



## CURRICULUM VITAE

### PROF. HAZEM MUNAWER AL-OTUM

PH.D. ENG. – FULL PROFESSOR  
 ELECTRICAL ENGINEERING  
 DIGITAL COMMUNICATIONS - DIGITAL IMAGE PROCESSING

#### 1. PERSONAL DATA

**Date and Place of Birth:** 18/07/1969 - Jarash / Jordan.

**Nationality:** Jordanian.

**Marital Status:** married.

**Address:** EE Dep., Faculty of Engineering,  
 Jordan University of Science & Technology  
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#### 2. ACADEMIC INFORMATION

Degree	Specialty	Grade	Institution	Country	Date
High School Education	Scientific Branch	95.1 %	Jerash Secondary School	Jordan	1987
B.Sc. & M.Sc.	Communication	With Honor	Georgian Technical University	Georgia	1993
Ph.D.	Digital Image processing	—	Georgian Technical University	Georgia	1996

#### 3. TEACHING EXPERIENCE: (since 15/02/1997)

#	Institution	Period	Rank	Notes
1	The Hashemite University, Biomedical Dept. (Jordan)	12/2/2003-14/6/-2004	Assistant Professor	Part Time
2	Al-Balqa University, Al-Huson College, Com. Dept. (Jordan)	15/2/2007-15/6/2007	Associate Professor	Part Time
3	Philadelphia University, EE Dept. (Jordan)	15/2/1977-13/2/2000	Assistant Professor	Full Time
4	Jordan University of Science & Technology, EE Dept. (Jordan)	13/2/2000-9/9/2007	Associate Professor (9/11/2005)	Full Time

*Teaching Experience (continued)*

#	Institution	Period	Rank	Notes
5	5. Al-Yarmouk University, the Com. Dept. (Jordan)	9/9/2007-7/9/2008	Associate Professor	Sabbatical Leave
6	6. Jordan University of Science & Technology, EE Dept. (Jordan)	Due 25/9/2009	Associate Professor	Full Time
7	7. Al-Imam Mohammad Bin Saud University (Saudi Arabia)	26/9/2010-10/9/2012	Associate Professor	Full Time
8	8. Jordan University of Science & Technology, EE Dept. (Jordan)	Since 13/9/2012	Full Professor ( since 13/02/2014)	Full Time

During this period many courses (undergraduate as well as master) were taught including:

1. Electric Circuits	2. Circuits Lab	3. Electronics	4. Electronics Lab
5. Signals and Systems	6. Analog Communications	7. Digital Communications	8. Communications Lab
9. Communications Circuits	10. Communications Systems	11. Fiber-Optical Communications	12. Electromagnetics
13. Satellite Communications	14. Master Seminar	15. Digital Image Processing (Master)	16. Special Topics in EE (Master)

#### **4. WORKSHOPS & SHORT TRAINING COURSES**

##### **4.1. Attended Short Training Courses:**

1. "Fourth Future: Electric Vehicles Technology, Energy and Future", at Al Hussein Cultural Center / Amman, Jordan, Sep. 2017.
2. "Development of curriculum and study plans according to ABET", at the Academic Development and Quality Assurance Center / Jordan University of Science and Technology, Jordan, March 2014.
3. "Advanced Statistical Analysis using SPSS", at the Consultative Center of The Jordan University of Science and Technology, Jordan, Sep. 2013.
4. "Modern strategies in teaching methods", at the Academic Development and Quality Assurance Center / Jordan University of Science and Technology, Jordan, Sep. 2013.
5. "Using IEEE Xplore Digital Library" , IEEE branch at Riyadh, KSA, October 2011.
6. "Strategic Planning and Innovative Thinking", at the Consultative Center of The Jordan University of Science and Technology, Jordan, 2009.
7. TEMPUS (European Union Project) training session on "WiMAX Technology", Wireless TEMPUS Center, EE dep., Jordan University of Science and Technology, Jordan, May 2007.

