

Instructor: Redha M. Radaydeh, Ph.D.

Academic Department: Department of Engineering & Technology

## **University Address:**

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Commerce, TX 75429-3011

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### **EDUCATION**

University of Mississippi, Oxford, MS

Ph.D., Electrical Engineering, January 2004 – November 2006

GPA: 4.0/4.0

Dissertation Topic: Efficient Receivers and Digital Modulation Techniques for

Communications Systems.

Area of Study: Wireless Communications

Jordan University of Science and Technology (JUST), Irbid, Jordan

M.Sc., Electrical Engineering, October 2001 – August 2003

Percentage Average: 87.2% [Top 5% of graduates]

Thesis Topic: Detection and Diversity Combining in Mobile Channels.

Area of Study: Communications and Electronics

B.Sc., Electrical Engineering (five years program; 162 credit hours), October 1996 – June 2001

Percentage Average: 80.7% [Top 5% of graduates]

Area of Study: Communications and Electronics

Zarnouji Comprehensive Secondary School, Kufryouba, Irbid, Jordan The General

Secondary Education Certificate Examination, August 1995 – July 1996

Percentage Average: 93.4% Area of Study: Scientific Stream

### **TEACHING EXPERIENCE**

Texas A&M University-Commerce, TX

Associate Professor of Electrical Engineering August 2024 to Present
Assistant Professor of Electrical Engineering August 2018 to August 2024

King Abdullah University of Science and Technology (KAUST), Thuwal, KSA Remote Research Scientist in Communication Theory Lab (CTL) October 2016 to May 2018

Texas A&M University-College Station, TX
Visiting Researcher July 2017 to December 2017

Alfaisal University (AU), Riyadh, KSA
Associate Professor of Electrical Engineering December 2014 to August 2016
Assistant Professor of Electrical Engineering September 2012 to November 2014

Texas A&M University-Qatar (TAMUQ), Doha, Qatar Associate Research Scientist January 2012 to September 2012

King Abdullah University of Science and Technology (KAUST), Thuwal, KSA Research Fellow and Graduate Research Supervisor October 2009 to January 2012

Jordan University of Science and Technology (JUST), Irbid, Jordan
Assistant Professor of Electrical Engineering February 2007 to September 2009 (on unpaid leave till February 2010 (resignation date))

Instructor October 2003 to January 2004
Teaching Assistant October 2001 to June 2003

University of Mississippi, Oxford, MS, USA

Research Assistant January 2004 to November 2006 Graduate Instructor January 2006 to May 2006

# **Courses Taught**

### At Texas A&M University-Commerce, TX

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ENGR 110 Introduction to Engineering and Tech. (Fall 2018)
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ENGR 2304 Computing for Engineers- EE (Fall 2024)

EE 220 Circuit Theory (Spring 2020, Fall 2020, Spring 2025)

EE 320 Electronics I (Fall 2018–2025)

EE 321 Electronics II (Spring 2019–2025)

EE 340 Electromagnetics (Spring 2019–2025)

EE 452 Antenna Theory and Design (Fall 2019–2025)

EE 454 Power Electronics (Fall 2019–2025)

EE 471 Electrical Engineering Capstone II (Spring 2020–2025)

TMGT 444 Decision Theory (Spring 2023)

EE 497 Special Topics - Energy Storage Systems (Spring 2021)

### At Alfaisal University

EE 202: Introduction to Electronics (Spring 2014–2016)

EE 309: Applied Electromagnetics (Fall 2012–2015)

EE 403: Wireless Communications (Fall 2012)

EE 413: Digital Communications (Spring 2013, Fall 2013–2015)

EE 417: Digital Signal Processing (Spring 2013–2016)

EE 422: Antennas and Wave Propagation (Spring 2014–2016)

EE 490: Capstone Project (Fall/Spring 2012–2013; Fall/Spring 2014-

2015, Fall 2015)

