



Abdallah Kassem, Ph.D Professor O:E20.30 T:09.218950, Ext. 204 E:akassem@ndu.edu.lb

## **Biography**

Abdallah Kassem has previously worked as research assistant at Polystim Neurotechnologies Laboratory of the Ecole Polytechnique de Montreal, Canada. He still cooperates with this laboratory doing some researches. He received his B.S in Microelectronics from University of Quebec in Montreal in 1992, his M.Sc and Ph.D in microelectronic from Ecole polytechnique de Montreal in 1996 and 2004 respectively. From 1996 to 2000, he taught computer architecture, microprocessors and digital electronic courses and laboratories at AUB, LAU in Lebanon. Dr. Kassem joined Notre Dame University-Louaize in 2005 as an assistant professor in the Electrical and Computer Engineering department. He was promoted to the rank of full professor in 2020. Dr. Kassem published approximately 60 papers in reviewed journals and conference proceedings in Lebanon and around the world. He is a Guest Editor Elsevier, AEU - International Journal of Electronics and Communications. His research interests include microelectronics design and testing, VLSI, semiconductor device modeling and simulation, microprocessors, engineering education/management, ultrasonic applications, healthcare applications, e-Health and m-Health. Dr. Kassem is a Professional Engineer in Lebanon (Ordre des Ingénieurs du Liban). He is a senior member of the Institute of Electrical and Electronics Engineering (IEEE) and Organizer and TPC member of many IEEE International conferences.

#### **Peer-reviewed Journals**

- R. A. Jaber, A. M. El-Hajj, A. Kassem, L. A. El-Nimri and A. M. Haidar, "CNFET-Based Designs of Ternary Half-Adder using a Novel "Decoder-less" Ternary Multiplexer based on Unary Operators," in the Microelectronics Journal, Elsevier, Vol. 96, 104698, 2020. (Q2)
- H. Bazzi, A. Harb, H. Aziza, M. Moreau, A. Kassem, "RRAM-based Non-Volatile SRAM Cell Architectures for Ultra-Low-Power Applications," in the Analog Integrated Circuits and Signal Processing, Springer, https://doi.org/10.1007/s10470-020-01587-z. (Q3)
- A Harb, E. Baz, A. Kassem, C. Baena, "A Strategic Assessment of the Effects of Project Control Systems on Performance and Outcomes. The Case of ICT Organizations," in the Int. J. Technological Learning, Innovation and Development InderScience Publishers, vol. 11 (3), pp. 245-264, 2019. (Q3)
- A. Kassem, W. Antoun, M. Hamad, C. El-Moucary, "A Comprehensive Approach for A Smart Medication Dispenser, in the International Journal of Computing and Digital Systems vol. 8 (2), pp. 131-141, 2019. (Scopus)
- R. A. Jaber, A. Kassem, A. M. El-Hajj, L. A. El-Nimri and A. M. Haidar, "High-Performance and Energy-Efficient CNFET-Based Designs for Ternary Logic Circuits," in IEEE Access Journal, vol. 7, pp. 93871-93886, 2019. (Q1)
- A Harb, R. Abou Antoun, A. Kassem, C. Baena, "Empirical Classification and Effect of Procurement Process on Organizational Performance Outcomes," the International Journal of Procurement Management, vol. 12 (1), InderScience Publishers, Jan. 2019. (Q2)
- M.A. Chahine, H. Bazzi, A. Mohsen, A. Harb, A. Kassem "A low-noise voltage-controlled ring oscillator in 28-nm FDSOI technology for UWB applications" AEU-International Journal of Electronics and Communications-Elsevier, vol. 97, pp. 94-101, Dec. 2018. (Q2)