8. TEMPUS-FINSI (European Union Project) training session on: "Industrial System Integration Syllabus Preparation", Irbid, Al-Husson College, Jordan, Nov. 2005.
9. "Programmable Logic Controllers – PLCs", Al-Husson College, Jordan, Dec. 2004.
10. TEMPUS-FINSI (European Union Project) training session on "Control Engineering and Industrial Automation", HIAST (Higher Institute for Applied Sciences & Technology), Damascus, Syria, Dec. 2004.
11. TEMPUS-FINSI (European Union Project) training session on "Sensors, Signal Conditioning, PLCs and Micro-Controllers", Leban University, Tripoli, Lebanon, September 2004.
12. "Communication Skills and Classroom Interaction" at the Consultative Center of The Jordan University of Science and Technology, Jordan, Sep. 2003.
13. "Communication Skills for Teaching Purposes" at the Consultative Center of The Jordan University of Science and Technology, Jordan, Feb. 2002.
14. "Exam Preparation and Evaluation" at the Consultative Center of the Jordan University of Science and Technology, Jordan, Sep. Feb. 2000.

#### **4.2. Lecturer & Coordinator of the Following Short Training Courses**

1. A one Day Short Training Course on "Current Trends in Biomedical Image Processing", at the Biomedical Eng. College / King Hussein Medical City, Amman, August 2004.
2. A Short Training Course on: "Ultrasound, CT scan and MRI" organized by the Biomedical Engineering Dept./ JUST in corporation with the Embassy of France / Amman March 2001.
3. A Short Training Course on: "Mastering Electrical Engineering Concepts Using MATLAB, MATLAB ToolBoxes and SIMULINK" at the Consultative Center of The Jordan University of Science and Technology (2002; 2003).
4. A Short Training Course on: "Digital Image Processing: A Practical Approach Using MALAB", at the Consultative Center of The Jordan University of Science and Technology (2001, 2002).
5. A special training course (for secondary teachers) entitled as "The revolution of communications" / Ministry of Education - Jordan (1998-1999).

#### **5. SEMINARS / SCIENTIFIC DAYS / INVITED LECTURES**

1. "Online Course Design", Jordan University of science and technology July 2021.
2. "E-library database – Springer", Jordan University of science and technology Jan. 2020.
3. "E-library database – Elsevier", Jordan University of science and technology Nov. 2019.
4. "The art of invention and its sciences", Jordan Engineering Association, 25 Sep. 2017.
5. "E-based Course Design", Consultative center at Jordan University of science and technology , Sep. 2017.
6. "E-passport Security Based on a Semi-fragile Watermarking for ID Authentication and Tamper Detection", *the 1<sup>st</sup> International Engineering Conference on New Advances in Engineering Research and their Impact on Engineering Education*, University of Applied Sciences, Amman, December 28-30, 2014.
7. "A Trip with Data Hiding in Color Images", The 3rd Yarmouk University Scientific Week, Irbid, May, 2008.
8. "Current Trends in Color Image Morphology", Faculty of Scientific Research at the Princess Sumayyah University of Technology, Amman March 2007.
9. "Color Image Compression Using a Modified Angular Vector Quantization Algorithm", Al-Balqa University, Hoson College, Irbid, May 2007.
10. "Current Trends in Biomedical Imaging Applications", at the King Hussein Medical City, Amman, August 2004.

11. "Digital Image Watermarking for Copyright Applications" The 2nd Electrical Engineering Day at the Jordan University of Science and Technology (2002).
12. "Current Trends in Image Processing" The 1st Electrical Engineering Day at the Jordan University of Science and Technology (2001).
13. "Application-Oriented Image Processing Tools" The 7th Scientific Day at the Jordan University of Science and Technology (2000).
14. "Digital Image Processing For Internet Purposes" under the care of Prof. Adnan Badran / President of Philadelphia University 1999.

