

Sanaa Salama, Dr.-Ing.

Curriculum Vitae

PERSONAL DATA

Date of birth

15.02.1984

Gender

Female

Family Status

Married with three children

Nationality

Palestine

Address

Arab American University
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EDUCATION

- **PhD in Electrical Engineering (April 2015):** High Frequency Technology Department (HFT), *Duisburg-Essen University*, Germany. Dissertation title: “Electromagnetic Modelling and Optimization of Antennas on small Platforms”. Specialization area: Antenna Engineering, Phased Antenna Arrays, Multi-Ports Antenna Systems (MIMO) /Mutual Coupling, Chassis Wavemodes Coupling, Microwave Engineering and Feed Networks Design.
- **M.Sc. in Electrical Engineering (September 2009):** *Jordan University*, Jordan, excellent evaluation GPA 3.83/4. Master’s thesis title: “Enhanced Dual-band Planar Inverted F-L Antenna for WLAN applications”. Specialization area: Multiband Antenna Design.
- **B.Sc. in Telecommunication Technology (June 2006):** *Arab American University (AAUP)*, Palestine, first class honors GPA 3.96/4. Bachelor’s thesis title: “Simulation of End to End Communication System Using Matlab/Simulink and Multisim”. Specialization area: Communication Systems.

EXPERIENCE AND WORKSHOPS

- Lecturer (February 2010-September 2011), Telecommunication Engineering Department, Arab American University (AAUP), Palestine.
- Committee Member for Foundation of Antenna and Microwave Lab, Telecommunication Engineering Department, AAUP, Palestine.
- Exercise Supervision (WS 2013/2014), Microwave Theory and Techniques, High Frequency Department, Duisburg-Essen University, Germany.
- Reviewer for “Multi Band PIFA Antenna GSM, WLAN and WiMAX for Mobile Phone Applications”, submitted to Majlesi Journal of Electrical Engineering, Islamic Azad University, Iran.
- Reviewer for “A Novel UWB Wearable Antenna”, submitted to Zuhair Hijjawi Award for undergraduate research, Palestine.
- Workshop on “LTCC for Highly Integrated Antenna Front Ends”, (13 November 2013), Loughborough, UK.
- Workshop on “Multibeam Antennas and Beamforming Networks/Electronic Scanned Arrays Design”, (10 October 2014), Rome, Italy.
- **Assistant Professor (February 2016-current), Telecommunication Engineering Department, Arab American University (AAUP), Palestine.**
- Chairperson (2016 - 2018), Telecommunication Engineering Department, Arab American University (AAUP), Palestine.
- As a reviewer for Asia Pacific Microwave Conference APMC2017, Kuala Lumpur, Malaysia, November 2017.
- Workshop on “Sustainable Development, the Centre for International Migration and Development (CIM)”, (23-24 February 2018), Amman, Jordan.
- As a reviewer for 2018 IEEE International RF and Microwave Conference (RFM2018), Penang, Malaysia, December 2018.
- As a reviewer for [IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology \(JEEIT2019\)](#), Amman, Jordan, April 2019.

- Membership as a returning expert in the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH, 01.08.2017-31.07.2019.
- As a reviewer for International Journal of Information and Communication Sciences (IJICS); ISSN: 2575-1700 (Print); ISSN: 2575-1719 (Online); <http://www.sciencepublishinggroup.com/j/ijics>”, June, 2018-June, 2020.
- As a reviewer for 2020 IEEE International RF and Microwave Conference (RFM2018), Kuala Lumpur, Malaysia, December 2020.
- Member in the founding council of the Palestinian Communications and Informatics Society (PCIS) established in 2020 under the umbrella of Palestine Academy for Science and Technology (PALAST).
- A technical program committee member at International Conference on Promising Electronic Technologies ICPET 2020, December 2020, Jerusalem and Gaza city, Palestine.
- As a reviewer for international Journal of Magnetics and Electromagnetism, ISSN: 2631-5068.
- Workshop on “Innovation in Teaching and Learning in Higher Education During the Corona Era”, (13-15 November 2020), in partnership between the Arab-German Young Academy of Sciences and Humanities (AGYA) and the Palestine Polytechnic University (PPU).
- Participant in the Writing Grant Proposals for Young Palestinian Researchers (GRYPS) course provided by the DAAD, June – August 2021.

