كلية الهندسة والبترول College of Engineering and Petroleum

قسم الهندسة الكهربائية Electrical Engineering Department





Name: Mohammed W. Baidas

Rank: Professor

Department: Electrical Engineering

Email: m.baidas@ku.edu.kw
Telephone: 24987029

Specialty: Wireless Communications and Networking

Research Interests:

• Cooperative communications and networking.

 Optimization- and game-theoretic resource allocation in wireless networks.

Spectrum sensing and management in cognitive radio networks.

Green and energy-harvesting wireless networks.

 Machine learning and artificial intelligence applications in future generation wireless networks.

Location: College of Engineering and Petroleum – South Building – Second

Floor – Office: S-02-E2-202

Degree

Degree	Field	Institution	Year
Ph.D.	Electrical Engineering	Virginia Polytechnic Institute and State University, Blacksburg,	5/2012
FII.D.	(Wireless Communications)	VA, United States	
	Electrical Engineering		
M.S.	(Communications and Signal	University of Maryland, College Park, MD, United States	
	Processing)		
M.Sc.	Digital and RF Wireless	University of Leeds, Leeds, United Kingdom	
(Eng.)	Communications		
B.Eng.	Communication Systems	University of Manchester Manchester United Kingdom	6/2005
(Hons.)	Engineering	University of Manchester, Manchester, United Kingdom	6/2005

Academic Rank

Rank	Period
Professor	12/2021 - Present
Associate Professor	6/2017 – 11/2021
Assistant Professor	5/2012 – 5/2017

Theses

Title	Degree	Supervisor
Node Selection, Synchronization and Power Allocation in Cooperative Wireless Networks	Ph.D.	Prof. Allen B. MacKenzie
Cooperative Detection and Network Coding in Wireless Networks	M.S.	Prof. K. J. Ray Liu
A Characterization of the Performance of Multicarrier Radio Systems Using Perfect Difference Codes	M.Sc. (Eng.)	Prof. Tim O'Farrell

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Scholarships

Degree	Sponsor	Period
M.S. and Ph.D. in Electrical Engineering	Kuwait University	8/2007 – 8/2012
M.Sc. (Eng.) in Wireless Communications Engineering	Ministry of Higher Education, Kuwait	9/2005 – 9/2006
B.Eng. (Hons.) in Communication Systems Engineering	Ministry of Higher Education, Kuwait	9/2001 – 6/2005

Memberships

Organization	Country	Membership	Period
Institute of Electrical and Electronics Engineers (IEEE)	U.S.A.	Senior Member	8/2017 - Present
Institute of Electrical and Electronics Engineers (IEEE)	U.S.A.	Member	5/2005 – 8/2017

Experience (Academic)

Institution	Designation	Period
University of Manchester, Manchester, UK	Visiting Researcher	9/2018 – 8/2019
University of Manchester, Manchester, UK	Visiting Researcher	1/2015 – 12/2015
Kuwait University, Kuwait	Scientific Assistant	10/2006 – 7/2007

Professional Activities and Administrative Positions

Designation	Details	Period
Director	Graduate Studies Program	AY 2025/2026
Acting Chairman	Electrical Engineering Department, Kuwait University	10/2020 – 5/2024
Acting Chairman	Electrical Engineering Department, Kuwait University	1/2018
Acting Chairman	Electrical Engineering Department, Kuwait University	8/2017

Conference Technical Program Committee

Designation	Conference	Period
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) – Kuala Lumpur, Malaysia.	4/2026
TPC Member	IEEE Global Conference on Artificial Intelligence and Internet of Things (GCIoT).	11/2025
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) – Milan, Italy.	3/2025
TPC Member	IEEE Global Conference on Artificial Intelligence and Internet of Things (GCAIoT) - Dubai, UAE.	12/2024
TPC Member	Joint European Conference on Networks and Communication & 6G Summit (EuCNC/6G Summit) – Antwerp, Belgium.	6/2024
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) – Dubai, UAE.	4/2024