- Charles Sawma, Ahmad Hassan, Abdallah Kassem, Mohamad Sawan, "Bidirectional Parallel Capacitive Data Links: Experimental Measurement and System Modeling," in the IEEE Access Journal, March 2018. (Q1)
- Nayif Saleh, Abdallah Kassem and Ali Massoud Haidar, "Energy-Efficient Architecture for Wireless Sensor Networks in Healthcare Applications", in IEEE Access Journal, Special Section: Mobile Multimedia for Healthcare, vol. 6, pp. 6478 – 6486, Jan. 2018. (Q1)
- A Harb, C. Yaacoub, A. Kassem, C. Baena, "Assessment and Analysis of Factors Depicting the International Expansion Process of Mobile Network Operators: Case of Zain Telecom," Int. J. Technological Learning, Innovation and Development InderScience Publishers, vol. 9 (2), 2017. (Q3)
- A. Kassem, M. Hamad, C. Bechara and M. Khattar, "An Educational Board for Teaching Microcontroller System Design laboratory," International Journal of Computing & Information Sciences, IJCIS, vol. 12, pp. 1-9, 2016.
- Foulwa Ezzeddine, Ahmad Diab, Abdallah Kassem, Ahmad Rifai Sarraj, "Studying Mental Visual Imagery and Action Observation Using Electro-Oculogram (EOG)," Jacobs Journal of Physical Rehabilitation Medicine, vol. 2, pp. 1-7, 2016.
- J. Issa, and A. Kassem, "Disk I/O Performance-per-Watt Analysis for Cloud Computing," International Journal of Computer Applications, Foundation of Computer Science, New York, USA, vol. 97(3), pp. 23-27, 2014.
- Marianne Khlat, Atef H. Harb and Abdallah Kassem, "Lean Manufacturing: Implementation and assessment in the Lebanese Pharmaceutical Industry," International Journal of Computing and Optimization (JCO), vol. 1(2), pp. 47-62, 2014.
- David Semaan, Atef Harb and Abdallah Kassem, "Reliability and Accuracy of Neural Networks for Exchange Rate", the International Journal of Digital Information and Wireless Communications, (IJDIWC), vol. 4 (4), pp. 447-457, 2014.
- A. Kassem, M. Sawan, M. Hamad, and A. Haidar, "Toward a Miniaturized Generation of Ultrasonic-based Devices", World Scientific, Journal of Circuits, Systems, and Computers (JCSC), vol. 16, pp. 1027-1044, December 2007.
- A. Kassem, M. Sawan, M. Boukadoum and A. Haidar "Perception SoC Based on an Ultrasonic Array of Sensors: Efficient DSP Core Implementation and Subsequent Experimental Results", EURASIP, Journal on Applied Signal Processing, vol. 7, pp. 1071-1081, July 2005.
- A. Kassem, M. Sawan, and M. Boukadoum "A New Digital Scan Conversion Architecture for Ultrasonic Imaging Systems," World Scientific, Journal of Circuits, Systems, and Computers (JCSC), vol. 4, pp. 367-382, April 2005.
- M. Sawan, R. Chebli, A. Kassem, "Integrated Front-End Receiver For A portable Ultrasonic System," Kluwer, Journal of Analog Integrated Circuits and Signal Processing, vol. 36, pp. 57–67, July 2003.

# **Book Chapters**

- ElKheshen H., Deni I., Baalbaky A, Bamashmos S. H., Dib M., Hamawy L., Hajj Hassan M., Abou Ali M., and Kassem A, "Safer Drug Administration via Smart Syringe Pump using Patient's Monitor Feedback," chapter in a book "Vital Signs: An Overview," pp. 81-106, published by Nova Science Publishers, Inc. 2020.
- Hamawy L., Alnaggar A., Omais K., Baalbaky A, Hajj Hassan M., Abou Ali M., and Kassem A, "Structural and Functional Abnormalities in Major Depressive Disorder," chapter in a book "Vital Signs: An Overview", pp. 131-150, published by Nova Science Publishers, Inc. 2020.
- Chady El Moucary, Abdallah Kassem, Walid Zakhem, Chaybane Ghabach, Roger El Khoury, and Patrick Rizk, "Complete Design of a Hardware and Software Framework for PWM/Discrete PID-Based Speed Control of a Permanent-Magnet DC Motor without Prior Knowledge of the Motor's Parameters", chapter in a book "Recent Trends in Computer Applications for Sustainable Development", pp 153-173, published by Springer-Verlag, 2018.

### **Patent**

• A. Kassem, M. Hamad, C. El-Moucary, G. Bou Jaoude, and C. Merhej, "Asthma Care Apps," Lebanese Patent, 2014.

## **Keynote Speaker**

- A. Kassem, "Wearable Devices: Current and Future Research," Keynote Speaker at the International Conference on Computer and Applications, September, 6-7, 2017 Dubai, UAE.
- A. Kassem, "Emerging Smart Biomedical Devices and Telemedicine," Invited Speaker at the International workshop on Emerging Technologies in Biomedical Engineering and TeleMedicine (ETBET'18), February 18th-19th, 2018, Doha, Qatar.

