Taimour Aldalgamouni

PhD in Electrical Engineering

Irbid-Jordan

Tel: +962797100932

tfaldalgamouni@just.edu.jo

EDUCATION

- **PhD** in Electrical Engineering, Concordia University, Montreal, Canada, 2009.
- **Master of Science** in Electrical Engineering, Western Michigan University, Kalamazoo, MI, USA, 1998.
- **Bachelor of Science** in Electrical Engineering, Jordan University of Science and Technology, Irbid, Jordan, 1995.

Academic experience

Chairman

September 2023 - present

Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.

Professor

June 2023 - present

Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.

Associate professor

June 2015 – June 2023

Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.

Chairman and Associate professor

September 2018- August 2020

Electrical Engineering Department, Fahad Bib Sultan University, Tabuk, KSA.

Associate professor

August 2017-August 2018

Electrical Engineering Department, Higher Colleges of Technology, Dubai, UAE.

Visiting professor

September 2016- August 2017

Systems and Computer Engineering Department, Carleton University, Ottawa, Canada. Conducting research in the 5G wireless communication systems.

Visiting Assistant Professor

February 2014- June 2014

Electrical and Computer Engineering Department, Khalifa University of Science, technology & Research (KUSTAR).

Assistant dean

September 2011-September 2013

College of Engineering, Jordan University of Science and Technology, Irbid, Jordan Responsibilities:

- Personnel matters.
- Course equivalency.
- Students' absence excuses.
- Students' discipline.

Visiting Scientist

June 13, 2011-September 9, 2011

Electrical Engineering Department, Concordia University, Montreal, Canada. Activities:

Conducting research in the area of resource allocation for fourth generation wireless systems.

Assistant professor

February 2010-June 2015

Electrical Engineering Department, Jordan University of Science and Technology, Irbid, Jordan.

Lecturer

September 2009-January 2010

Electrical Engineering Department-Jordan University of Science and Technology, Irbid, Jordan.

Research Assistant

September 2006-September 2009

Electrical and Computer Engineering Department, Concordia University, Montreal, Canada.

Activities:

Conducting research in the area of resource allocation for fourth generation wireless systems.

Courses Taught:

- Analog Communication Systems.
- Digital Communication Systems.
- Linear Algebra.
- Signals and Systems.
- Wireless communication systems.
- Communication Systems Lab.
- Digital Communication Systems Lab.
- Electronic Circuits Lab.
- Electric Circuits.
- Principles of Electrical Engineering.
- Electric Circuits Lab.

Research Interests:

- Wireless communication systems.
- Resource allocation for cognitive radio networks.
- Cross-layer designs for wireless networks.
- Multiple input multiple output communication systems for multiuser environments.

Supervision of Graduate Students:

PhD Students:

No PhD students were supervised because neither Jordan University of Science and Technology nor any other University in Jordan offers a PhD program in electrical engineering.

Current MSc Students:

- Waed Rawashdeh.
- Ziad Aljaludi.

Graduated MSc Students:

- Asma Alqudah,"Multiple Antenna Aided Orthogonal Frequency Division Multiplexing Employing Differential Evolution Algorithm for Minimum Bit Error Rate Multiuser Detection", May 2010.
- Monir Abughalwa, "Comparison of Analytical and Simulated BER Performance of Uplink CDMA-SFBC Systems", May 2011.
- Salsabeel Theiabat, "Performance Evaluation for Code Division Multiple Access With Space-Frequency Block Code Downlink Transmission Over Multipath Weibull Fading Channel Model", November 2011.
- Ahmad Alhubaishi, "Selection Diversity Techniques and their performance over the $\alpha \mu$ fading channels", October 2012.

- Maymonah Hayajneh, "Minimum Bit Error Rate Multiuser Detection Of Space Division Multiple Access-Orthogonal Frequency Division Multiplexing System Using Biogeography Based Optimization Algorithm", 2013.
- Shafea M Al-yousofi, "Performance Analysis of Multihop Wireless communication Systems Over Kappa-Mu and Eta-Mu Fading Channels using Generalized Gaussian Finite Mixture technique", 2014.
- Sharaf Mater, "Capacity analysis of Alpha-Eta-Mu Fading Channels under different adaptive transmission protocols", 2016.
- Hadeel Alenaizat, "Performance Analysis of Free-Space Optical Links Over Cascaded Snedecor's F Turbulence Channels in the Presence of Pointing Errors", June 2022.

