



Research Interests

- Security and resilience of IT/OT, critical infrastructure, and industrial control systems
- Modeling and analysis of cyber-physical systems
- Stability, integration, and optimization of smart power grids
- Software-defined communication and networking systems
- Downhole wireless telemetry systems

Abdallah Farraj, Ph.D., P.Eng., SMIEEE

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Associate Professor of Electrical Engineering (2020 – Present)

Texas A&M University-Texarkana

Recently Taught Courses (Past 2 Years)

- EE307 - Probability & Random Processes
 - EE319 - Electric Circuits II
 - EE429 - Basic Communication Theory
 - EE325 - Signals and Systems
 - EE445 - Embedded Systems
 - EE345 - Introduction to Electromagnetic Theory
 - ENGR315 - Engineering Computations
 - ENGR312 - Engineering & Business Ethics
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Education

Texas A&M University; College Station, TX

Ph.D. in Electrical Engineering, 2012

University of Jordan; Amman, Jordan

M.S. in Electrical Engineering, 2005

B.S. In Electrical Engineering, 2000

Academic Experience

TEXAS A&M UNIVERSITY- TEXARKANA / RELLIS Campus; Bryan, TX

Associate Professor of Electrical Engineering, 2020 – Present

University of Toronto; Toronto, ON, Canada

Instructor, 2015 - 2018

Texas A&M University; College Station, TX

Graduate Assistant, 2006 –2012

University of Jordan; Amman, Jordan

Instructor, Spring 2005

Significant Professional Publications (Past 5 Years)

- Abdallah Farraj and Eman Hammad, "Noise-Based Active Defense Strategy for Mitigating Eavesdropping Threats in Internet of Things Environments", Computers, vol. 14, no. 1, 6, January 2025
- Abdallah Farraj and Eman Hammad, "A Physical-Layer Security Cooperative Framework for Mitigating Interference and Eavesdropping Attacks in Internet of Things Environments. Sensors, vol. 24, no. 16, 5171, August 2024
- Abdallah Farraj, "On the Role of OT Visibility Solutions in Guarding Critical Energy Infrastructure", Oil, Gas & Energy Quarterly, vol. 73, no. 1, pp. 109–122, September 2024
- Abdallah Farraj, "On Securing Industrial Control Systems in the Energy Sector: An Overview", Oil, Gas & Energy Quarterly, vol. 72, no. 2, pp. 169–181, December 2023
- Abdallah Farraj, "On Using Acoustic Waves for Downhole Telemetry Systems", Oil, Gas & Energy Quarterly, vol. 70, no. 2, pp. 383–399, December 2021
- Abdallah Farraj, "Cooperative Transmission Strategy for Industrial IoT Against Interference Attacks", IEEE Texas Power and Energy Conference (TPEC), pp. 1–6, November 2022