## 6. LIST OF PUBLICATIONS

### Journal Papers

1. **Al-Otum, H.M.**, "Machine Learning Based Color Image watermarking Using Wavelet-Packets Decomposition Approach", submitted to *Multimedia Tools and Applications*, Jun. 2022.
2. **Al-Otum, H.M.**, "Colour Image Authentication and Recovery Using Wavelet Packets Watermarking", *Circuits, Systems, and Signal Processing* 41 (6), 3222-3264, 2022. <https://doi.org/10.1007/s00034-021-01927-y>
3. **Al-Otum, H.M** and Arwa Ellubani. "SECURE AND EFFECTIVE COLOR IMAGE TAMPERING DETECTION AND SELF RESTORATION USING A DUAL WATERMARKING APPROACH." *Optik*, 169280, 2022. <https://doi.org/10.1016/j.ijleo.2022.169280>
4. **Al-Otum, H.M.** "Dual image watermarking using a multi-level thresholding and selective zone-quantization for copyright protection, authentication and recovery applications." *Multimedia Tools and Applications*, 1-42, 2022. <https://doi.org/10.1007/s11042-022-11920-5>
5. **Al-Otum, H.M.**, Ibrahim, M. Color image watermarking for content authentication and self-restoration applications based on a dual-domain approach. *Multimed Tools Appl* , 11739-11764 (2021). <https://doi.org/10.1007/s11042-020-10368-9>
6. **Hazem Al-Otum**, "Secure and Robust Host-adapted Color Image Watermarking using Inter-layered Wavelet-packets." *Journal of Visual Communication and Image Representation*, 102726, 2020. <https://doi.org/10.1016/j.jvcir.2019.102726>
7. **Hazem Al-Otum**, Image watermarking based on inter-tree coefficients differencing in paired wavelet-packets tree constructions." *Multimedia Tools and Applications*, 78, (16),1-29, 2019. <https://doi.org/10.1007/s11042-019-7542-3>
8. **Hazem Al-Otum**, Wavelet packets-based watermarking with preserved high color image quality and enhanced robustness for copyright protection applications." *Multimedia Tools and Applications* 78, (2), 2199-2225, 2019. <https://doi.org/10.1007/s11042-018-6328-3>

9. **Hazem Al-Otum** and Nour Emad Al-Shalabi. "Copyright protection of color images for android-based smartphones using watermarking with quick-response code." *Multimedia Tools and Applications* 77.12 , 15625-15655, 2018. <https://doi.org/10.1007/s11042-017-5138-3>
10. **Hazem Munawer Al-Otum**, "Color image authentication using a zone-corrected error-monitoring quantization-based watermarking technique", *Opt. Eng.* 55(8), 083103, 2016. <http://dx.doi.org/10.1117/1.OE.55.8.083103>
11. **Hazem Al-Otum**, "A novel set of image morphological operators using a modified vector distance measure with color pixel classification", *J. of Visual Communication and Image Representation, Elsevier*, Vol.30, pp.46–63, Feb 2015. <https://doi.org/10.1016/j.jvcir.2015.02.010>
12. **Hazem Al-Otum**, "Semifragile watermarking for grayscale image authentication and tamper detection based on an adjusted expanded-bit multiscale quantization based technique", *J. of Visual Communication and Image Representation, Elsevier*, Vol.25, no.5, pp.1064-1081, April 2014. <https://doi.org/10.1016/j.jvcir.2013.12.017>
13. Omar Qasaimeh and **Hazem Al-Otum**, "Cross-gain modulation in closely spaced energy states quantum dash semiconductor optical amplifiers", *J. of Optics Communications, Elsevier*, Vol.284, no.19, pp. 4635–4641. Aug. 2011. <https://doi.org/10.1016/j.optcom.2011.06.010>
14. **Hazem Al-Otum**, "Semiblind copyright protection of color images based on a hybrid classified watermarking technique", *Journal of Electronic Imaging* 20(4), pp.043011-21 (Oct–Dec 2011), Oct. 2011.
15. **Hazem Al-Otum** and Omar Qasaimeh, "Novel watermarking technique based on the generalized squared interpoint distance for image copyright protection applications", *J. of Electronic Imaging, SPIE*, Vol. 20, No.3, pp. 033014-(1-13), Sep 2011.
16. **Hazem Al-Otum** and Sulaiman S. Al-Sowayan, "Color Image Watermarking Based on Self-Embedded Color Permissibility with Preserved High Image Quality and Enhanced Robustness", *Int. J. Electron. Commun. (AEU)*, Vol. 65, no.7, pp. 619–629, July 2011.
17. **Hazem Al-Otum** and Nedal Samara, " A Robust Blind Color Image Watermarking Based on Wavelet-Tree Bit Host Difference Selection", *Signal Processing J., Elsevier*, Vol.90, No.8, pp. 2498–2512, August 2010.
18. **Hazem Al-Otum** and Allam Taba'a, "Adaptive Color Image Watermarking Based on a Modified Improved Pixel-wise Masking Technique", *Computers and Electrical Engineering Journal, Elsevier* , Vol.35, No. 5, pp. 673–695, September 2009.
19. Walid Shahab, **Hazem Al-Otum**, and Farouq Al-Ghoul, "A Modified 2D Chain Code Algorithm for Object Segmentation and Contour Tracing", *International Arab Journal for Information Technology (IAJIT)*, Vol.6, NO.5,pp.250-257, July 2009.
20. Imad Zyout, Ikhlas Abdel-Qader and **Hazem Al-Otum**, "Progressive lossy to lossless compression of ROI in mammograms: Effects on microcalcification detection", *Integrated Computer-Aided Engineering Journal* , Vol.15, No.3, pp.241-251, 2008
21. **Hazem Al-Otum** and Nedal Samara, "Adaptive Blind Wavelet-Based Watermarking Technique Using Tree Mutual-Differences", *Electronic Imaging J.*, Vol.15, No.4, 043011-(1-12), Dec. 2006.
22. **Hazem Al-Otum**, Walid Shahab and Mamoon Smadi, "Colour Image Compression Using a Modified Angular Vector Quantization Algorithm", *IEEE-Journal of Electrical Engineering*, Vol. 57, No. 4, pp. 227–235, 2006.