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TPC Member	IEEE Global Conference on Artificial Intelligence and Internet of Things (GCAIoT) - Dubai, UAE.	12/2023
TPC Co-Chair	IEEE International Symposium on Networks, Computers and Communications (ISNCC) - Doha, Qatar.	10/2023
TPC Member	Joint European Conference on Networks and Communication & 6G Summit (EuCNC/6G Summit) – Gothenburg, Sweden	6/2023
TPC Member	IEEE International Wireless Communications and Mobile Computing (IWCMC) - Marrakesh, Morocco.	6/2023
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) - Glasgow, Scotland, UK.	3/2023
TPC Member	IEEE International Symposium on Wireless Communications Systems (ISWCS) - Hangzhou, China.	10/2022
TPC Co-Chair	IEEE International Symposium on Networks, Computers and Communications (ISNCC) - Shenzhen, China.	7/2022
TPC Member	IEEE International Wireless Communications and Mobile Computing (IWCMC) - Dubrovnik, Croatia.	6/2022
TPC Member	Joint European Conference on Networks and Communication & 6G Summit (EuCNC/6G Summit) - Grenoble, France.	6/2022
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) - Austin, TX, USA.	4/2022
TPC Co-Chair	IEEE Global Conference on Artificial Intelligence and Internet of Things (GCAIoT) - Dubai, UAE.	12/2021
TPC Member	IEEE International Symposium on Networks, Computers and Communications (ISNCC) - Dubai, UAE.	11/2021
TPC Member	Joint European Conference on Networks and Communication & 6G Summit (EuCNC/6G Summit) - Porto, Portugal.	8/2021
TPC Member	IEEE International Wireless Communications and Mobile Computing (IWCMC) - Harbin, China.	7/2021
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) - Nanjing, China.	3/2021
TPC Co-Chair	IEEE Global Conference on Artificial Intelligence and Internet of Things (GCAIoT) - Dubai, UAE.	12/2020
TPC Member	International Conference on Computing and Network Communications (CoCoNet) - Chennai, India.	10/2020
TPC Member	IEEE International Conference on Recent Advances in Signal Processing, Telecommunications and Computing (SigTelCom) - HaNoi, Vietnam.	8/2020
TPC Member	International Symposium on Wireless Communication Systems (ISWCS) - Berlin, Germany.	8/2020
TPC Member	IEEE International Wireless Communications and Mobile Computing (IWCMC) - Limassol, Cyprus.	6/2020
TPC Member	IEEE International Symposium on Networks, Computers, and Communications (ISNCC) - Montreal, Canada.	6/2020
TPC Member	IEEE International Conference on Communications (ICC) - Dublin, Ireland.	6/2020
TPC Member	International Conference on Computer Applications and Information Security (ICCAIS) - Riyadh, Saudi Arabia.	3/2020
TPC Member	6G Wireless Summit - Levi, Lapland, Finland.	3/2020
TPC Member	International Symposium on Wireless Communication Systems (ISWCS) - Oulu, Finland.	9/2019

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TPC Member	IEEE International Wireless Communications and Mobile Computing (IWCMC) - Tangier, Morocco.	6/2019
TPC Member	IEEE International Conference on Communications (ICC) - Shanghai, China.	5/2019
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) - Marrakech, Morocco.	4/2019
TPC Member	IEEE International Conference on Recent Advances in Signal Processing, Telecommunications and Computing (SigTelCom) - HaNoi, Vietnam.	3/2019
TPC Member	International Conference on Advances in Computing, Communications, and Informatics (ICACCI) - Bangalore, India.	9/2018
TPC Member	International Symposium on Wireless Communication Systems (ISWCS) - Lisbon, Portugal.	8/2018
TPC Member	IEEE International Wireless Communications and Mobile Computing (IWCMC) - Limassol, Cyprus.	6/2018
TPC Member	IEEE International Conference on Communications (ICC) - Kansas City, MO, USA.	5/2018
TPC Member	IEEE Wireless Communications and Networking Conference (WCNC) - Barcelona, Spain.	4/2018

Academic Committee Work

Committee Name	Role	Level	Semester/Academic Year
Review of Academic Degrees	Member	University	2025/2026
Graduate Studies Directors Committee	Member	College	2025/2026
Signal Processing and Communications TAG Group	Coordinator	Department	2025/2026
Academic Assessment	Member	Department	2025/2026
Review of Academic Degrees	Member	University	2024/2025
Appointments	Member	Department	2024/2025
Graduate Studies	Member	Department	2024/2025
Signal Processing and Communications TAG Group	Member	Department	2024/2025
Review of Academic Degrees	Member	University	2023/2024
College of Engineering and Petroleum	Secretary	College	2023/2024
Scholarships	Member	College	2023/2024
Appointments	Convener	Department	2023/2024
Scholarships	Convener	Department	2023/2024
Promotions	Convener	Department	2023/2024
Outstanding Research Award for Graduate Students	Convener	University	May 2023
Scholarships	Member	College	2022/2023
Undergraduate Program Committee (UPC)	Member	College	2022/2023
Undergraduate Program Committee (UPC)	Convener	Department	2022/2023
Appointments	Convener	Department	2022/2023
Scholarships	Convener	Department	2022/2023
Promotions	Convener	Department	2022/2023
Scholarships	Member	College	2021/2022

