

Curriculum Vitae (CV)

Radwa A. Roshdy

Personal Information



Academic Rank: Assistant Professor
Department: Electrical Engineering
Specialization: Wireless Communications
Position: Assistant Professor in Electrical Engineering dept.
Web of Science: [AAH-2759-2020](#)
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Research Gate: [Radwa Adel](#)
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Education

Degree	Discipline	Institution	Year
Ph.D.	Electronics and Communications Engineering	Faculty of Engineering – Zagazig university- Egypt.	2020
M.Sc.	Electronics and Communications Engineering	Faculty of Engineering – Zagazig university- Egypt.	2014
B.Sc.	Electronics and Communications Engineering	Faculty of Engineering – Zagazig university- Egypt.	2008

Academic Experience

Institution: Higher Technological Institute- 10th of Ramadan
Rank: Assistant Professor
Dates: from 2020 until now

Institution: Higher Technological Institute- 10th of Ramadan
Rank: Assistant Lecturer
Dates: from 2015 to 2020

Institution: Higher Technological Institute- 10th of Ramadan
Rank: Teaching Assistant
Dates: from 2008 to 2015

Research interests:

- Channel estimation
- Channel Coding
- 5G physical layer
- Mmwave propagation
- Reconfigurable intelligent surfaces
- visible light communication.

Publications

Journal Papers

1. **R. Roshdy**, M. Fouad, M. Aboul-Dahab, "Design and Implementation a New Security Hash Algorithm Based on MD5 and SHA-256," International Journal of Engineering Sciences and Emerging Technologies, Vol.6, Iss.1, pp. 29-36, August 2013.
2. M. A. Aboul-Dahab, M. M. Fouad, **R. A. Roshdy**, "Generalized Discrete Fourier Transform for FBMC Peak to Average Power Ratio Reduction". IEEE Access. 2019 Jun 6; 7:81730-40.
3. **R. A. Roshdy**, M. A. Aboul-Dahab, M. M. Fouad, "A modified interference approximation for improving preamble based channel estimation performance in FBMC system". International Journal of Computer Networks & Communications (IJCNC) Vol.12, No.1, January 2020.
4. MA. Salem, MA. Aboul-Dahab, S.M. Abd El-kader, and **R. A. Roshdy**, "Performance Improvement for the Single Carrier in FBMC Systems by PAPR Reduction," International journal of Computer Networks & Communications, vol. 14, no. 05, pp. 17–30, September 2022.
5. **R. A. Roshdy**, A. I. Hussein, M. M. Mabrook and M. A. Salem, "A Complexity Efficient PAPR Reduction Scheme for FBMC based VLC Systems," Opto-electronics review, March 2023.
6. **R. A. Roshdy**, M. H. Dahshan, S. A. AlQahtani, A. Emam, H. M. Kasem, and M. A. Salem, "Methods for Simplifying Quasi-Deterministic Millimeter-Wave Channel Models," IEEE Access, vol. 11, pp. 34529–34543, 2023.
7. **R. A. Roshdy**, and M. A. Salem, "A Proposed Channel Estimation Framework for Reconfigurable-Intelligent-Surface-Aided MIMO Communication System," IEEE Internet of Things Journal, vol. 10, no. 15, pp. 13612–13621, Aug. 2023.
8. **M. A. Salem**, A. A. Hady, H. H. Hussein, and **R. A. Roshdy**, "Enhanced connectivity through double RIS uplink MIMO and advanced modulation," Computers and Electrical Engineering, vol. 119, p. 109486, Oct. 2024.
9. **R. A. Roshdy**, H. M. Kasem, and M. A. Salem, "Mutual Coupling Impedance Effect on RIS-Assisted Terahertz Communication," Journal of Engineering Research: Vol. 9: Iss. 2, Article 17, 2025.
10. M. A. Salem, and **Radwa A. Roshdy**, "Oceanic Turbulence Effect on Underwater Visible Light Communication," Journal of Al-Azhar University Engineering Sector, 2025.
11. M. A. Salem, H. M. Kasem, R. I. Abdelfatah, M. Y. El-Ganiny, and **R. A. Roshdy**, "A KLJN-Based Thermal Noise Modulation Scheme With Enhanced Reliability for Low-Power IoT Communication," IEEE Open Journal of the Communications Society, Vol. 6, Aug. 2025.

Conference Papers

1. M. A. Aboul-Dahab, M. M. Fouad, **R. A. Roshdy**, "A proposed preamble-based channel estimation method for FBMC in 5G wireless channels", In 2018 35th National Radio Science Conference (NRSC) 2018 Mar 20 (pp. 140-148).

Certifications & Professional Activities

- Exam systems and student assessment for colleges and institutes of higher education.
- Effective teaching and learning strategies for colleges and institutes of higher education.
- Certificate of attendance and presenter at National Radio Science Conference (NRSC) 2018.
- **PEER REVIEWER FOR ACADEMIC JOURNALS AND PUBLISHERS:**
 - IEEE Access, Institute of Electrical and Electronics Engineers Inc.
 - International Journal of Computer Networks & Communications (IJCNC), Academy and Industry Research Collaboration Center (AIRCC).
 - 2023 International Conference on Advances in Computing Research (ACR'23).

Teaching Experience: **Courses taught.**

- Electric Circuits
- Advanced Programming
- System Analysis
- Communication Systems
- Analog and Digital Communications
- Antenna and Wave Propagation
- Electronic Lab
- Communications Lab
- Information Theory and Coding
- Analog Communications
- Digital Communications