23. **Hazem Al-Otum** and Mohammad Ibbini, "A Low Bit Rate Color Image Encoder Using An Adaptive Morphological Pyramid Decomposition", *Electronic Imaging J.*, Vol.14, No. 3, pp.330141-3301412, Jul. 2005.
24. Majdi T. Oraiqat, Firas M. Awwad and **Hazem M. Al-Otum**, "Angle-Valued Mahalanobis-based Morphological Operators ", *WSEAS Trans. on Electronics.*, Issue 3, Vol.1, pp. 449-455, July 2004
25. Majdi T. Oraiqat, Firas M. Awwad and **Hazem M. Al-Otum**, " A comparison of Image Enhancement using Curvelet Transform with Multiscale Gradient and Retinex Operators", *WSEAS Trans. on Electronics.*, Issue 3, Vol.1,pp. 461-467, July 2004
26. **Hazem Al-Otum**, " Color Image Morphology Using an Adaptive Saturation-Based Technique", *Optical Engineering J.*, Vol.43, NO.6, pp. 1280-1292, June 2004
27. **Hazem Al-Otum**, "Morphological Operators For Color Image Processing Based on Mahalanobis Distance Measure", *Optical Engineering J.*, Vol 42., No.9, pp.2595-2606, Sep. 2003.
28. **Hazem Al-Otum**, "Qualitative and Quantitative Image Quality Assessment of Vector Quantization, JPEG, and JPEG2000 Compressed Images", *Electronic Imaging J.*, Vol.12, No. 3, pp.511-521, Jul. 2003.
29. **Hazem Al-Otum**, "Fast clustering algorithm for codebook production in image vector quantization", *Electronic Imaging J.*, Vol.10, NO. 2, pp. 409-417, April 2001.
30. **Hazem M. Al-Otum**, "Evaluation of reconstruction quality in image vector quantization using existing and new measures", *IEE Proceed. On Vision, Signal and Image Processing*, Vol.145, No.5, pp.349, Oct. 1998.
31. **Al-Otum Hazem** and Otar Zumburidze, "Image Compression using residual vector quantization with variable block size segmentation", *Trans. of the Georgian Technical University*, NO.3,(404), pp.52-64, Rep. of Georgia, March 1994.
32. **Al-Otum Hazem** and Otar Zumburidze, "Image compression using vector quantization with discrete cosine-III transform", *The Journal of The Ministry of Communications of Georgia.*, NO.2., pp.53-55, Rep. of Georgia 1995.
33. **Hazem Al-Otum**, "Image vector quantization using a modified LBG algorithm with approximated centroids" *Electronics Letters J.*, Vol. 31, NO.3, pp.174-175, 1995, United Kingdom.