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Appointments	Convener	Department	2021/2022
Scholarships	Convener	Department	2021/2022
Promotions	Convener	Department	2021/2022
Scholarships	Member	College	2020/2021
Appointments	Convener	Department	2020/2021
Scholarships	Convener	Department	2020/2021
Scholarships	Member	Department	2019/2020
Supervision Committee for the College of Engineering and Petroleum Buildings	Member	Department	2019/2020
Teaching Excellence (Office of Vice President for Academic Affairs (VPAA))	Member	University	11/2018 – Present
Scientific Research	Member	Department	2017/2018
Scholarships	Member	Department	2017/2018
Supervision Committee for the College of Engineering and Petroleum Buildings	Member	College	2017/2018
Supervision Committee for the College of Engineering and Petroleum Buildings	Convener	Department	2017/2018
Supervision Committee for the College of Engineering and Petroleum Buildings	Member	College	2016/2017
Supervision Committee for the College of Engineering and Petroleum Buildings	Convener	Department	2016/2017
Labs and Instruments	Member	Department	2016/2017
Undergraduate Program Committee (UPC)	Member	Department	Spring 2016
Labs and Instruments	Member	Department	Fall 2014
"Biomedical Engineering" Course Development	Member	University	Fall 2014
"ENG205: Electrical Engineering Fundamentals" Course Development	Member	Department	Spring 2014
Academic Tracks	Member	Department	2013/2014
Sabbatical Leave	Member	Department	2013/2014
Sabbatical Leave	Member	Department	2012/2013

Courses

Institution	Course No.	Course Name	Level	Semester
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Fall 2025
Kuwait University	0600-205	Electrical Engineering Fundamentals	Undergraduate	Fall 2025
Kuwait University	0600-205	Electrical Engineering Fundamentals	Undergraduate	Summer 2025
Kuwait University	0610-497	Engineering Design	Undergraduate	Spring 2025
Kuwait University	0610-397	Communication Theory	Undergraduate	Spring 2025
Kuwait University	0610-528	Wireless Communication Networks	Graduate	Fall 2024
Kuwait University	0610-297	Cornerstone Design	Undergraduate	Fall 2024
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Summer 2024
Kuwait University	0610-497	Engineering Design	Undergraduate	Spring 2024

