Hasan Othman Hasan Farahneh (CV)

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Nationality:
Canadian, Jordanian

Education:

1. PhD in Electrical and Computer Engineering, 2018, Ryerson University, Toronto-Canada. Thesis title (**Investigation of Vehicle to Vehicle Communication System Using Visible Light Technology).**
2. Master of Science in Electrical Engineering, 2004, The University of Jordan, Amman-Jordan. Thesis title (**Measuring Polarization Mode Dispersion in optical fibers using the nonlinear effect of Four-Wave Mixing**)
3. Bachelor degree in Electrical Engineering, 1985, Al-Yarmouk University, Irbid-Jordan

Teaching Experience:

1. September 2004- 2013 Full time Instructor at the Electrical Engineering Department, The University of Jordan. http://fetweb.ju.edu.jo/ee/faculty.htm,, and http://eacademic.ju.edu.jo/h.farahneh/default.aspx
2. Teaching Assistant at Ryerson University Fall 2013 -August 2018.
3. Part Time instructor at RCC collage- Yorkville-University, 2016-2017, Toronto-Canada.
4. Full time instructor at University of Jordan (Sept 2018- till now)

Courses Taught:

1. Electrical Circuits
2. Signals and Systems
3. Probability and Random Variables
4. Optical Communication
5. Digital Electronics
6. Electronic circuits and Amplifiers
7. Electrical Machines and Actuators.
8. Analog and Digital Communications
9. Matlab

Supervised Capstone Projects

More than 40 projects in different areas in Electrical, communications and electronics fields.

Practical Experience (Industry):

1. Jun. 1985-Aug. 1985: Trainee, Communication establishments, Irbid, Jordan.
2. Dec 1985-Nov 2000: Maintenance Engineer, in Jordan Army electronics work shop, Jordan.
3. Nov 2000-Oct 2002: Electronic Advisor in the Jordan Army.
4. Oct 2002-Aug 2003: Project manager in the Jordanian Royal Court (KADDB).

Research Areas of Interest:

Optical Communications with focusing on visible light communication, Wireless Communications, and Machine learning.

Professional memberships:

1- Jordan Engineers Association (1985-Now).
2- IEEE (Institute of Electrical and Electronic Engineers)

Publications:

1. Hazem Awad ; Ahmad Atieh ; Trevor J. Hall ; Hasan Farahneh." Stability and line width of multi wavelength Semiconductor fiber ring Laser" (Photonic North 2007-Canada).
2. Hasan Farahneh, Ibrahim Mansour, Ahmad. Atieh, " Measuring Polarization Mode Dispersion (PMD) in optical fibers using the nonlinear effect of Four-Wave Mixing (FWM)," Proceedings of the 6th Int. Conference on Electrical Engineering, ICEENG 2008, 27-29 May 2008, Cairo, Egypt
3. Ibrahim Mansour, Jamal S. Rahall, Hasan Farahneh "Two Slot MIMO Configuration for Cooperative Sensor Network" (Int. Communications, Network and System Sciences, Sept 2010, 3, PP 750-754
4. Hasan Farahneh, Ayman Issa "A Linear Use Case Based Software Cost Estimation Model" at the ICCIT 2011: International Conference on Computer and Information Technology organized by WASET, in Dubai, UAE, January 25-27, 2011, PP 409-413
5. Atieh, M. Kassb, S. Al Sharif, Hasan Farahneh, "Solar energy powering up aerial misting systems for cooling surroundings in Saudi Arabia", Global Conference on Renewables and Energy Efficiency for Desert Regions, GCREEDER 2011, April 2011, Amman, Jordan
6. Hassan Farahneh and Jamal Rahall, " A Coplanar Waveguide UWB Antenna with filtering band," ICECECE 2012 International Conference on Electrical, Computer, Electronics and Communication Engineering, Zurich, Switzerland, January 15- 17, 2012.
7. Hasan Farahneh "Wireless ZigBee Based Heart Rate " ICECECE 2013 International Conference on Electrical, Computer, Electronics and Communication Engineering, A PRIL 14-15, 2013 VENICE, ITALY
8. Hasan Farahneh and Xavier Fernando "Modeling the Leaky Feeder as a Multi Antenna Array "2014 Canadian Conference on Electrical and Computer Engineering, CCECE 2014, Toronto, Canada 4-7 May 2014.
9. Hasan Farahneh and Xavier Fernando "Leaky feeder, a new linear array transceiver for micro/Pico cells "2015 IEEE 28th Canadian Conference on Electrical and Computer Engineering (CCECE), Halifax, NS, Canada

10. Hasan Farahneh, Christopher Mekhiel, Ala Khalifeh, Wisam Farjow, and Xavier Fernando, "Shadowing Effects on Visible Light Communication Channels," published paper in CCECE 2016-Vancouver -Canada.
11. Ala Khalifeh, Hasan Farahneh, and Xavier Fernando, "Visible Light Communication Numerous Applications", Book Chapter published in Encyclopedia of Information Science and Technology, 4th edition 2016.
12. Hasan Farahneh, Ala Khalifeh, and Xavier Fernando, "An Outdoor Multi Path Channel Model for Vehicular Visible Light Communication Systems". Published in Photonics *North 2016*. May 24 to 26, *2016*, Quebec QC- Canada.
13. Fatima Hussain, Hasan Farahneh, Xavier Fernando and Alexander Ferworn, "VLC Enabled Foglets Assisted Road Asset Reporting", Published in IEEE 85th Vehicular Technology Conference: *VTC2017*-Spring 4–7 June *2017, Sydney, Australia*.
14. Hasan Farahneh, Fatima Hussain and Xavier Fernando" A New Alarming System for an Underground Mining Environment Using Visible Light Communications" Published in IEEE IHT, July 20-21, *2017*, Toronto-Canada.
15. Hasan Farahneh, Skidder M. Kamruzzaman and Xavier Fernando,'' Differential Receiver as a DE noising Scheme to Improve the Performance of V2V-VLC Systems'', Published in ICC-2018, 20-24 May *2018*, Kansas City, MO, *USA*.
16. Hasan Farahneh, Fatima Hussain and Xavier Fernando, 'Performance Analysis of Adaptive OFDM Modulation Scheme in VLC Vehicular Communication Network in Real Noise Environment", Springer-EURASIP Journal on Wireless Communications and Networking", Oct, 2018, volume 2018 number 1, page 243. (ISI)
17. Hasan Farahneh, Fatima Hussain and Xavier Fernando, "Optimal Precoder and Equalizer in 2x2 MIMO VLC Systems for Vehicular Application" Published in GLOBCOM, 10-12 December. 2018-Dubai-UAE.
18. Xavier Fernando and Hasan Farahneh "Vehicular Applications of Visible Light Communications", IOP-eBook-publisher-UK, 2019

References:

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2) Dr. Dia Abo Nadi, University of Jordan dnadi@ju.edu.jo Mobile number +962-7776-53270
3) Dr. Jamal Rahall, University of Jordan rahhal@ju.edu.jo Mobile number +962-78828-6254
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5) Dr. Sattar Hussein, Ryerson University, sattar.hussain@ryerson.ca Mobil number +1647-828-4823
6) Dr. Ahmed Atieh, Optiwave Systems Inc ahmad.atieh@optiwave.com Mobile number+1613-981-3577