### At JUST

EE 210: Electric Circuits I

EE 310: Electric Circuits II

EE 303: Principles of Electrical Engineering

EE 307: Electromagnetics II

EE 451: Digital Communications

EE 452: Communications LAB

EE 553: Communications Systems

EE 751: Digital Data Transmission

EE 781: Wireless Communications

EE 782: Advanced Wireless Communications

# **SELECTED JOURNAL PUBLICATIONS**

R. M. Radaydeh, "On Power-Efficient Low-Complexity Adaptation for D2D Resource Allocation with Interference Cancelation," Sensors, 23 (16), 7138, Aug. 2023.

### 2020

R. M. Radaydeh, F. S. Al-Qahtani, A. Celik, K. Qaraqe, and M.-S. Alouini, "Generalized Imperfect D2D Associations in Spectrum- Shared Cellular Networks under Transmit Power and Interference Constraints," IEEE Access, vol. 8, 2020.

### 2019

- R. M. Radaydeh, F. S. Al-Qahtani, A. Celik, M.-S. Alouini, and N. Tayem, "Adaptive Spectrum-Shared Association for Controlled Underlay D2D Communication in Cellular Networks," IET Communications, vol. 13, no. 18, pp. 3075–3087, 2019.
- A. Celik, M.-C. Tsai, R. M. Radaydeh, F. S. Al-Qahtani, M.-S. Alouini, "Distributed User Clustering and Resource Allocation for Imperfect NOMA in Heterogeneous Networks", IEEE Transactions on Communications, vol. 67, no. 10, pp. 7211-7227, 2019.
- A. Celik, M.-C. Tsai, R. M. Radaydeh, F. S. Al-Qahtani, M.-S. Alouini, "Distributed Cluster Formation and Power-Bandwidth Allo- cation for Imperfect NOMA in DL-HetNets," IEEE Transactions on Communications, no. 2, vol. 67, pp. 1677-1692, 2019.
- A. A. Hussain, N. Tayem, A.-H. Soliman, and R. M. Radaydeh, "FPGA-Based Hardware Implementation of Computationally Efficient Multi-Source DOA Estimation Algorithms," IEEE Access, vol. 7, pp. 88845–88858, 2019.

### 2018

- Y. H. Al-Badarneh, C. N. Georghiades, R. M. Radaydeh, M.-S. Alouini, "On the Secrecy Performance of Generalized User Selection for Interference-Limited Multiuser Wireless Networks," IEEE Trans- actions on Vehicular Technology, no. 12, vol. 67, pp. 12442–12446, 2018.
- Y. Zhang, J. Ge, E. Serpedin, R. M. Radaydeh, and Y. Hu, "On Cooperative NOMA Relay Selection Under Nakagami-m Fading and Imperfect Channel Estimation" Transactions on Emerging Telecommunications Technologies, no. 12, Vol. 29, e3535, Dec. 2018.
- A. A. AbdelNabi, F. S. Al-Qahtani, R. M. Radaydeh, M. Shaqfeh, and H. Alnuweiri, "Hybrid Access Femtocells in Overlaid MIMO Cellular Networks with Transmit Selection under Poisson Field Interference," IEEE Transactions on Communications, no. 1, vol. 66, pp. 163–179, 2018.

# **RESEARCH GRANTS AND AWARDS**

Co-PI: Development and Deployment of Emission Free Smart Infrastructure,, 2020. (\$40,000)

### KAUST

Collaboration Travel Fund Grant, February 2010. (\$21,500) AU Internal Research Grant, December 2012. (\$11,467) QNRF - NPRP PI: Power control, Mobility and Interference Management for Underlay D2D Communications in 5G Networks, May 2015. (\$890,000.00 USD)

### KACST - NSTIP

Co-PI: Proposing and Investigating New Scenarios for Advanced Communications Networks Based on Free Space Optical Communications, September 2015. (1,482000.00 SAR).