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Kuwait University	0610-297	Cornerstone Design	Undergraduate	Fall 2023
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Summer 2023
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Spring 2023
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Fall 2022
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Summer 2022
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Spring 2022
Kuwait University	0610-581	Communication Theory	Graduate	Fall 2021
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Summer 2021
Kuwait University	0610-497	Capstone Design	Undergraduate	Spring 2021
,	0600-304	Engineering Probability and Statistics	<u> </u>	
Kuwait University	0610-297	Cornerstone Design	Undergraduate	Fall 2020
•	0610-385	Introduction to Digital Signal Processing	C	
Kuwait University	0610-385	Introduction to Digital Signal Processing	Undergraduate	Summer 2020
·	0600-304	Engineering Probability and Statistics	Undorgraduato	
Kuwait University	0610-297	Cornerstone Design	Undergraduate	Spring 2020
	0610-528	Wireless Communication Networks	Graduate	
IZ attitut at a sett	0610-318	Introduction to Digital Signal Processing		5 W 2242
Kuwait University	0610-297 0600-304	Cornerstone Design	Undergraduate	Fall 2019
Kuwait University	0610-304	Engineering Probability and Statistics Introduction to Digital Signal Processing	Undergraduate	Summer 2018
Ruwait Offiversity	0610-318	Introduction to Digital Signal Processing	Officergraduate	Julillier 2018
Kuwait University	0610-381	Communication Theory	Undergraduate	Spring 2018
•	0610-490	Special Topics in Communications	G	
Kuwait University	0610-297	Cornerstone Design	Undergraduate	Fall 2017
	0610-318	Introduction to Digital Signal Processing	-	
Kuwait University	0610-318	Introduction to Digital Signal Processing	Undergraduate	Summer 2017
Kuwait University	0610-297 0610-318	Cornerstone Design	Undergraduate	Spring 2017
	0610-318	Introduction to Digital Signal Processing Cornerstone Design		
Kuwait University	0610-318	Introduction to Digital Signal Processing	Undergraduate	Fall 2017
Kuwait University	0610-318	Introduction to Digital Signal Processing	Undergraduate	Summer 2017
Kuwait University	0610-297	Cornerstone Design	Undergraduate	Spring 2017
Ruwait Offiversity	0610-318	Introduction to Digital Signal Processing	Ondergraduate	3pring 2017
	0610-318	Introduction to Digital Signal Processing		- H. 224.5
Kuwait University	0610-297 0610-460	Cornerstone Design Communication Networks	Undergraduate	Fall 2016
Kuwait University	0600-304	Engineering Probability and Statistics	Undergraduate	Summer 2016
	0610-297	Cornerstone Design		
Kuwait University	0610-318	Introduction to Digital Signal Processing	Undergraduate	Spring 2016
	0610-318	Introduction to Digital Signal Processing		
Kuwait University	0610-428	Wireless Communication Networks	Undergraduate	Fall 2014
	0600-304	Engineering Probability and Statistics		
Kuwait University	0600-304	Engineering Probability and Statistics	Undergraduate	Summer 2014
Kuwait University	0600-304	Engineering Probability and Statistics	Undergraduate	Spring 2014
· ·	0600-205	Electrical Engineering Fundamentals		

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	0610-297	Cornerstone Design		
Kuwait University	0600-304	Engineering Probability and Statistics	Undergraduate	Fall 2013
Kuwait University	0610-213	Linear Circuit Analysis		
Kuwait University	0600-304	Engineering Probability and Statistics	Undergraduate	Summer 2013
	0600-304	Engineering Probability and Statistics		
Kuwait University	t University 0600-205	Electrical Engineering Fundamentals	Undergraduate	Spring 2013
	0610-381	Communication Theory		
Kuwait University	0600-205	Electrical Engineering Fundamentals	Undergraduate	Fall 2012
Ruwait Offiversity	0610-213	Linear Circuit Analysis	Ondergraduate	Fall 2012

Honors and Awards

Title	Details	Year
Best Paper Award	IEEE International Symposium on Networks, Computers, and Communications (ISNCC), Dubai, UAE	11/2021
Outstanding Teaching Award for Academic Year 2017/2018	Kuwait University	6/2019
Outstanding Teaching Award for Academic Year 2016/2017	College of Engineering and Petroleum, Kuwait University	4/2018
IEEE Best M.Sc. Project Prize in the Field of Communications	the IEEE Communications Society - UK&RI Chapter	12/2006
Best M.Sc. Project	Faculty of Engineering, University of Leeds, Leeds, U.K.	11/2006
Commendation for Second Best Final Year Project	School of Electrical and Electronic Engineering, University of Manchester, Manchester, U.K.	7/2005
Top Student of the B.Eng. Class	School of Electrical and Electronic Engineering, University of Manchester, Manchester, U.K.	7/2005
Top Student of the Second Year	School of Electrical and Electronic Engineering, University of Manchester, Manchester, U.K.	7/2004
Top Student of the First Year	School of Electrical and Electronic Engineering, University of Manchester, Manchester, U.K.	7/2003
Top Student of the International Foundation Year	University of Manchester, Manchester, U.K.	7/2002