## **Peer-Reviewed International Proceedings**

- Jaber R. A., El-Hajj A. M., Haidar A. M., Kassem A. and Nimri L. A., "A Novel Binary to Ternary Converter using Double Pass-Transistor Logic," 2019 31st International Conference on Microelectronics (ICM), Cairo, Egypt, 2019, pp. 240-243, doi: 10.1109/ICM48031.2019.9021886. Indexed IEEExplore
- Mohsen A., Harb A., Deltimple N. and Kassem A., "Variable Gain Differential Low Noise Power Amplifier in 28-nm FD-SOI," 2019 31st International Conference on Microelectronics (ICM), Cairo, Egypt, 2019, pp. 206-209, doi: 10.1109/ICM48031.2019.9021538.Indexed IEEExplore
- Merhi N., Nour M., Hajj Moussa G., ElSayed A., Bamashmos S. H., Hamawy L., Elhalabi F., Hajj Hassan M., Abou Ali M., and Kassem A., "An Intelligent Infusion Flow Controlled Syringe Infusion Pump," accepted for publication in the 31th IEEE International Conference on Microelectronics, ICM2019. Indexed IEEExplore
- Hamawy L., Hellani Z., Abu-Zeidan S., Hajj Hassan M., Abou Ali M., and Kassem. A, "Development of an Assistive Rehabilitation Device for Upper Limb Extremity", in the 5th International Conference on Advances in Biomedical Engineering 2019, (ICABME'19), doi: 10.1109/ICABME47164.2019.8940249. Indexed IEEExplore
- Bamashmos S. H., Hajj Moussa G., Wadaane M., Al-naggar A. N., Hamawy L., Elhalabi F., Hajj Hassan M., Abou Ali M., and Kassem A., "Affordable Automated Blood Cell Imager", in the 5th International Conference on Advances in Biomedical Engineering 2019 (ICABME'19), doi: 10.1109/ICABME47164.2019.8940241. Indexed IEEExplore
- Sassiya B., Chaaya P., Ghnatios C. and Kassem A., "Asthma Device Calibrator (ADC)," in the 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Germany, pp. 1429-1432, 2019, Indexed IEEExplore
- Chaaya P., Sassiya B., Ghnatios C. and Kassem A., "Automated Calibration Machine for Spirometers," in the 2019
  Fourth International Conference on Advances in Computational Tools for Engineering Applications (ACTEA),
  Lebanon, 2019, pp. 1-5. Indexed IEEExplore
- Aoun A., Maalouf E-J., Bou Abdo J., Marina N., Hamad, M., and Kassem A., "Asthma Irritant Monitoring," in the 30th IEEE International Conference on Microelectronics, ICM2018, Dec. 2018. pp. 120-123. Indexed IEEExplore
- Aoun A., Iliovits A., Kassem A., Sak'r P. and Metni N., "Arthro-Glove a Hybrid Bionic Glove for patients diagnosed with Arthritis, ALS and/or Dysmorphia, " in the 2018 9th Cairo International Biomedical Engineering Conference (CIBEC), Cairo, Egypt, 2018, pp. 106-109. Indexed IEEExplore
- Antoun W., Abdo A., Al-Yaman, S., Kassem A., Hamad, M., and El Moucary C., "Smart Medicine Dispenser (SMD)," in the 4th IEEE Middle East Conference on Biomedical Engineering, MECBME, pp. 20–23, July 2018. Indexed IEEExplore
- Aoun A., Kassem A. and Hamad M., "Sun Stimulator for Daylight System," in 2018 International Arab Conference on Information Technology (ACIT), Werdanye, Lebanon, 2018, pp. 1-4. Indexed IEEExplore
- Bassil H., Moubarak H., Kassem A., Hamad, M., and El Moucary C., "Smart Real Time Portable Multichannel Data Loggers," in the 29th IEEE International Conference on Microelectronics, ICM2017, pp. 1–5, Dec. 2017. Indexed IEEExplore
- Nawfal E., Aoun A., Hamad M., El Moucary C., and Kassem A., "MedBed: Smart Medical Bed," in the 4th International Conference on Advances in Biomedical Engineering 2017 (ICABME'17), pp. 1-4, Oct. 2017. Indexed IEEExplore
- Kassem A., Hamad, M.; El Moucary, C. and Fayad, E., "A Smart Device for the Detection of Heart Abnormality using R-R Interval," in the 28th IEEE International Conference on Microelectronics, ICM2016, pp.263-296, 2016. Indexed IEEExplore
- Jamous G., Saad E., Geagea M., ElMurr S. and Kassem A., "A Smart Lock System using Wi-Fi Security," in the International Conference on Advances in Computational Tools for Engineering Applications, ACTEA 2016, pp. 222-225, 2016. Indexed IEEExplore
- Harb A., Kassem A., Chartouni M. A. and Chaaya L. B., "Effects of Warehouse Management and engineering system on cost reduction and operations improvement," in 2016 Sixth International Conference on Digital Information Processing and Communications (ICDIPC), pp. 8-12, 2016. Indexed IEEExplore
- Frewat G., Baroud C., Sammour R., Hamad M. and Kassem A., "Android Voice Recognition Application with Multi Speaker Feature", in the 18th IEEE Mediterranean Electrotechnical Conference (MELECON 2016), pp. 1-5, 2016. Indexed IEEExplore
- Kassem, A., Hamad, M.; El Moucary, C.; "A Smart Spirometry Device for Asthma Diagnosis", in the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS), pp. 1629-1632, 2015. Indexed IEEExplore
- Charles Sawma, Mohamad Sawan, Abdallah Kassem, "Capacitive Data Links Intended for Implantable Medical Devices: A Survey", in the 3rd International Conference on Advances in Biomedical Engineering 2015 (ICABME'15), pp. 266-269, 2015. Indexed IEEExplore
- Christelle Nasrany, Riwa Bou Abdou, Abdallah Kassem and Mustapha Hamad, "S2LV-A Sign to Letter and Voice Converter", in the 3rd International Conference on Advances in Biomedical Engineering 2015 (ICABME'15), pp. 189-192, 2015. Indexed IEEExplore