### Conference Proceedings

34. **Hazem Al-Otum**, "Securing Color Images with Copyright Protection and Accurate Tamper Localization Using Selective Quantization-based Wavelet-Packets Watermarking Approach", accepted for publication in the 2020 12<sup>th</sup> Int. Conf. on Electrical Engineering, Cairo, Egypt, 7-9 April 2020.
35. **Hazem Al-Otum** and Alaa Alansari, Tamper Detection and Image Recovery using Shuffling Watermarking, *Proceedings of the 2019 5<sup>th</sup> Int. conf. on Computer and Information Technology, Istanbul, Turkey, 16-17 April, 2019. 25-29*, <https://doi.org/10.1145/3323933.3324078>
36. **Hazem Al-Otum**, "Color Image Authentication for Detecting Intentional Attacks", *Proceedings of the 6<sup>th</sup> Inter. Conf. Digital Information Processing and Communications (ICDIPC2016)*, Beirut, Lebanon 21-23 April, 2016, pp.97-102. (DOI: [10.1109/ICDIPC.2016.7470799](https://doi.org/10.1109/ICDIPC.2016.7470799))

37. **Hazem Al-Otum**, "E-passport Security Based on a Semi-fragile Watermarking for ID Authentication and Tamper Detection", *presented at the 1st International Engineering Conference on New Advances in Engineering Research and Their Impact on Engineering Education, University of Applied Sciences, December 28-30, 2014, Amman, Jordan.*
38. **Hazem Al-Otum** and Allam Taba'a, "Color Image Copyright Ownership Protection based on a Multi-Spectral Selective Pixel-Wise Watermarking Technique", *Proc. of the 3<sup>rd</sup> Int. Symposium on Comm., Control and Sig. Proc. (ISCCSP 2008)*, pp. 544-549, 2008.
39. Imad Zyout, Ikhlas Abdel-Qader and **Hazem Al-Otum**, "Embedded ROI coding of mammograms via combined SPIHT and integer wavelet transforms", *Proc. of the IEEE International Conf. on Electro/Information Technology 2007*, pp. 173-174, May 2007.
40. **Hazem Al-Otum** and Majed Al-Dwairi, "Image Compression Based on Color Morphological Pyramidal Decomposition", *in the Proc. of the 9<sup>th</sup> International Symposium on Signal Processing and its Applications (ISSPA07)*, pp.1-4, ISBN: 1-4244-0779-6, Feb. 2007.
41. A. Al-Nu'aيمي, R. Qahwaji and **H. Al-Otum**, "An adaptive digital colored images watermarking technique using YCbCr" *appears in the Proceedings of the 18th National Computer Conference 2006 © Saudi Computer Society*, pp.1-5, 2006.
42. **Hazem Al-Otum**, "Color Image Compression Using Combined VQ Algorithms", *appears in the Proceedings of the 10th IEEE Int. Conf. on Electronic, Circuits and Systems, Sharja, UAE, 14-17*, pp 100-104, Dec. 2003.
43. Rami Oweis and **Hazem Al-Otum**, "Intraframe Image Coding Using a Modified LBG Algorithm" *in the Proc. of the ISSPIT 2001 (IEEE on signal Processing), Cairo, Egypt, Dec. 2001*
44. **Hazem Al-Otum** and Rami Oweis, "Image Vector Quantization for Interframe Coding Applications" *in the Proc. of the ISSPIT 2001 (IEEE on signal Processing), Cairo, Egypt, Dec. 2001*
45. **Al-Otum Hazem** and Otar Zumburidze, "Adaptive low bit rate interframe coding of images using vector quantization ", *Proceedings of EOS-SPIE symposium on Advanced Networks and Services, The Netherlands, 1995.*
46. **Al-Otum Hazem**, "Reduction of specific distortions in image vector quantization", *published in the proceedings of the International Symposium on Advanced Network Technologies, Berlin, Germany, 1996.*
47. **Al-Otum Hazem** and Otar Zumburidze, "Intra- and interframe image coding via vector quantization", *The SPIE's conf. on visual Com. and Image Proc.*, Vol.2501, pp.717-732, USA 1995.
48. **Hazem Al-Otum** and Otar Zumburidze, "Image vector quantization with channel coding", *The SPIE's conf. on visual Com. and Image Proc.*, Vol.2394, pp.862-873, USA, 1994.

## 7. INTERNATIONAL PROJECTS

1. **The European Union TEMPUS-FINSI Project:** This project has been sponsored by the European Union TEMPUS Commission (#JEP300782002). The FINSI project concentrates on describing the job of a system integrator having good basic knowledge in subjects such as mechanics, electronics, electrical engineering, heat

transfer, automation control and industrial data processing so as to able to envisage a global way of designing products, machines or installations. For more details, please refer to [www.euromid.org](http://www.euromid.org).