Journal Papers

No.	Information	
1	Mohammed W. Baidas , Ahmed M. AbdelGhaffar, Basma Alfahad, and Emad Alsusa, "Joint Power Allocation and Subcarrier Assignment for Network-Coded Uplink Clustered Multi-Carrier NOMA Networks: Models and Performance Comparisons", <i>International Journal of Communication Systems (IJCS)</i> , Sept. 2025 (DOI: https://doi.org/10.1002/dac.70275).	
2	Reem T. Akasha, and Mohammed W. Baidas , "Joint Antenna Selection and Power Allocation for Clustered Downlink NOMA Networks with Alamouti Space-Time Block Coding", <i>International Journal of Communication Systems (IJCS)</i> , vol. 38, no. 10, e70125, Jul. 2025 (DOI: https://doi.org/10.1002/dac.70125).	
3	Mohammed W. Baidas, Nour I. AbdAli, and Sultan Sh. Alanzi, "Hybrid Solar PV/Hydrogen Fuel Cell-Based Cellular Base-Stations in Kuwait", <i>Journal of Engineering Research (JER)</i> , Dec. 2024 (DOI: https://doi.org/10.1016/j.jer.2024.12.015).	
4	Mohammed W. Baidas , Ahmed M. AbdelGhaffar, and Emad Alsusa, "Network Sum-Rate Maximization for Network-Coded Clustered Uplink NOMA Networks with SWIPT-Enabled Relays", vol. 224, May 2024 (DOI: https://doi.org/10.1016/j.comnet.2024.110340).	

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5	Aysha Ebrahim, Abdulkadir Celik, Emad Alsusa, Mohammed W. Baidas , and Ahmed M. Eltawil, "Hybrid Multiple-Access: Mode Selection, User Pairing and Resource Allocation", <i>IEEE Access</i> , vol. 11, pp. 107251-107264, Oct. 2023
	(DOI: https://doi.org/10.1109/ACCESS.2023.3320640).
6	Mohammed W. Baidas , Dalal R. Alkandari, and Asmaa A. Alrushoud, "Grid-Connected Solar-Powered Cellular Base-Stations in Kuwait", <i>Journal of Engineering Research (JER)</i> , vol. 11, no. 3, pp. 134—142, Sept. 2023 (DOI: https://doi.org/10.1016/j.jer.2023.100104).
7	Yao Shi, Emad Alsusa, and Mohammed W. Baidas , "On the Application of Uplink/Downlink Decoupled Access in Heterogeneous Mobile Edge Computing", <i>Computer Networks</i> , vol. 223, pp. 1-14, Mar. 2023 (DOI: https://doi.org/10.1016/j.comnet.2023.109593).
8	Mohammed W. Baidas, Ahmed M. AbdelGhaffar, and Emad Alsusa, "Network-Coded Uplink Clustered NOMA Relay Networks: Models and Performance Comparisons", <i>Computer Networks</i> , vol. 220, pp. 1-17, Jan. 2023 (DOI: https://doi.org/10.1016/j.comnet.2022.109465).
9	Mohamad K. Awad, Mohammed W. Baidas , Ahmad A. El-Amine, and Noura Al-Mubarak, "A Matching-Theoretic Approach to Resource Allocation in D2D-Enabled Downlink NOMA Cellular Networks", <i>Physical Communication</i> , vol. 54, pp. 1-22, Oct. 2022 (DOI: https://doi.org/10.1016/j.phycom.2022.101837).
10	Yao Shi, Emad Alsusa, and Mohammed W. Baidas , "A Survey on Downlink-Uplink Decoupled Access: Advances, Challenges, and Open Problems", <i>Computer Networks</i> , vol. 213, pp. 1-17, Aug. 2022 (DOI: https://doi.org/10.1016/j.comnet.2022.109040).
11	Murat Temiz, Emad Alsusa, and Mohammed W. Baidas , "A Dual-Function Massive MIMO Uplink OFDM Communication and Radar Architecture", <i>IEEE Transactions on Cognitive Communications and Networking</i> , vol. 8, no. 2, pp. 750-762, Jun. 2022 (DOI: https://doi.org/10.1109/TCCN.2021.3128599).
12	Mohammed W. Baidas , Mastoura F. Almusailem, Rashad M. Kamel, and Sultan Sh. Alanzi, "Renewable Energy-Powered Base-Stations in Kuwait's Rural Areas", <i>Energies</i> , vol. 15, no. 7, pp. 1-29, Mar. 2022 (DOI: http://dx.doi.org/10.3390/en15072334).
13	Yao Shi, Emad Alsusa, and Mohammed W. Baidas , "Energy-Efficient Decoupled Access Scheme for Cellular-Enabled UAV Communication Systems", <i>IEEE Systems Journal</i> , vo. 16, no. 1, pp. 701-712, Mar. 2022 (DOI: https://doi.org/10.1109/JSYST.2020.3046689).
14	Mohammed W. Baidas, Ahmed M. AbdelGhaffar, and Emad Alsusa, "Network Sum-Rate Maximization via Joint Power Allocation and Antenna Selection for Clustered Downlink/Uplink NOMA Networks", <i>Physical Communication</i> , vol. 51, pp. 1-17, Apr. 2022 (DOI: https://doi.org/10.1016/j.phycom.2022.101596).
15	Yao Shi, Mutasem Q. Hamdan, Emad Alsusa, Khairi Hamdi, and Mohammed W. Baidas , "A Decoupled Access Scheme with Reinforcement Learning Power Control for Cellular-Enabled UAVs", <i>IEEE IoT Journal</i> , vol. 8, no. 24, pp. 17261-17274, Dec. 2021 (DOI: https://doi.org/10.1109/JIOT.2021.3078188).
16	Mohammed W. Baidas, Rola W. Hasaneya, Rashad M. Kamel, and Sultan Sh. Alanzi, "Solar-Powered Cellular Base-Stations in Kuwait: A Case Study", <i>Energies</i> , vol. 14, no. 22, pp. 1-26, Nov. 2021 (DOI: https://doi.org/10.3390/en14227494).
17	Mohamad K. Awad, Ali A. M. R. Behiry, and Mohammed W. Baidas , "User Association for Load Balancing in Coordinated Multipoint Green HetNets: A Quasi-Newton-based Approach", <i>Physical Communication</i> , vol. 49, pp. 1-14, Dec. 2021
18	(DOI: https://doi.org/10.1016/j.phycom.2021.101464). Mohammad R. Amini, and Mohammed W. Baidas , "Performance Analysis of Grant-Free Random-Access NOMA in URLL IoT Networks", <i>IEEE Access</i> , vol. 9, pp. 105974-105988, Jul. 2021 (DOI: https://doi.org/10.1109/ACCESS.2021.3097553).



