Walid Ali Mohamed Raslan

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PERSONAL INFORMATION

• Date And Place Of Birth: 13 August 1986, Port Said, Egypt

Nationality: Egyptian
 Marital Status: Married.

• Military Status: Exempt

• Occupation: Assistant Professor, Communications and Electronics Engineering Dept., Faculty of Engineering, Delta University for Science and Technology, Gamsaa, Egypt.

EDUCATION AND QUALIFICATIONS

Ph.D. in Electrical Engineering (Communications & Electronics Engineering).
 Faculty of Engineering, Port Said University – Port Said, Egypt, Dec. 2020.

 Thesis Title: Implementation of New Waveforms for Next Generation Wireless Networks.

• M.Sc. in Electronics and Communications Engineering.

Faculty of Engineering, Mansoura University – Mansoura, Egypt, Sept. 2014.

Thesis Title: Implementation of LTE Physical Layer Using FPGA.

B.Sc. in Electrical Engineering (Communications & Electronics).

Faculty of Engineering, Suez Canal University – Port Said, Egypt, May 2008.

Accumulated Grade: Very Good

Graduation Project: Autonomous Mobile Robot

ACADEMIC POSITION

- [1] Assistant Professor, Electronics and Communications Engineering Dept., Faculty of Engineering, Delta University for Science and Technology, Gamsaa, Egypt. Feb. 2021 till now.
- [2] Assistant Lecturer in Communications and Computer Engineering Dept., Faculty of Engineering, Delta University for Science and Technology, Gamsaa, Egypt. Oct. 2018 Jan. 2021.
- [3] Assistant Lecturer in Electronics Dept., Military Education Authority, Gust University, Kuwait. February 2016 August 2018.
- [4] Assistant Lecturer in Communications and Electronics Dept., Faculty of Engineering Sciences, Sinai University Arish, Egypt. December 2014 January 2016.
- [5] Demonstrator in Communications and Electronics Dept., Faculty of Engineering Sciences, Sinai University Arish, Egypt. October 2010 November 2014.

RESEARCH INTERESTS

Wireless communications, new mobile, wireless networks and technology, physical layer communications, detection and estimation; modulation and coding; multicarrier modulation, OFDM Systems; MIMO Systems; machine learning for communications emerging technologies, hardware implementations field programmable gate array (FPGA) applications.

PUBLICATIONS

- [1] B. M. El-den, W. A. Raslan, and A. A. Abdullah, "Even symmetric chaotic and skewed maps as a technique in video encryption," EURASIP J. Adv. Signal Process., vol. 2023, no. 1, pp. 1–22, Dec. 2023, doi: 10.1186/S13634-023-01003-4/TABLES/11.
- [2] W. A. Raslan and H. M. Abdel-Atty, "Performance Evaluation of Data Detection Methods for Orthogonal Time Frequency Space Modulation," Delta Univ. Sci. J., vol. 6, no. 1, pp. 162–180, Apr. 2023, doi: 10.21608/DUSJ.2023.291035.
- [3] M. Abu Al-Atta, K. A. Said, M. A. Mohamed, and W. Raslan, "Physical-Layer Security in Power-Domain NOMA Based on Different Chaotic Maps," Entropy 2023, Vol. 25, Page 140, vol. 25, no. 1, p. 140, Jan. 2023, doi: 10.3390/E25010140.
- [4] A. Eldemiry, A. A. Abdelsalam, H. M. Abdel-Atty, A. Azouz, A. E. Gaafar, and W. Raslan, "Overview of the Orthogonal Time-Frequency Space for High Mobility Communication Systems," 2022 5th Int. Conf. Commun. Signal Process. their Appl. ICCSPA 2022, 2022, doi: 10.1109/ICCSPA55860.2022.10019038.
- [5] T. E. Ahmed, W. A. Raslan, A. Ghouniem, and H. M. Abdel-Atty, "Proposed HCDNA for Enhancing the Security of Marine Environment IoT Systems," Proc. 10th Int. Japan-Africa Conf. Electron. Commun. Comput. JAC-ECC 2022, pp. 169–174, 2022, doi: 10.1109/JAC-ECC56395.2022.10044040.
- [6] W. Aly Raslan, M. Abdel-Azim Mohamed, H. Mohamed Abdel-Atty, and S. Member, "Efficient Implementation of MIMO FBMC/OQAM Scheme based on Block Spreading," Delta Univ. Sci. J., vol. 5, no. 1, pp. 66–82, Apr. 2022, doi: 10.21608/DUSJ.2022.233923.
- [7] W. A. Raslan, M. A. Mohamed, and H. M. Abdel-Atty, "Deep-BiGRU based channel estimation scheme for MIMO–FBMC systems," Phys. Commun., p. 101592, Jan. 2022, doi: 10.1016/J.PHYCOM.2021.101592.
- [8] H. M. Abdel-Atty, W. A. Raslan, and A. T. Khalil, "Evaluation and analysis of FBMC/OQAM systems based on pulse shaping filters," IEEE Access, vol. 8, pp. 55750–55772, 2020, doi: 10.1109/ACCESS.2020.2981744.
- [9] W. A. Raslan, M. A. Mohamed, and H. M. Abdel-Atty, "Complementary FBMC/OQAM for Future Internet of Things Wireless Communications," 2019. doi: 10.1109/JAC-ECC48896.2019.9051157.
- [10] M. A. Mohamed, H. M. Abd-El-Atty, M. Abo-El-Seoud and W. M. Raslan "Fast Implementation of Different LTE Physical Downlink Control Channels Using FPGA"