- Harb, A.; Yaacoub, C.; Kassem, A.; Baena, C., "Internationalization process of a mobile operator: Case of Zain Telecom," in 2015 Fifth International Conference on Digital Information and Communication Technology and its Applications (DICTAP), pp.159-164, 2015. Indexed IEEExplore
- Karami, N.; Moubayed, N.; Kassem, A., "Autonomous water heater current optimizer," in 2015 Third International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAEECE), pp.1-6, 2015. Indexed IEEExplore
- David Semaan, Atef Harb and Abdallah Kassem, "Forecasting Exchange Rates: Artificial Neural Networks Vs Regression", in the Third International Conference on e-Technologies and Networks for Development (ICeND2014), pp.156-161, April 2014 (Selected paper to publish in an International Journal of Digital Information and Wireless Communications). Indexed IEEExplore
- Hanine El Hayek and Jessica Nacouzi, Abdallah Kassem, Mustapha Hamad and Sami El-Murr, "Sign to Letter Translator System using a Hand Glove", in the Third International Conference on e-Technologies and Networks for Development (ICeND2014), pp.146-150, April 2014. Indexed IEEExplore
- A. Kassem, M. Hamad, C. El-Moucary, G. Bou Jaoude, E. Neghawi and C. Merhej, "Asthma Care Apps," in the 2nd International Conference on Advances in Biomedical Engineering 2013 (ICABME'13), pp. 42-45, 2013. Indexed IEEExplore
- G. Daou, A. Kassem, M. Hamad and C. El-Moucary, "FPGA Implementation of a Three-Way Asynchronous DDR2 Memory Controller," in the 2nd International Conference on Advances in Computational Tools for Engineering Applications (ACTEA), 2012, pp.334-337, Dec. 2012. Indexed IEEExplore
- C. El Moucary, B. El Hassan, A. Kassem, S. Mitri, J. Rehban, Y. Nemer, "Multiplexing stereo signals using digital watermarking," in the 2nd International Conference on Advances in Computational Tools for Engineering Applications (ACTEA), 2012, pp.24-28, Dec. 2012. Indexed IEEExplore
- Nayif Saleh, Ali Massoud Haidar, Abdallah Kassem and Lina Nimri "Neuro-SRAM Technology", in the 10th IEEE International NEWCAS Conference, pp.89-92, July 2012. Indexed IEEExplore
- J. Farjo, M. Hamouche, J. Aoun, M. Hamad and A. Kassem, "Speaker Identification on compactRIO", in the 16th IEEE Mediterranean Electrotechnical Conference (MELECON 2012), pp. 399–403, March 2012. Indexed IEEExplore
- A. Kassem, M. Hamad, "A Microcontroller-Based Multi-Function Solar Tracking System", in the 5th IEEE International Systems Conference (SysCon 2011), pp. 13-16, April 2011. Indexed IEEExplore