19	Murat Temiz, Emad Alsusa, and Mohammed W. Baidas , "Optimized Precoders for Massive MIMO OFDM Based Radar and Communication Systems", <i>IEEE Transactions on Communications</i> , vol. 69, no. 7, pp. 4781-4794, Jul. 2021
	(DOI: https://doi.org/10.1109/TCOMM.2021.3068485).
20	Mohammad R. Amini, and Mohammed W. Baidas , "Performance Analysis of URLL Energy-Harvesting Cognitive-Radio IoT Networks with Short Packet and Diversity Transmissions", <i>IEEE Access</i> , vol. 9, pp. 79293-79306, May 2021 (DOI: https://doi.org/10.1109/ACCESS.2021.3083095).
21	Mohamad K. Awad, Mohammed W. Baidas , and Ahmad A. El-Amine, "Resource Allocation for Downlink Non-Orthogonal Multiple Access in Joint Transmission Coordinated Multi-Point Networks", <i>Computer Communications</i> , vol. 173, pp. 134-149, May 2021 (DOI: https://doi.org/10.1016/j.comcom.2021.03.025).
22	Mohammed W. Baidas, "Resource Allocation for Offloading-Efficiency Maximization in Clustered NOMA- Enabled Mobile Edge Computing Networks", <i>Computer Networks</i> , vol. 189, pp. 1-20, Apr. 2021 (DOI: https://doi.org/10.1016/j.comnet.2021.107919).
23	Yao Shi, Emad Alsusa, and Mohammed W. Baidas , "Joint DL/UL Decoupled Cell-Association and Resource Allocation in D2D-Underlay HetNets", <i>IEEE Transactions on Vehicular Technology</i> , vol. 70, no. 4, pp. 3640-3651, Apr. 2021 (DOI: https://doi.org/10.1109/TVT.2021.3067269).
24	Mohammad R. Amini, and Mohammed W. Baidas , "Random-Access NOMA in URLL Energy-Harvesting IoT Networks with Short Packet and Diversity Transmissions", <i>IEEE Access</i> , vol. 8, pp. 220734-220754, Dec. 2020 (DOI: https://doi.org/10.1109/ACCESS.2020.3042744).
25	Mohammad R. Amini, and Mohammed W. Baidas , "GoodPut, Collision Probability and Network Stability of Energy-Harvesting Cognitive-Radio IoT Networks", <i>IEEE Transactions on Cognitive Communications and Networking</i> , vol. 6, no. 4, pp. 1283-1296, Dec. 2020
	(DOI: https://doi.org/10.1109/TCCN.2020.2982874).
26	Mohammed W. Baidas , "Distributed Energy-Efficiency Maximization in Energy-Harvesting Uplink NOMA Relay Ad-Hoc Networks: Game-Theoretic Modeling and Analysis", <i>Physical Communication</i> , vol. 43, pp. 1-14, Dec. 2020
	(DOI: https://doi.org/10.1016/j.phycom.2020.101188).
27	Mohammed W. Baidas , Emad Alsusa, and Yao Shi, "Resource Allocation for SWIPT-Enabled Energy-Harvesting Downlink/Uplink Clustered NOMA Networks", <i>Computer Networks</i> , vol. 182, pp. 1-14, Dec. 2020 (DOI: https://doi.org/10.1016/j.comnet.2020.107471).
28	Murat Temiz, Emad Alsusa, and Mohammed W. Baidas , "A Dual-Functional Massive MIMO OFDM Communication and Radar Transmitter Architecture", <i>IEEE Transactions on Vehicular Technology</i> , vol. 69, no. 12, pp. 14974-14988, Dec. 2020 (DOI: https://doi.org/10.1109/TVT.2020.3031686).
29	Mohammed W. Baidas, and Mohammad R. Amini, "Resource Allocation for NOMA-Based Multicast Cognitive Radio Networks with Energy-Harvesting Relays", <i>Physical Communication</i> , vol. 42, pp. 1-15, Oct. 2020 (DOI: https://doi.org/10.1016/j.phycom.2020.101166).
30	Mohammed W. Baidas, Emad Alsusa, and Khairi A. Hamdi, "Joint Relay Selection and Power Allocation for NOMA-Based Multicast Cognitive Radio Networks", <i>IET Communications</i> , vol. 14, no. 13, pp. 2027-2037, Aug. 2020 (DOI: https://doi.org/10.1049/iet-com.2019.0954).
31	Mohammed W. Baidas, "Joint Relay Assignment and Energy-Efficiency Maximization in Energy-Harvesting Downlink/Uplink Clustered Nonorthogonal Multiple-Access Networks", <i>Transactions on Emerging Telecommunications Technologies</i> , vol. 31, no. 6, e3962, Jun. 2020 (DOI: http://dx.doi.org/10.1002/ett.3962).
32	Mohammad R. Amini, and Mohammed W. Baidas , "Availability-Reliability-Stability Trade-Offs in Ultra-Reliable Energy-Harvesting Cognitive Radio IoT Networks", <i>IEEE Access</i> , vol. 8, pp. 82890-82916, May 2020