Courses taught at AAUP:

1. Electromagnetic Theory I
2. Electromagnetic Theory II
3. Electrical Circuits I
4. Electrical Circuits II
5. Microwave Systems
6. Analog Communications
7. Digital Communications
8. Signals and Systems
9. Introduction to MatLab

Labs taught at AAUP:

1. Analog Communications Lab
2. Digital Communications Lab
3. Electrical Circuits Lab
4. Antennas and Microwave Lab.
5. Engineering Workshop I

6. Engineering Workshop II

PUBLICATIONS (Books and Papers)

- S. Salama, Y. Battah, and A. Abuelhaija, “Design of A Microstrip Maximally Flat 7th Order Lowpass Filter Using ADS Simulation”, *Journal of Engineering Science and Technology*, Vol. 17, no. 2, April **2022**.
- A. Abuelhaija, G. Saleh, O. Nashwan, S. Issa, and S. Salama “Multi-and dual-tuned microstripline-based transmit/ receive switch for 7-Tesla magnetic resonance imaging”, *International Journal of Imaging Systems and Technology*, vol., no. , July **2021**.
- S. Salama, D. Zyoud, and A. Abuelhaija, “Modeling of A Compact Dual Band and Flexible Elliptical-Shape Implantable Antenna in Multi-Layer Tissue Model”, *POLISH POLAR RESEARCH*, vol.42, no. 4, pp.46–56, **2021**.
- A. Abuelhaija, G. Saleh, T. Baldawi, and S. Salama, “Symmetrical and Asymmetrical Microstripline-based Transmit/Receive Switches for 7 Tesla Magnetic Resonance Imaging”, *International Journal of Circuit Theory and Applications*, Vol. 49, no. 5, **2021**.
- S. Salama, Y. Battah, and A. Abuelhaija, “Stepped Impedance 7th order Maximally Flat Low Pass Filter Using Microstrip Line for X-Band Applications”, *Journal of Physics: Conference Series*, IOP publishing, vol. 1803, **2021**.
- S. Salama, D. Zyoud, R. Daghlas, and A. Abuelhaija, “Design of a Planar Inverted F-Antenna for Medical Implant Communications Services Band”, *Journal of Physics: Conference Series*, IOP publishing, vol. 1711, December **2020**.
- S. Salama, D. Zyoud, and A. Abuelhaija, “Design of a Dual-Band Planar Inverted F-L Implantable Antenna for Biomedical Applications”, *Journal of Physics: Conference Series*, IOP publishing, vol. 1711, December **2020**.
- S. Salama, T. Baldawi, A. Abualhaija and S. Issa, “Comprehensive Study on Decoupling Networks for 7 Tesla MRI based on Reactive Load Parasitic-Element”, *Majlesi Journal of Electrical Engineering MJEE*. vol. 14, no.3, September **2020**.
- A. Abuelhaija, S. Salama, and, T. Baldawi, “Port Decoupling vs Array Elements Decoupling for Tx/Rx Systemat 7-Tesla Magnetic Resonance Imaging”, *Progress in Electromagnetics Research C*, vol. 98, pp.213–224, **2020**.
- S. Salama, “Reactive-Element Based Decoupling Network for a Two-Element MRI Phased Array”, *Journal of King Saud University-Engineering Sciences JKSU*, vol. 32, no.1, pp. 42-50, January **2020**.