- A. Kassem, M. Hamad, Z. Chalhoub, and S. El Dahdaah "An RFID Attendance and Monitoring System for University Applications", in the 17th IEEE International Conference on Electronics, Circuits, and Systems, ICECS 2010, pp. 853-856, Dec. 2010. Indexed IEEExplore
- A. Kassem, M. Hamad and J. Haddad "Real Time Video Streaming over Bluetooth using Software Technique", in the International Conference on Advances in Computational Tools for Engineering Applications, ACTEA 2009, pp. 225-229, 2009. Indexed IEEExplore
- A. Kassem, M. Hamad and E. Haidamous "Image Compression on FPGA using DCT", in the International Conference on Advances in Computational Tools for Engineering Applications, ACTEA 2009, pp. 320-323, 2009. Indexed IEEExplore
- H. Osseily, A.M. Haidar and A. Kassem "Implementation of RSA Encryption Using Identical Modulus", in the International Conference on Information & Communication Technologies, pp. 463-468, 2008.
- A. Haidar, M. J. Hamdan, M. B. Rashid, H. Hamieh, A. Issa, and A. Kassem, "A Novel Neural Network Ternary Arithmetic Logic Unit", in the International Conference on Information & Communication Technologies, pp. 593-596, 2008
- A. Kassem, R. Jabr, G. Salamouni and Z. K. Maalouf, "Vehicle Black Box System", in the 2nd IEEE International Systems Conference, 2008. Indexed IEEExplore
- A. Kassem, M. Hamad, and M. Sawan, "An Efficient SoC Dedicated to Ultrasonic Digital Imaging Systems", in the 6th IEEE International Workshop on SoC for Real-Time Applications, 2006. Indexed IEEExplore
- M. Hamad, A. Kassem, R. A. Jabr, C. Bechara and M. Khattar, "A PIC-Based Microcontroller Design Laboratory," in the 6th IEEE International Workshop on SoC for Real-Time Applications, 2006. Indexed IEEExplore
- A. Kassem, J. Wang, A. Khouas, M. Boukadoum, and M. Sawan, "Pipelined Sampled-Delay Focusing CMOS Implementation for Ultrasonic Beamforming", in the 3rd IEEE International Workshop on SoC for Real-Time Applications, pp. 247-250, 2003. Indexed IEEExplore
- A. Kassem, M. Sawan, and M. Boukadoum "A Scan Conversion CMOS Implementation for a Portable Ultrasonic System", in CCECE, 2003, pp. 1461-1464. Indexed IEEExplore
- A. Kassem, J. Wang, A. Khouas, M. Sawan, and M. Boukadoum, "Variable Delay CMOS Implementation for Ultrasonic Beamforming," the 14th International Conference on Microelectronics, pp. 127-130, 2002. Indexed IEEExplore
- K. El-Sankary, A. Kassem, R. Chebli, M. Sawan, "Low Power/Voltage 10bit-50MSPS Pipeline ADC dedicated to ultrasonic receivers", the 14th International Conference on Microelectronics, pp. 219-222, 2002. Indexed IEEExplore
- R. Chebli, A. Kassem, M. Sawan, "Logarithmic Programmable Preamplifier Dedicated to Ultrasonic Receivers", the IEEE, ISCAS, Vol. I, pp. 673-676, 2002. Indexed IEEExplore