	(DOL-latters //dsi-are/0.4400/ACCESS 2020-20040S4)
	(DOI: https://doi.org/0.1109/ACCESS.2020.2991861).
33	Mohammed W. Baidas, Emad Alsusa, and Khairi A. Hamdi, "Performance Analysis and SINR-Based Power Allocation Strategies for Downlink NOMA Networks", <i>IET Communications</i> , vol. 14, no. 5, pp. 723-735, Mar. 2020
	(DOI: https://digital-library.theiet.org/content/journals/10.1049/iet-com.2018.6112).
34	Mohammed W. Baidas , Emad Alsusa, Motasem Al-Farra, and Mubarak Al-Mubarak, "Multi-Relay Selection in Energy-Harvesting Cooperative Wireless Networks: Game-Theoretic Modeling and Analysis", <i>Telecommunication Systems</i> , vol. 73, no. 2, pp. 289-311, Feb. 2020 (DOI: https://doi.org/10.1007/s11235-019-00611-6).
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	Poster	Mohammed W. Baidas and Allen B. MacKenzie, "Auction-Based Power Allocation for Multi-Balay Cooperative Networks", Viscinia, Took, 2011, Wireless Personal
2		for Multi-Relay Cooperative Networks", Virginia Tech, 2011 Wireless Personal Symposium and 7th Wireless Summer School - 6/2011.
		Mohammed W. Baidas and Allen B. MacKenzie, ``Space-Time Network Coding with
3	Poster	Optimal Node Selection for Amplify-and-Forward Cooperative Networks", Virginia
		Tech, 2010 Wireless Personal Symposium and 6th Wireless Summer School - 6/2010.