- Wireless Personal Communication, Springer 85, 1525–1559 (2015). https://doi.org/10.1007/s11277-015-2854-8
- [11] M. A. Mohamed, H. M. Abd-El-Atty, M. Abo-El-Seoud and W. M. Raslan "Field Programmable Gate Array Implementation of Long Term Evolution Physical Downlink Control Channel Under Multiple Input Multiple Output Technique" The 2nd International Conference on Advances Technology in Telecommunication, Broadcasting, and Satellite 2014 (TelSaTech 2014), Bali Indonesia and published in Adv. Sci. Lett., Vol. 21, pp29-35, January 2015, ISSN: 1936-6612.
- [12] M. A. Mohamed, H. M. Abd-El-Atty, M. Abo-El-Seoud and W. M. Raslan "Performance Analysis of LTE-Advanced Physical Layer" IJCSI International Journal of Computer Science, Vol.11, Issues 1, No 1, pp80-87, January 2014, ISSN:1694-0814.

CONFERENCE ATTENDANCE

- [1] International Japan-Africa Conference on Electronics, Communications and Computations (JAC-ECC) 2019 Alexandria, Egypt, Dec.15-16, 2019.

 Presented a research paper titled "Complementary FBMC/OQAM for Future Internet of Things Wireless Communications,"
- [2] International Telecommunications Conference ITC-EGYPT'2023. Air Defense College, Alexandria. Egypt. 18-20 July 2023. Attended the conference and participated as a supervisor for two graduation projects in the project competitions.
- [3] 1st International Engineering Conference on Research and Innovation 2022 (DU-IECRI) (Delta University, Egypt), Cairo, Egypt, 26-27 November 2022.

 Community Organizer and Presented a research paper titled "Performance Evaluation of Data Detection Methods for Orthogonal Time Frequency Space Modulation,"
- [4] First International Conference on Engineering Solutions toward Sustainable Development ESSD 2023, Port said, Egypt, 2-3 May 2023

 Presented a research paper titled "Performance Analysis of Emerging Waveforms for 6G Wireless Communications."

TEACHING COURSES

Teaching courses for undergraduate students:

- DC & AC Electrical Circuits.
- Electronics Circuits.
- Signals and Systems.
- Logic Circuits.
- Digital Circuits Designs.
- Electronic Measurements.
- Electronics and Photonics Devices
- Antenna and Wave Propagation.

- Microwave Engineering and Design.
- Analog Communications.
- Digital Communications.
- Communications Systems.
- Satellite Communications.
- Navigation Systems.
- Wireless Communications.
- Radar Engineering

• Telecommunications Networks.

Training Courses:

MATLAB

VHDL & FPGA

Electronics

ADMINISTRATIVE AND LEADERSHIP ROLES

- [1] Director of the Awareness and Training Committee Faculty of Engineering Quality Assurance Unit.
- [2] Coordinator of the Leadership, Governance, and Self-Management Standard for the University.
- [3] Website Manager for the Faculty of Engineering.
- [4] Member of the Graduate Studies Committee at the Faculty.
- [5] Member of the Media and Documentation Unit at the Faculty.
- [6] Member of the Alumni Unit at the Faculty.
- [7] Deputy Director of the Academic Support and Guidance Unit.
- [8] Member of the Academic Standards Standard in the Faculty's Self-Study.
- [9] Responsible for the Leadership and Program Organization Standard in the Electronics and Communications Engineering Program.
- [10] Responsible for the Academic Standards Standard in the Electronics and Communications Engineering Program.
- [11] Member of the ABET Accreditation Committee at the Faculty of engineering.
- [12] Responsible for the Fourth Chapter in the Arab Engineers Union Accreditation Team.
- [13] Member of the Quality Committee in the Department.
- [14] Member of the Academic Guidance Committee in the Department.
- [15] Member of the Graduate Studies Committee in the Department.
- [16] Member of the Control Committee at the Faculty of Engineering.
- [17] Member of the Bylaws Update Committee for the Electronics and Communications Engineering Program.
- [18] Member of the Bylaws Writing Committee for the Postgraduate Program (Diplomas and Masters) in Electronics and Communications Engineering.

WORK EXPERIENCES

[1] Instructor (part time)

Teaching the following courses: Analog and Digital Electronics, Printed Circuit Board (PCB), MATLAB, VHDL & FPGA.

Jelecom Company, Port Said, Egypt. January 2013 till Now.