- R. Chebli, A. Kassem, M. Sawan, "Integrated Front-End Preamplifier Dedicated to a Portable Echograph", the 8th IEEE International Conference on Electronics, Circuits and Systems, pp. 1103-1106, 2001. Indexed IEEExplore
- A. Kassem, J. Davidson, J-L. Houle, Y. Kayssi, M. Mansour, "Simulation and Implementation of DCT for Image Processing Applications," Second LAAS International Conference on Computer Simulation, 1997.
- A. Kassem, J. Davidson, J-L. Houle, "FPGA Implementation of Discreet Cosine Transform 4x4, 8x8 and 16x16", WORKSHOP on Field-Programmable Devices FPD'96.
- A. Kassem, J. Davidson, J-L. Houle, "FPGA Implementation of Discreet Cosine Transform (DCT) Algorithm," WORKSHOP on Field-Programmable Devices FPD'95.

## **Professional Recognition**

- Associate Editor of The IEEE Open Access, IEEE, since 2018
- Guest Editor Elsevier, AEU International Journal of Electronics and Communications-Special Issue ICM17,
- Reviewer of The Elsevier-Applied Soft Computing, journal 2019,
- Reviewer of The IEEE Transactions on Circuits and Systems I: Regular Papers,
- Reviewer of The International Journal of Electrical Engineering & Education, 2019, Sage Pub.,
- Reviewer of The IEEE Systems Journal, IEEE, 2017,
- Reviewer of The IEEE Open Access, IEEE, 2017,
- Organization member and a Technical Program Chair of the 4th IEEE MECBME 2020, Aman, March. 2020.
- Organization member and a Technical Program Committee Chair of the IEEE ICM 2019, Egypt, Dec. 2019.
- Organization member and a Technical Program Committee Chair of the IEEE ICABME 2019, Lebanon, Oct. 2019.
- Organization member and a Technical Program Publication Chair of the 4th IEEE ACTEA 2019, Lebanon, July. 2019.
- Organization member and a Technical Program Committee Chair of IEEE ICM 2018, Tunis, Dec. 2018.
- Organization member and a Technical Program Chair of the 4th IEEE MECBME 2018, Tunis, March. 2018.
- Organization member and a Technical Program Committee Chair of the IEEE EBECEGC2018, Lebanon, April 2018.
- Organization member and a Technical Program Committee Chair of the IEEE DINWC2018, Lebanon, April 2018.
- Organization member and a Technical Program Committee Chair of IEEE ICM 2017, Lebanon, Dec. 2017.
- Organization member and a Technical Program Committee Chair of IEEE ICABME 2017, Lebanon, Oct. 2017.
- Organization member and a Technical Program Committee Chair of the IEEE CSCEET2017, Lebanon, April 2017.
- Organization member and a Technical Program Committee Chair of the IEEE EECEA2016, Lebanon, April 2017.
- Organization member and a Technical Program Committee Chair of the IEEE EEETEM2017, Lebanon, April 2017.
- Member of the Steering Committee and Organization Member of IEEE ICCA 2016.
- Member of the Executive Steering Committee of IEEE ICM since 2015.
- Organization member and a Technical Program Chair of the 3rd IEEE MECBME 2016, Lebanon, Oct. 2016.
- Organization member and a Technical Program Publication Chair of the 3rd IEEE ACTEA 2016, Lebanon, July. 2016.
- Organization member and a Technical Program Committee Chair of the 6th IEEE ICDIPC 2016, Lebanon, April. 2016.
- Organization member and a Technical Program Committee Chair of the 3rd IEEE EECEA 2016, Lebanon, April. 2016.
- Organization member and a Technical Program Committee Chair of the 5th IEEE DICTAP 2015, Lebanon, April. 2015,
- Organization member and a Technical Program Committee Chair of the 3th IEEE TAEECE 2015, Lebanon, April. 2015,
- Organization member and a Technical Program Committee Chair of IEEE ICABME 2015, Lebanon, Sept. 2015,
- Organization member and a Technical Program Committee Chair of the 3rd IEEE ICeND2014, 3rd CyberSec2014, Lebanon, April. 2014,
- Organization member and a Technical Program Committee Chair of LAAS 2014, Lebanon March 2014,
- Technical Program Committee Chair of the Special Session Emerging biomedical wearable IEEE ICM 2014
- Organization member and a Local Arrangements Chair of the 17th IEEE MELECON 2014, Lebanon, April. 2014,
- Organization member and a Technical Program Committee Chair of IEEE ICABME 2013, Lebanon, Sept. 2013,
- Special Topics Chair of the 25th IEEE ICM 2013 Lebanon, Dec. 2013,
- Organization member and a Technical Program Committee Chair of IEEE ICABME 2013, Lebanon, Sept. 2013,
- Organization member and a Technical Program Committee Chair of IEEE ACTEA 2012, NDU, Dec. 2012,
- Publication chair IEEE ACTEA 2009,
- Member of the Technical Program Committee, IEEE ACTEA 2009, NDU, July 2009.
- Member of the Organizing Committee for the CTTACS held at NDU in 2007.