Research Projects

Project Code	Title	Sponsor/Funding Agency	Amount Awarded	Position	Period
	Cellular Networks Coverage-Enrichment	KFAS	70,040 K.D. (\$230,000)	PI	9/2019
PN17-15EE-02	Using Renewable-Energy-Powered				_
	Base-Stations				8/2023
	Energy-Efficient and Sustainable Communication Networks	KFAS	61,090 K.D. (\$205,000)	Co-I	2/2015
P314-35EO-01					_
					1/2018
	A Game-Theoretic Framework with	Research Sector, Kuwait University	2,000 K.D. (\$6,600)	PI	4/2013
ZE03/13/2923	Reinforcement Learning for Multinode				_
	Cooperation in Wireless Networks				3/2014

قسم الهن*دس*ة الكهربائية Electrical Engineering Department



Graduate Student Supervision

No.	Title	Project/Thesis	Role (Supervisor/Co-Supervisor)	Student Name	Completion (MM-YYYY)
1	Joint Power Control, Scheduling, and Flow Routing for Clustered NOMA Networks	Thesis	Supervisor	Hassan Zaeri	12/2026 (Expected)
2	Cooperation Stimulation in Multicast NOMA Networks	Thesis	Supervisor	Dina Al-Refaei	12/2026 (Expected)
3	Resource Allocation for Alamouti STBC-Based NOMA Networks	Thesis	Supervisor	Reem T. Akasha	2/2025
4	Joint Power Allocation and User Clustering in Network- Coded Uplink NOMA Relay Networks	Project	Supervisor	Hawraa Alkhajah	11/2024
5	Hybrid Solar PV/Hydrogen Fuel Cell-Based Cellular Base-Stations in Kuwait	Project	Supervisor	Nour I. AbdAli	9/2023
6	Grid-Connected Solar- Powered Cellular Base- Stations in Kuwait	Project	Supervisor	Dalal R. Al- Kandari	1/2023
7	Design and Implementation of Resource Allocation Schemes for D2D-Enabled NOMA Cellular Networks	Thesis	Co-Supervisor	Noura Al- Mubarak	1/2022
8	Hybrid Renewable Energy- Powered Base-Stations in Kuwait's Rural Areas	Project	Supervisor	Mastourah Al- Musailem	7/2021
9	How Much Photovoltaic Solar Energy is Required to Run a Cellular Base-Station in Kuwait?	Project	Supervisor	Rola W. Hasaneya	7/2021
10	Resource Allocation for NOMA-Based Multicast Cognitive Radio Networks with SWIPT-Enabled Relays	Project	Supervisor	Ala'a Al-Refaei	3/2021

Courses, Workshops and Certifications

Title	Location	Period
Assessment of Student Learning Workshop	ABET (Virtual)	3/2023
Innovative Solutions for a Sustainable University Workshop	UN-House, Kuwait	6/2019
Intercultural Fluency Essentials Workshop	British Council, Kuwait	3/2017

كلية الهندسة والبترول College of Engineering and Petroleum

قسم الهندسة الكهربائية Electrical Engineering Department



Advanced Teaching Excellence Workshop	University of California (UC), Berkeley in Collaboration with Kuwait Foundation for the Advancement of Sciences (KFAS)	1/2017
Developing Competitive Research Proposals Workshop	Kuwait Foundation for the Advancement of Sciences (KFAS) in Collaboration with the American Association for the Advancement of Science (AAAS)	12/2016
Assessment of Student Learning and Characteristics of Effective Teaching Workshop	Office of Academic Assessment, College of Engineering and Petroleum, Kuwait University	11/2016
Outcome-Based Teaching and Assessment: Principles and Applications Workshop	Office of Consultation and Career Development, College of Engineering and Petroleum, Kuwait University	4/2016
Teaching Excellence Workshop	Kuwait Foundation for the Advancement of Sciences (KFAS) in Collaboration with the Center of Teaching and Learning of the University of California, Berkeley (UCB)	3/2016
PASS Leader and Peer Mentor	University of Manchester, UK	9/2004 - 5/2005
Personal Development and Effectiveness Training	University of Manchester, UK	9/2004 - 11/2004
Interconnecting Cisco Network Devices	New Horizons Computer Learning Center, Kuwait	7/2004
European Computer Driving License (ECDL)	Manchester Computing Center, UK	6/2004
Personal Development for Successful Learning	Teaching and Learning Support Center, University of Manchester, UK	10/2003 - 11/2003

Programming Languages and Software Packages

Title	Level
C#, Java, MATLAB, LaTeX, Mathematica, and MIDACO	Developer