2. **The European MEDNET'U Project for Video Teaching & Distance Learning:** The Mediterranean Network of Universities (MedNet'U) resulted from the cooperation between Nettuno University and 25 partners of 11 Euro-Mediterranean countries and aims at creating a Distance Euro-Mediterranean University for University and Vocational Training Learning and to create a common technological platform to carry out distance teaching and learning processes. The participation in the MedNet'U Project was by recording a video course on "Signal Theory" that is broadcasted on satellite television and on Internet ([www.uninettuno.it](http://www.uninettuno.it)).

## 8. ACADEMIA-INDUSTRIAL LINKING PROGRAMS

1. **The Jordanian Faculty For Factory (FFF) Project (4th Cycle-2006):** In its 4th run (2006), A proposal has been made to the FFF project commission, and the project entitled as: "Computerization and Atomization of the Modern Injaz Chips Factory " has been financially sponsored by The National Agency For Industrial Support (NAFIS).
2. **The Jordanian Faculty For Factory (FFF) Project (3rd Cycle-2005):** This project aims at bridging the faculty members in the Jordanian Universities (Academia) with the Industrial Enterprises in Jordan. This was accomplished by encouraging the faculty members to spend a 3-month period (at summer) at factory sites and locations. In summer 2005, the applicant's participation in the FFF project was as a faculty member along with Al-Ahli Food Factory (AFF) at Jarash city.

## 9. SUPERVISION OF MASTER THESIS

#	Thesis Title	Date
1	PV Hot spot detection and correction based on Deep learning approaches and thermal imaging techniques	2021-2022
2	Color Image Watermarking based on machine learning and deep learning approaches	2020-2022
3	Face Detection and Recognition For Security Applications	2019-2021
4	Color Image Watermarking for Authentication and Recovery Applications	2018-2020
5	Content Authentication of Color Images with Restoration Capabilities based on Spatial-transformed Dual Domain Watermarking Techniques.	2017-2018
6	Copyright Protection of Color Images for Android-based Smartphone Applications Using Watermarking Techniques with Quick-Response Code	2015-2017
7	Tamper Detection and Image Recovery Based on Watermarking Techniques	2015-2017
8	Color Image Authentication and Integrity Verification based on Dual-Domain Semi-Fragile Watermarking Techniques	2008-2010
9	The Design and Construction of a Novel Framework for Jordanian Passport Authentication System based on Dual-Domain Color Image Watermarking	2008-2010
10	Designing of Digital Watermarking Schemes for Still-Image Ownership Verification	2006- 2008

11	Automated Visual Inspection of Electronic Kits based on Image Processing Concepts	2004-2005
12	Digital Image Compression Based on Progressive Transmission for Medical Applications	2003-2005
13	Digital Image Processing Using Curvelet Transform	2003-2005
14	Color video coding based on modified MPEG2 standard	2001-2003
15	Dynamic tracking of moving objects based on digital image segmentation and motion compensation techniques	2000-2003

## 10. FUNDED RESEARCH

- Project 1: Muhammad Bin Saud Islamic University / KSA: (2009-2011):**  
entitled as "Designing of a Novel Package for Color Image Morphological Operators Using Angular-Based Distance Measure".
- Project 2: TEMPUS-FINSI Project (2003-2006):**  
with a budget of 300 000 € (see section 7).
- Project 3: MEDNET'U (2002-2005):**  
with a budget of 3 000 000 € (see section 7).
- Project 4: JUST 17/2001 (2001-2003):**  
entitled as " Design and construction of a multipurpose system based on the principles of digital image morphology".
- Project 5: JUST 32/99 (1999-2002):**  
entitled as "Color Digital Image Compression Using Modified Vector Quantization Algorithms".

