=PSISDG006937000001693739000001&idtype=cvips&gifs=yes> , Proc. SPIE, Vol. 6937, 693739 (2007); DOI:10.1117/12.784826
- Al-Qawasmi A.K., Ibrahim Abu-Isbeih "A Comparison of Parallel and Series Transmission Techniques with M-ary FSK", Military Technical Collage, The 6th International Conference on Electrical Engineering ICEENG 2008, EE 061-(1-10), Egypt May 27-29, 2008.
- Khaled Daqrouq Ibrahim Abu-Isbeih Abdel-Rahman Al-Qawasmi "QRS Complex Detection Based on Symmlets Wavelet Function", IEEE 5th International Multi-Conference on Systems, Signals and Devices, 2008. IEEE SSD 2008., Philadelphia University, Jordan, ISBN: 978-1-4244-2205-0, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4632788 P. 1-5
- Khaled Daqrouq, Wael Al-Sawalmeh, Abdel-Rahman Al-Qawasmi* and Ibrahim N. Abu-Isbeih "Speaker Identification Wavelet Transform Based Method", 5th International Multi-Conference on Systems, Signals and Devices, 2008. IEEE SSD 2008, Philadelphia University, Jordan ISBN: 978-1-4244-2205-0, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4632901 P.1-5
- Abdel-Rahman Al-Qawasmi, Ayman Al-Lawama "The Effect of Amplitude Fades on a Forward Transmission System Using DS CDMA" , Microwaves, Radar and Remote Sensing Symposium, 2008. MRRS 2008 IEEE MRRS-Ukraine 22-24-May ISBN: 978-1-4244-2688-1, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4669601 P 306-309
- Omar Daoud, Abdel-Rahman Al-Qawasmi "Efficient Performance of COFDM-Based DVB-T", [6th International Multi-Conference on Systems, Signals and Devices - Conference on Communication and Signal Processing-IEEE SSD'9](#), Tunis 2009, ISBN: 978-1-4244-4345-1, On page(s): 1-4. Digital Object Identifier: 10.1109/SSD.2009.4956809
- Abdel-Rahman Al-Qawasmi, Ayman Al-Lawama and Nada Al-Khatib "Speech Compression Using Zeros-Ones-Position method". IEEE-SPIE, SPS-09, Poland
- Wael Al-Sawalmeh, Khaled Daqrouq , Abdel-Rahman Al-Qawasmi and Mohammad " Multistage Speaker Feature Tracking Identification System Based on Continuous and Discrete Wavelet Transform", Proceedings of the 9th WSEAS International Conference on Multimedia Systems & Signal Processing ISSN: 1790-5117 30 ISBN: 978-960-474-077-2, p 30-36
- Khaled Daqrouq, Abdel-Rahman Al-Qawasmi, Wael Al-Sawalmeh and Tareq Abu Hilal " Wavelet Transform Based Multistage Speaker Feature Tracking Identification System Using Linear Prediction Coefficient", IEEE 2009 International Conference on Advances in Computational Tools for Engineering Applications - 2009 Advances in Computational Tools for Engineering Applications, Lebanon
- K. Daqrouq, T. Abu Hilal, M. Sherif, S. El-Hajjar, and A. Al-Qawasmi," Speaker Identification System Using Wavelet Transform and Neural Network", IEEE 2009 International Conference on Advances in Computational Tools for Engineering Applications - 2009 Advances in Computational Tools for Engineering Applications, Lebanon.
- K. Daqrouq1, A. Al-Qawasmi, "The study of Wavelet Filter Speech Enhancement Method", Third Mosharaka International Conference on Communications, Computers and Applications, MIC-CCA 2009.
- K. Daqrouq, Emad Khalaf, Omar Daoud and Abdel-Rahman Al-Qawasmi " K-means Clustering Algorithm for Wavelet Transform Speaker Identification System", Third Mosharaka International Conference on Communications, Signals and Coding, MIC-CSC2009.
- Abdel-Rahman Al-Qawasmi and Ayman Al-Lawama " Improvement of UWB - multiband OFDM BER performance using Barker signalling", Military Technical Collage, The 7th International Conference on Electrical Engineering ICEENG 2010, , Egypt May 25-27, 2010
- Abdel-Rahman Al-Qawasmi and Ayman Al-Lawama " Orthogonal Frequency Division Multiplexing Based DS-SS Barker Code for Resistance to AWGN and Multipath", Lithuania, SPW 2010
- Mousa AL-Akhras, Khaled Daqrouq and Abdel-Rahman Al-Qawasmi "Perceptual Evaluation Of Speech Enhancement", IEEE 7th International Multi-Conference on Systems, Signals and Devices, 2010. IEEE SSD 2010. Philadelphia University, Jordan.
- Al-Qawasmi A.K., Ayman Al-Lawama, "New FEC encoding technique based Parity Selected Codes for 4-ary PAM Signal". Poland, SPW 2011. SPIE 2011
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- Omar A. M. Aly¹, Abdel-Rahman Al-Qawasmi² and Ahmed G. Abo-khalil³ " Noise Immune Spectrum Sensing Algorithm for Cognitive Radio", 30th NATIONAL RADIO SCIENCE CONFERENCE (NRSC 2013) April 16-18, 2013, National Telecommunication Institute, Egypt. 978-1-4673-6222-1/13/\$31.00 ©2013 IEEE
- Ahmed G. Abo-Khalil, A. Al-Qawasmi, Omar A. M. Aly, " **A Novel Islanding Detection Method for Three-Phase Photovoltaic Generation Systems**", 2013 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT 2013)