

Dr. Adel Sharar Aldalbahi

Associate Professor
Dean College of Engineering
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Personal Data:

Nationality | Saudi
Date of Hire | 3/8/2016
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Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Electrical Engineering	Communication	New Jersey Institute of Technology	323 Dr Martin Luther King Jr Blvd, Newark, NJ 07102, United States	2017
Masters (M.Sc.)	Electrical Engineering	Electrical Engineering	New Jersey Institute of Technology	323 Dr Martin Luther King Jr Blvd, Newark, NJ 07102, United States	2013
Bachelor (B.Sc.)	Electrical Engineering	General	Virginia Commonwealth University	907 Floyd Ave, Richmond, VA 23284, United States	2011

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Simulation, performance and interference analysis of multi-user visible light communication systems
Master	none

Experiences:

Title of Job	Address of Work	Country	Date	
Assistant Professor	King Faisal University	Saudi Arabia	From	23/4/2018
			To	now
Researcher	New Jersey Institute of Technology	USA	From	1/9/2013
			To	1/12/2017

Research Interests:

1. Millimeter wave networks
2. Deep Learning
3. Visible light communication
4. 5G and beyond

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	Adel Aldalbahi, Farzad Shahabi, Mohammed Jasim	BRNN-LSTM for Initial Access in Millimeter Wave Communications	Electronics, Multidisciplinary Digital Publishing Institute (MDPI), 2021/6, 13, 1505.	Click Here
2	Adel Aldalbahi, Farzad Shahabi, Mohammed Jasim	Instantaneous Beam Prediction Scheme Against Link Blockage in mmWave Communications	Applied Sciences, Multidisciplinary Digital Publishing Institute (MDPI), 2021/6, 12, 5601	Click Here
3	K Aissaoui, S Mhatli, O Gharbi, Adel Aldalbahi, R Attia, S Haxha, I Dayoub	Performance and evaluation of Volterra Nonlinear Equalizer for coherent RoF mobile front-haul network: a case study of QOSTBC-OFDM and QOSTBC-GFDM waveforms	Optical and Quantum Electronics, Springer US, 2021/3, 3, 1-19	Click Here
4	Guanxiong Liu, Issa Khalil, Abdallah Khreishah, Abdulelah Algosaibi, Adel Aldalbahi, Mohammed Alnaeem, Abdulaziz Alhumam, Muhammad Anan	ManiGen: A Manifold Aided Black-box Generator of Adversarial Examples	IEEE Access, IEEE, 2020/10/7, 197086-197096	Click Here
5	Nazli Siasi, Mohammed Jasim, Adel Aldalbahi, Nasir Ghani	Delay-aware SFC provisioning in hybrid fog-cloud computing architectures	IEEE Access, IEEE, 2020/9/24, 167383-167396	Click Here
6	Nazli Siasi, Mohammed Jasim, Adel Aldalbahi, Nasir Ghani	Deep learning for service function chain provisioning in fog computing	IEEE Access, IEEE, 2020/9/24, 167665-167683	Click Here
7	Oussama Gharbi, Sofien Mhatli, Iyad Dayoub, Shyqyri Haxha, Rabah Attia, Adel Aldalbahi, Mohammed Jasim	Performance assessment of dual-polarized 5G waveforms and beyond in directly	Optical Engineering, International Society for Optics and	Click Here