## 11. ADMINISTRATIVE EXPERIENCE

#	Position	Period	Role	Achievements
1.	Acting Dean – Faculty of Graduate Studies – JUST	Summer 2021	Acting Dean	Graduate Studies Affairs
2.	Vice Dean – Faculty of Graduate Studies – JUST	2019-2021	Vice Dean	Graduate Studies Affairs
3.	Vice Dean – Faculty of Engineering - JUST	2017-2018	Vice Dean	Eng. Faculty Affairs - Instructors Affairs
4.	JUST University Council	2017-2018	Member	University Regulations
5.	Dean Assistant - Faculty of Engineering - JUST	2001-2002	Dean Assistant	Computerization of Eng. Faculty

## 12. COMMITTEES AND COMMUNITY SERVICES

#	Committees/Services	Period	Role	Achievements
1.	Graduate Studies Council	2019-2021	Member	Graduate studies issues
2.	ABET Committee at EE Department – JUST	2019-2020	Member	Preparation of document for the Next ABET evaluation cycle
3.	Eng. Faculty Committee for Strategic Planning - JUST	2017-2018	Chairman	Eng. Faculty Strategic Plan
4.	Eng. Faculty Council – JUST	2005-2006 2015-2016	Member	2005-2006 2015-2016
5.	Ministry of Higher Education Committee for Private University Program Adoption - Jordan	2008	Member	Adoption of programs in two private universities
6.	Ministry of Higher Education Committee for Jordanian Ph.D. Equivalency – Jordan	2002-2003	Member	Granting of the Jordanian Ph.D. Equivalency
7.	Eng. Fac. Internet and Computer Affairs Committee – JUST	2003-2004	Member	Computerization of Eng. Faculty
8.	EE Strategic Planning Committee – JUST	2005-2006	Member	ABET Preparation
9.	EE Grad. Training Committee - JUST	2006-2007	Chairman	EE Training Affairs - Organization and Management
10.	EE Grad. Project Training Committee – JUST	2005-2006	Chairman	EE Grad. Project Affairs
11.	Eng. Fac. Library Committee – JUST	2002-2003	Member	Organization, Books and Journals.
12.	Ministry of Higher Education Committee for Public University Program Adoption - Jordan	2008	Member	Investigation for the possibility of opening a new specialty (Electronic Communications) in Al-Hussein University
13.	The College of Engineering Foundation committee – Al-Imam Muhammad Ibn Saud Islamic University – Saudi Arabia	2009-2012	Member	Establishing a new College of Engineering
14.	EE Plan Development Committee	2009-2011	Member	EE Plan Development Electrical Engineering Department

	Al-Imam Muhammad Ibn Saud Islamic University – Saudi Arabia			
15.	EE Committee for Selection of Academic Staff Members Al-Imam Muhammad Ibn Saud Islamic University – Saudi Arabia	2009-2010	Member	Selection of Academic Staff Members
16.	Al-Imam Muhammad Ibn Saud Islamic University – Saudi Arabia	2011-2012	Chairman	Exams and Time Table Affairs Committee College of Engineering

## 12. OTHER PROFESSIONAL ACTIVITIES

- **Conference TPC membership:** served as a TCP member for:
  - The 2020 12<sup>th</sup> Int. Conf. on Electrical Engineering, Cairo, Egypt, 7-9 April 2020 (reviewer).
  - The 5<sup>th</sup> Int. conf. on Computer and Information Technology, Istanbul, Turkey, 16-17 April, 2019
  - The 15<sup>th</sup> IEEE International Conference on Signal Processing and Information Technology (ISSPIT 2015 –AEU Dec. 7-10/2015)
- **Review Activities:** served as a peer reviewer for many (and not limited to) international journals and conferences including:
  - Signal Processing: Image Communication Journal - Elsevier
  - Journal of Visual Communication and Image Representation – Elsevier
  - The 15<sup>th</sup> IEEE Int. Conf. Sig. Proc. and Info. Technology (ISSPIT 2015)
  - The Institute of Electrical and Electronics Engineers (IEEE)
  - The International Society for Optics and Photonics (SPIE)
  - The Institution of Engineering and Technology (IET )
  - Applied Mathematics and Computation (ACM)
  - Annals of Telecommunications - Springer
  - Journal of Systems and Software- Elsevier
  - British Journal of Applied Science & Technology
- **Reviews for Promotion App./Thesis/ Funded Research:** served as a peer reviewer for:
  - Scientific Research Support Fund - Ministry of Higher Education and Scientific Research (2004-2016).
  - Accreditation of Bachelor Programs in Private Universities - Ministry of Higher Education and Scientific Research (2005- 2016).
  - Master Thesis Committees (Jordan University, Yarmouk University and Al-Ahliyya Amman University, Princess Sumayah University for Technology , etc, 2007-2018).
  - Promotion Committees (Princess Sumayah University for Technology - 2015)
  - JUST Departmental and College committees for promotion applications 2000-2022