Publications:

- A. M. Magableh, T. Aldalgamouni, O. Badarneh, S. Mumtaz, and S. Muhaidat, "Performance of Non-Orthogonal Multiple Access (NOMA) Systems over N-Nakagami-m Multipath Fading Channels for 5G and Beyond," *IEEE Transaction* on Vehicular Technology, 2022.
- T. Aldalgamouni, O. S. Badarneh, and H. Alenaizat, "Analytical performance assessment of FSO links over cascaded Snedecor's F turbulence channels in the presence of pointing errors," *Physical Communication*, vol. 54, 2022.
- O. S. Badarneh, F. S. Almehmadi, and T. Aldalgamouni, "On the performance analysis of wireless communication systems over $\alpha \mu/\alpha \mu$ composite fading channels," *International Journal of Ad Hoc and Ubiquitous Computing*, vol. 30, no. 3, 2019.
- A. M. Magableh, T. Aldalgamouni, S. Mater, and O. S. Badarneh, "Ergodic capacity and SNR analysis for dual hop amplify and forward cooperative communication systems over α-η-μ Channels," *IEEE Transaction on Vehicular Technology*, vol. 67, no. 12, 2018.
- A. M. Magableh, O. S. Badarneh, I. S. Ansari, and T. Aldalgamouni, "Error analysis of TAS/MRC in Rayleigh fading channel with non-Gaussian noise," *Journal of the Franklin Institute*, vol. 355, no. 14, 2018.
- T. Aldalgamouni, M. C. Ilter, O. S. Badarneh, and H. Yanikomeroglu, "Performance analysis of fisher-snedecor F composite fading channels," *IEEE Middle East and North Africa Communications Conference, (MENACOMM 2018)*, 2018.
- T. Aldalgamouni, M. C. Ilter, and H. Yanikomeroglu, "Joint power allocation and constellation design for cognitive radio systems," *IEEE Transaction on Vehicular Technology*, vol. 67, no. 5, 2018.

- O. S. Badarneh, F. S. Almehmadi, and T. Aldalgamouni, "On the application of the sum of generalized Gaussian random variables: maximal ratio combining," *Telecommunication Systems*, vol. 67, no. 3, 2018.
- O. S. Badarneh, F. S. Almehmadi, and T. Aldalgamouni, "Performance evaluation of cognitive underlay multi-hop networks with interference constraint in Rayleigh fading channels perturbed by non-Gaussian noise," *Physical Communication*, vol. 25, 2017.
- T. Aldalgamouni, A. M. Magableh, and O. S. Badarneh, "Outage probability analysis of multi-hop relayed wireless networks over α- μ fading channels," *Telecommunication Systems*, vol. 66, no. 3, 2017.
- T. F. Hailat, H. B. Salameh, and T. Aldalgamouni, "Performance study of multi-hop communication systems with decode-and-forward relays over α-μ fading channels," *IET Communications*, vol. 11, no. 10, 2017.
- T. Aldalgamouni, A. M. Magableh, S. Mater, and O. S. Badarneh, "Capacity analysis of α η μ channels over different adaptive transmission protocols," *IET Communications*, vol. 11, no. 7, 2017.
- O. S. Badarneh, T. Aldalgamouni, and F. S. Almehmadi, "A unified framework for performance evaluation over generalized fading channels," *Telecommunication Systems*, vol. 64, no. 4, 2017.
- H. B. Salameh, Y. Jararweh, T. Aldalgamouni, and A. Khreishah, "Traffic-driven exclusive resource sharing algorithm for mitigating self-coexistence problem in WRAN systems," *IEEE Wireless Communications and Networking Conference* (WCNC 2014), 2014.
- T. Aldalgamouni, A. M. Magableh, and N. M. Jafreh, "Exact expression for general average BER over Nakagami-m fading channels," *International Conference on Information and Communication Technology Research (ICTRC 2015)*, 2015.
- T. Aldalgamouni, A. M. Magableh, and S. M. Al-Yousofi, "Outage capacity of multi-hop wireless communication systems over κ-μ Fading channels using generalized Gaussian-finite-mixture technique," *IEEE International Conference on Electro Information Technology (IET 2015)*, 2015.
- H. Bany Salameh, Y. Jararweh, A. Khreishah, and T. Aldalgamouni, "Cooperative weighted-fair control strategy for spectrum self-coexistence in multi-cell WRAN systems," *Computers and Electrical Engineering*, vol. 46, 2015.
- A. M. Magableh, T. Aldalgamouni, and N. M. Jafreh, "Performance of dual-hop wireless communication systems over the -fading channels," *International Journal of Electronics*, vol. 101, no. 6, 2014.
- A. M. Magableh, T. Aldalgamouni, and N. M. Jafreh, "Capacity analysis of dual-hop wireless communication systems over α-μ Fading channels," *Computers and Electrical Engineering*, vol. 40, no. 2, 2014.
- O. S. Badarneh, T. Aldalgamouni, and M. Aloqlah, "Outage probability analysis
 of multi-hop relayed wireless networks over η μ fading channels," AEU International Journal of Electronics and Communications, vol. 67, no. 10, 2013.