		modulated DFB-laser using Volterra equalizer	Photonics, 2020/5, 5, 056114	
8	Adel Aldalbahi	Link recovery scheme for multi-point mmwave communications	Electronics, Multidisciplinary Digital Publishing Institute (MDPI), 2020/1, 1, 50	Click Here
9	Adel Aldalbahi	Multi-Backup Beams for Instantaneous Link Recovery in mmWave Communications	Electronics, Multidisciplinary Digital Publishing Institute (MDPI), 2019/10/10, 10, 1145	Click Here
10	Mounir Bouzguenda, S Rajamohamed, MH Shwehdi, Adel Aldalbahi	Solar powered smart irrigation system based on low cost wireless network: A senior design project experience	The International Journal of Electrical Engineering & Education, SAGE Publications, 2019/7/23, 0020720919860414	Click Here
11	A. Jaesim, N. Siasi, A. Aldalbahi, N. Ghani	Beam-Bundle Codebook for Highly Directional Access in mmWave Cellular Networks	IEEE Communications Letters, IEEE, 2019/7/11, 11, 2104 - 2108	Click Here
12	Oussama Gharbi, Sofien Mhatli, Khalil Aissaoui, Adel Aldalbahi, Rabah Attia	Numerical Investigation of Long-Haul Coherent Optical Generalized Frequency Division Multiplexing Signal	IEEE Photonics Journal, IEEE, 2019/6/3, 4, 1-14	Click Here
13	Mohammed A Jasim, Adel Aldalbahi	Design of XOR photonic gate using highly nonlinear fiber	Electronics, Multidisciplinary Digital Publishing Institute (MDPI), 2019/2, 2, 215	Click Here
14	Mohammad Sufian Badar, Shazmeen Shamsi, Mohammad Maksuf UI Haque, Adel Sharar Aldalbahi	Integration of WSNs into Internet of Things, book Chapter	CRC Press, 2021	Click Here
15	Nazli Siasi, Adrian Jaesim, Adel Aldalbahi, Nasir Ghani	Link Failure Recovery in NFV for 5G and Beyond	2019 International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob), 2019	Click Here
16	Adrian Jaesim, Adel Aldalbahi, Nazli Siasi, Diogo Oliveira, Nasir Ghani	Dual-Beam Analog Beamforming for mmWave Communications	2019 IEEE 10th Annual Ubiquitous Computing, Electronics & Mobile Communication	Click Here

			Conference (UEMCON), 2019	
17	Adel Aldalbahi, Sofien Mhatli	Numerical Analysis of Fast-OFDM in SMF-Based IM/DD Link	2019 2nd International Conference on Computer Applications & Information Security (ICCAIS),2019	Click Here
18	Sofien Mhatli, Adel Aldalbahi, Mohammed Jasim	IM/DD-OFDM Modem Based on Adaptive Equalization	2019 2nd International Conference on Computer Applications & Information Security (ICCAIS),2019	Click Here
19	Nazli Siasi, Adel Aldalbahi, Mohammed A Jasim	Reliable transmission scheme against security attacks in wireless sensor networks	2019 International Symposium on Networks, Computers and Communications (ISNCC),2019	Click Here
20	MA Jasim, N Siasi, A Aldalbahi, N Ghani	Soft Self-Handover Scheme for mmWave Communications	2019 SoutheastCon,2019	Click Here
21	Adel Aldalbahi, Nazli Siasi, Majdi Ababneh, Mohammed Jasim	Grating Lobes for Enhanced Scattering Intensity in Millimeter Wave Sparse Channels	2019 IEEE 9th Annual Computing and Communication Workshop and Conference (CCWC),2019	Click Here
22	Mohammed Jasim, Adel Aldalbahi	Diversity coding for instantaneous link recovery in millimeter Wave communications	2018 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)	Click Here
23	Mohammed Jasim, Adel Aldalbahi, Hazim Shakhatreh	Beam aggregation for instantaneous link recovery in millimeter wave communications	2018 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob),2018	Click Here
24	Mohammed Jasim, Adel Aldalbahi, Abdallah Khreishah, Nasir Ghani	Hooke Jeeves search method for initial beam access in 5G mmWave cellular networks	2017 IEEE 28th Annual International Symposium on Personal, Indoor, and Mobile Radio	Click Here



			Communications (PIMRC)	
25	Adel Aldalbahi, Michael Rahaim, Abdallah Khreishah, Moussa Ayyash, Thomas DC Little	Visible light communication module: An open source extension to the ns3 network simulator with real system validation	IEEE Access,2017	Click Here
26	Adel Aldalbahi	Simulation, performance and interference analysis of multi-user visible light communication systems	New Jersey Institute of Technology, Phd Dissertation, 2017	Click Here
27	Adel Aldalbahi, Michael Rahaim, Abdallah Khreishah, Moussa Ayyash, Ryan Ackerman, James Basuino, Walter Berreta, Thomas DC Little	Extending ns3 to simulate visible light communication at network-level	2016 23rd International Conference on Telecommunications (ICT),2016	Click Here

Language Proficiency:

1. Arabic
2. English