- Sessions Chair: (5) IEEE ACTEA 2019, 2016, 2012 and 2009, (3) IEEE MELECON 2012, 2014 and 2016, (4) IEEE ICM 2018-2015 (1) IEEE SysCon 2011, (1) IEEE ICECS 2011, (3) IEEE-ICABME 2017-2013, (2) IEEE-MECBME 2018-2016
- Technical Committee Member, Reviewer and Track Chair of The First Middle East Conference on Biomedical Engineering, 2011,
- Member of the Technical Program Committee IJEE,
- Member of the Technical Program Committee IJCDS-4,
- Technical Committee Member and Reviewer of IEEE ICEAC 2010 till 2013,
- Member of the Technical Program Committee IEEE SysCon 2013,
- Member of the Technical Program Committee ISWTA 2013,
- Member of the Technical Program Committee ICCVE 2013,
- Member of the Technical Program Committee ICEIT'2013,
- Member of the Technical Program Committee IEEE SysCon 2014,
- Member of the Technical Program Committee ICASNAM'2014,
- Member of the Technical Program Committee SIRS-2014,
- Member of the Technical Program Committee IEEE MELECON2014,
- Member of the Technical Program Committee ISWTA 2014,
- Member of the Technical Program Committee ICCVE 2014,
- Member of the Technical Program Committee ICESA'2014,
- Member of the Technical Program Committee ICCAAM' 2015,
- Member of the Technical Program Committee ICETES'2015,
- Member of the Technical Program Committee ICTAEECE'2015,
- Member of the Technical Program Committee IBMSGS' 2015,
- Member of the Technical Program Committee WSCNIS'2015,
- Member of the Technical Program Committee CITEF'14,
- Member of the Technical Program Committee DPNoC 2015,
- Member of the Technical Program Committee ICACCI Special Session on Advances in Satellite, Communications and Networking,
- Member of the Technical Program Committee ICTEL'2014,
- Member of the Technical Program Committee ICAET'2014,
- Member of the Technical Program Committee ICEEE'2014,
- Member of the Technical Program Committee SatComNet'14,
- Member of the Technical Program Committee MobiApps 2015,
- Member of the Technical Program Committee ICEPIT 2014,
- Technical Committee Member and Reviewer of The IEEE International Systems Conference SysCon since 2011,
- Reviewer of The Microelectronics Journal, Elsevier, 2008,
- Reviewer of The International Journal of Circuit Theory and Applications, Wiley, 2010,
- Reviewer of The 6th FEA (AUB) Student Conference, 2009,
- Reviewer of The ASCC2015, ICCSII 2012 till 2013, IEEE SysCon since 2012, SCOReD 2012, ISIEA 2012, ICCSII 2013, ISIEA 2013, ROBIONETICS 2013, TIME-E 2014, I4CT'2014, ICOCOE'2015, ROBIONETICS 2015, AR4MET'2015, IEEE SPICES 2015, I4CT'2015, IMACSI 2015, ISTMET 2015, PIAMSE'2015, ADVCIT'2014, REDEC2014, REEGETECH'2015, WSWAN'2015, ICITeS'2013, APMediaCast 2015, ICCEREC 2015, IAICT 2014, NEWCAS 2009 till 2015, IEEE ISCAS 2009, NEWCAS 2009 till 2015, ICECS 2009 till 2013.
- Certificate from Ramsis Summer School (NDU, 2010)

### **Awards / Honors Activities**

- Advisor of the 1st price award of the best project during the competition organized by the IEEE
  Communications Society Lebanon Chapter. It was the 3rd IEEE Lebanon Communications Student Competition
  2013 (IEEE LCSC'13) that took place at the Lebanese American University LAU Byblos campus, on Saturday
  June 29, 2013. This project entitled "Asthma Care Apps", realized by students Gilles Abou Jaoude, Cesar Merhej
  and Elie Neghawi.
- Jury member of the Final Year Project organized by the order of Engineers North Lebanon since 2011.
- Member for the establishment of IEEE Lebanon Section, and IEEE Lebanon Section Secretary (2005-2007).

- IEEE Senior Member since 2013.
- Member of the Executive committee of IEEE Lebanon Section.
- Member of the Executive committee of IEEE EMB Lebanon Chapter.
- President of the Joint (CAS, PES, PELS, IES) IEEE Lebanon Chapter.
- Member of the order of Engineers and Architects of Lebanon.