

Ziad Osman

Professor of Electrical Engineering

PROFESSIONAL SUMMARY

Accomplished academic with extensive experience in electrical and computer engineering education, academic leadership, and research. Proven expertise in curriculum design, ABET accreditation, and quality assurance. Published extensively in peer-reviewed journals and conferences in areas including signal processing, data science, and microwave technology.

SKILLS

- Electrical Engineering
- Signal Processing
- Microwave Systems
- Academic Leadership
- ABET Accreditation
- Curriculum Development
- Research Supervision
- Data Science & Analytics
- IEEE Student Chapter Leadership
- Quality Assurance in Higher Education

LANGUAGES

- English (Fluent)
- Arabic (Native)
- French (Proficient)

EDUCATION

Ph.D. in Electrical Engineering
University of Florida, USA — 1994

M.S. in Electrical Engineering
University of Florida, USA — 1991

B.S. in Electrical Engineering
Beirut Arab University, Lebanon — 1987

ACADEMIC EXPERIENCE

- University of Florida

- ❖ Adjunct Professor

- August 2025 – December 2025

- Beirut Arab University (BAU)

- ❖ Professor

- 2012 – present

- Full-time faculty member in the Faculty of Engineering
 - Teaching undergraduate and graduate courses in electrical engineering
 - Supervising theses and advising students

- ❖ Chairperson, Electrical & Computer Engineering Department

- September 2014 – August 2025

- Leading departmental operations including faculty evaluation, curriculum updates, and strategic planning
 - Coordinated successful ABET accreditation processes

Courses Taught

- Electric Circuits I and II
- Electronic Circuits I and II
- Digital Electronics
- Digital Design I and II
- Measurement and Instrumentation
- Semiconductor Physics
- Optical Fibers
- General Physics
- Modern Physics

SERVICE ACTIVITIES

- Head, ABET Unit – Faculty of Engineering | BAU | 2017 – 2025
- Head, Quality of Education Unit – Faculty of Engineering |BAU | 2012 – 2025
- Undergraduate Academic Coordinator | BAU | 2008 – 2021
- IEEE Student Chapter Councilor | BAU | 2005 – 2025

BOOK CHAPTERS

“MirageXR: A Framework for Metaverse - Enabled Cross - Platform Integration of Physical Hardware and XR Environments”, Qiblawi, R.A., Sliman, L., Osman, Z., Haidar, A.M. Book Chapter in: Borroni, A., Perboli, G., Piccinelli, G.M. (eds) Metaverses: Reshaping Economy, and Society (2026). PoliTO Springer Series. Springer, Cham. https://doi.org/10.1007/978-3-032-08664-8_9

JOURNAL PUBLICATIONS (Selected)

- “A Hybrid Dynamic Sand Cat Swarm Optimisation (HDSCSO) Approach for Resource Allocation in Wireless Sensor Networks”, S. Sindian, Z. Osman, A. Sabbagh, IET Wireless Sensor Systems, 2026, Vol. 16, Issue 1
- “Horse Herd Leadership Optimization: A Trust-Aware Metaheuristic for Resource Allocation and Secure Wireless Sensor Networks”, S. Sindian, Z. Osman, A. Sabbagh, MDPI Technologies 2026, 14(2), 109.
- “Cars Identification from partial images using norm angle of feature points|”, M. El Dimassi, Z. Osman, R. Zantout, International Journal of Data Science and Advanced Analytics, Vol. 5 No. 05, 2023.
- “An Ultra High Capacity Polarization Division Multiplexed 128-QAM Radio Over Fiber (Rof) System”, M. Rahal, S. Abou Chahine, Z. Osman, Optical and Quantum Electronics, Volume 55, Article 686, 2023
- “Comparison of Different Modulation Schemes in ROF Communication Systems”, M. Rahal, S. Abou Chahine, Z. Osman, International Journal of Microwave and Optical Technology, Vol. 16, No.1, January 2021, pp. 85-93
- “A Novel Arabic Corpus for Text Classification Using Deep Learning and Word Embedding”, R. Abou Khachfeh, I. El Kabani, Z. Osman, BAU Journal - Science and Technology, Volume 3, Issue 1, Article 10, December 2021.
- “Blind Image Quality Assessment for Face Pose Problem”, C.Tafran; M. El-Abed; I. Elkabani; Z.Osman, BAU Journal - Science and Technology, Volume 1 Issue 2, Article 11, June 2020.

CONFERENCE PUBLICATIONS

- "Design and Performance Analysis of a High-Efficiency 5G RF Front-End Receiver" Khaled El Hajj, Bassem Saad, Heba EL-Halabi, Ziad Osman, 5th IEEE International Multidisciplinary Conference on Engineering Technology (IMCET 2026), Lebanon, April 15, 2026.
- “Detection of Parkinson’s Disease Through Voice Analysis Using Shimmer and Jitter Techniques with Machine Learning”, M. El Dimassi, A. Daher, Z. Osman, Z. Doughan, M. Jabre, and K. Ozoor, 1st International Conference on Emerging Innovation and Digital Technology (ICEIDT 2025), Maldives, Nov. 24-25, 2025.
- “A No-Reference Image Quality Assessment for Detecting Illumination Alteration”, C.Tafran; M. El-Abed; I. Elkabani; Z.Osman, 10th International Conference on Information and Communication Systems (ICICS), Irbid, Jordan, June 11-13, 2019.
- “Ensemble Models for Enhancement of an Arabic Speech Emotion Recognition System”, R. Zantout, S. Klaylat, L. Hamandi, Z. Osman. In: Arai K., Bhatia R. (eds) Advances in

Information and Communication. FICC 2019. Lecture Notes in Networks and Systems, vol 70. Springer, Cham. https://doi.org/10.1007/978-3-030-12385-7_15

[Full list available upon request]

INTERESTS

Reading | Emerging Technologies | Engineering Education