- A. Abuelhaija, S. Salamh, and , O. Nashwan, “Decoupling Network for Tx/Rx Body Coil for 7 Tesla MRI”, *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 27 , no. 6 , pp. 4390 - 4402 , December **2019**.
- A. Abuelhaija, S. Salama, and, M. El-Absi, “Multi-tuned RF Coil using Microfluidically Tunable RF Capacitor for MRI/MRS at 7T”, *International Journal on Communications Antenna and Propagation IRECAP*, vol. 9, no. 6, December **2019**.
- S. Salama, and A. Abualhaija, “Parasitic-Element Based Decoupling Network for a Two-Element MRI Phased Array”, *2019 Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)*, Amman, Jordan, April **2019**.
- S. Salama, “Design of a Rectangular Loop-Shape RF Coil for 7-Tesla Magnetic Resonance Imaging,” *Asia Pacific Microwave Conference APMC2017*, Kuala Lumpur, Malaysia, November **2017**.
- S. Salama, “Antenna Design Challenges on Small Platforms”, ISBN: 978-3-8381-5141-0, *Südwestdeutscher Verlag für Hochschulschriften, OmniScriptum GmbH & Co. KG*, Germany, July **2015**.
- S. Salama, and K. Solbach, “Eigenmodal Feed Based Decoupling Network for Two Ports MIMO and Diversity,” *Loughborough Antennas and Propagation Conference LAPC 2014*, Loughborough, UK, November **2014**.
- S. Salama, and K. Solbach, “Study of Mutual Coupling and Chassismodes Coupling through the Equivalent Circuit Modeling of Two Monopoles on a Small Platform,” *Loughborough Antennas and Propagation Conference LAPC 2014*, Loughborough, UK, November **2014**.
- S. Salama, and K. Solbach, “Parasitic Elements Based Decoupling Technique for Monopole Four Square Array Antenna”, *European Microwave Conference EuMC2014*, Rome, Italy, October **2014**.
- S. Salama, and K. Solbach, “Design of Decoupling Network for Monopole Four Square Array antenna for Multi-beam Applications,” *Loughborough Antennas and Propagation Conference LAPC2013*, Loughborough, UK, November **2013**.
- S. Salama, and K. Solbach, “Equivalent Circuit Modeling of Monopoles on a Small Platform,” *International Workshop on Antenna Technology iWAT2013*, Karlsruhe, Germany, March **2013**.
- S. Salama, and Mohamed K. Abdelazeez, “Multiband Planar Inverted-F Dual-L Antenna (PIFDLA) for WLAN Applications”, *Journal of King Saud University-Engineering Sciences JKSU*, vol. 24, no. 1, pp. 61-69, January **2012**.

AWARDS

- Ministry of Higher Education Scholarship for B.Sc., Arab American University, Palestine, 2002-2006.
- Deutscher Akademischer Austausch Dienst (DAAD)Scholarship for M.Sc., JordanUniversity, Jordan, 2007-2009.
- Deutscher Akademischer Austausch Dienst (DAAD) Scholarship for PhD,Duisburg-Essen University, Germany, 2011-2015.

AREAS OF RESEARCH INTERESTS

- Characteristic Chassis Wavemodes.
- Coupling Element-Based Antenna Structure.
- MIMO Antenna Design.
- Beam-Forming Antenna Array Design.
- Mutual Coupling and Chassis Wavemodes Coupling.
- Design of Decoupling and Matching Networks.
- Magnetic Resonance Imaging MRI (7-Tesla MRI Systems).
- Design of Implantable Antennas for MICS and ISM bands.
- Design of Microwave Filters.

MEMBERSHIP

- Jordan Engineers Association
- Palestinian Communications and Informatics Society (PCIS) established in 2020 under the umbrella of Palestine Academy for Science and Technology (PALAST).
- Organization for Women in Science for the Developing Word (OWSD)

LANGUAGES

- Arabic Language (mother tongue).
- English Language (very good).
- German Language (levels A1, A2).

REFEREES

- **Prof. Mohamed K. Abdelazeez**,Electrical Engineering Department, Jordan University, Amman, Jordan,abdelazeez@ieee.org
- **Prof.Dr.-Ing. Klaus Solbach**, High Frequency Technology Department (HFT), Duisburg-Essen University, Duisburg, Germany,klaus.solbach@uni-due.de
- **Dr. Nasser Hamad**, Telecommunication Engineering Department, Arab American University, Palestine, naser.hamad@aaup.edu

- **Prof. Dr.-Ing. Thomas Kaiser**, Digital Signal Processing Department (DSP), Duisburg-Essen University, Duisburg, Germany, thomas.kaiser@uni-due.de

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28.07.2021