- T. Aldalgamouni, A. M. Magableh, and A. Al-Hubaishi, "Performance of selected diversity techniques over the α-μ fading channels," *WSEAS Transactions on Communications*, vol. 12, no. 2, 2013.
- T. Aldalgamouni, A. M. Magableh, and S. Al-Theiabat, "Performance of downlink CDMA-SFBC over Weibull fading channels," *Journal of Communications*, vol. 7, no. 4, 2012.
- T. Aldalgamouni, A. M. Magableh, and S. Al-Theiabat, "Performance evaluation for code division multiple access with space-frequency block code downlink transmission over multipath Weibull fading channel model," *IEEE GLOBECOM Workshops*, 2011.
- J. I. Ababneh, T. F. Aldalgamouni, and A. A. Alqudah, "Minimum bit error rate multiuser detection of SDMA-OFDM system using differential evolutionary algorithm," *IEEE 6th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2010), 2010.*
- T. Aldalgamouni and A. Elhakeem, "A joint cross layer routing and resource allocation algorithm for multi-radio wireless mesh networks," *IEEE International Conference on Electro/Information Technology (EIT 2009)*, 2009.
- T. Aldalgamouni and A. Elhakeem, "CDMA-SFBC downlink performance," *International Journal of Wireless Information Networks*, vol. 16, no. 1–2, 2009.
- T. Aldalgamouni and A. Elhakeem, "SFBC-MIMO-CDMA up-link performance under combined code and channel impairments," *The 8th IASTED International Conference on Wireless and Optical Communications (WOC 2008)*, 2008.
- T. Aldalgamouni and A. Elhakeem, "Optimized resource allocation for the uplink of SFBC-CDMA systems," *Conference on Local Computer Networks (LCN 2008)*, 2008.
- T. Aldalgamouni and A. Elhakeem, "On the performance of down link SFBC-MIMO-CDMA systems," Canadian Conference on Electrical and Computer Engineering, 2008.

Professional Activities

- Reviewer for several journals:
 - o IEEE transactions on vehicular technology.
 - o IEEE transactions on communications.
 - o IEEE communication letters.
 - o International journal of electronics.
 - o Wireless Communications and Mobile Computing, Wiley.
- Technical program committee:
 - The 1st international workshop on reliability of e-health information systems, 2014.
 - The 1st International Conference on Telecommunication Systems and Networks (MIC-Telecom 2013).
 - o IEEE 6th international conference on Wireless and mobile computing, networking and communications, 2010.
 - The International Conference on Information and Communication Technology Research (ICTRC2015).

 The 8th Jordanian International Electrical and Electronics Engineering Conference (JIEEC 2013).