[2] Member of Quality Assurance Unit.

Responsibilities include: Academic standards and educational programs criterion. *Faculty of Engineering, Delta University for Science and Technology, Gamsaa, Egypt. Oct.* 2018 – till now.

[3] Training Coordinator

Responsibilities include: Mapping out training plans and schedules, designing and developing training programs, Choosing appropriate training methods per case, Marketing available training courses.

Jelecom Company, Port Said, Egypt. January 2009 – August 2010.

[4] Maintenance Engineer.

Job Description: Maintenance medical and scientific equipment, Market medical and scientific devices.

Maintenance & Installation Integrated Center, Port Said, Egypt. Jul. 2008 – Dec. 2008.

PROFESSIONAL ACTIVITIES

- [1] Reviewer in international journals:
 - IEEE Access, IEEE.
 - Wireless Communications and Mobile Computing, Hindawi.
 - Physical Communication, Elsevier.
- [2] Reviewer in national journals:
 - Mansoura Engineering Journal, Mansoura University.
 - Delta University Scientific Journal, Delta University for Science and Technology.
- [3] Reviewer in international conferences:
 - 1st International Engineering Conference on Research and Innovation 2022 (DU-IECRI) (Delta University, Egypt), Cairo, Egypt, 26-27 November 2022.
 - International Telecommunications Conference ITC-EGYPT'2023. Air Defense College, Alexandria, Egypt. 18-20 July 2023.
- [4] Reviewer in international competition:
 - International Competition on Smart Innovation Technologies, IC-SIT'2023, IEEE Egypt AP-S/MTT-S Joint Chapter, Alexandria, Egypt.
- [5] Mentor in Innovation Club program for STEM students.
- [6] Member of IEEE, 2013 till now.
- [7] Member of IEEE Communications Society, 2013 till now.
- [8] Co-Founder of Port Said Engineering Day (PSED) held in the Faculty of Engineering in Port Said from 2009 till now.
- [9] Co-Founder of IEEE Port Said University Student Branch.
- [10] Member of the organization team of RDI Project "The Links between Research Sector and Industry" in the industrial field in Suez Canal Area, 2010.
- [11] Participant in Made in Egypt (MIE 2008) Contest.
- [12] Participant in ROBOCON Egypt 2006 and 2008.
- [13] Participant in Young Innovation Award program (YIA 2008) organized by Nahdet Elmahrousa.

TRAINING COURSES

• ISO/IEC 17025:2017: General Requirements for the Competence of Testing and Calibration Laboratories, International Agency for Quality & Technical Development (SWOT) Egypt. 17 December 2019.

- **Research Ethics Course**, Faculty and Leadership Development Center (FLDC) in Delta University for Science and Technology, June 2020.
- Total Quality Management (TQM) Course, Faculty and Leadership Development Center (FLDC) in Delta University for Science and Technology, May 2020.
- Competitive Research Projects Course, Faculty and Leadership Development Center (FLDC) in Delta University for Science and Technology, august 2019.
- Write a Scientific Article Course, Faculty and Leadership Development Center (FLDC) in Delta University for Science and Technology, May 2019.
- Future Career in Telecom Network Workshop, Faculty of Engineering, Delta University for Science and Technology, 27 July 2019.
- Academic Advising Workshop, Faculty of Engineering, Delta University for Science and Technology, 16 July 2019
- Air Pollutant Emissions from Rice Straw Open Field Burning Workshop, Faculty of Engineering, Delta University for Science and Technology, 19 March 2019
- **Emerald Publishing Solution Workshop**, Faculty of Engineering, Delta University for Science and Technology, 26 February 2019
- **Electronics & Advanced Telecommunications**, Military Education Department, DE LORENZO, Kuwait, *November 2017*.
- Long Term Evolution (LTE) Course, New Horizons, Sept. 2012.
- Digital Design Using VHDL Course, Cairo University, Aug. 2012.
- WIMAX Course, Jelecom Company, Port Said, Jul. 2010.
- Microcontroller Course, Jelecom Company, Port Said, Jan. 2010.
- Programmable Logic Controller Course, Jelecom Company, Cairo, Dec. 2009.
- MATLAB Course, Jelecom Company, Port Said, Jul. 2009.
- GSM & GPRS Course, Jelecom Company, Port Said, Aug. 2009.
- Control System Training, Gulf of Suez Petroleum Company (GUPCO), Sept. 2007
- Analog & Digital Electronics Course, Jelecom Company, Port Said, Aug. 2009.
- Network Training, Port Said Ports Authority, Port Said, Jul. 2006.
- **TOEFL** Paper with score 497 from the American University in Cairo (AUC) 2010.

ENGINEERING SOFTWARE SKILLS

Excellent in following Engineering Programs:

- MATLAB
- Xilinx ISE, FPGA Advantage, ModelSim.
- ORCAD
- Electronic Workbench and Proteus.

LANGUAGES

- Native speaker of Arabic
- Very Good in English (IELTS Score 6)