

CURRICULUM VITAE

PERSONAL DATA

NAME : DR. TAREQ FAISAL ZANOON
DATE OF BIRTH : 1 July 1980
NATIONALITY : Palestinian
PRESENT APPOINTMENT : Assistant Professor
Faculty of Engineering and Information
Technology
Computer Systems Engineering Dept.
Arab American University - Jenin
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HOME RESIDENT ADDRESS: Rafidia, 16th St. Nablus, Palestine

ACADEMIC QUALIFICATIONS:

2003	B.Eng (Electrical Engineering), An-Najah National University , Nablus, Palestine.
2004	M.Sc (Electronic Circuit Design and Manufacture), With Distinction, University of Dundee, Scotland, UK.
2011	Ph.D (Electromagnetic Imaging), University Sains Malaysia (USM), Penang, Malaysia.

Career

2004-2005	Galgon Industries, Sctoland, UK, Development Engineer.
2005-2007	Arab American University -Jenin, Instructor in the Faculty of Information Technology
2007-2011	USM, School of Electric and Electronic Engineering, PhD studentship grant concerned with the design of microwave tomography system for breast cancer imaging.
2011- 2014	Assistant Professor, Faculty of Engineering and information Technology, Arab American University -Jenin.
2014-2015	Deputy Dean, Faculty of Engineering and information Technology, Arab American University -Jenin.
2016-Present	Head of Computer Systems Engineering Dept. Faculty of Engineering and information Technology, Arab American University -Jenin.

STUDY AND RESEARCH AREAS

1) Nonlinear inverse scattering problems, optimization and gradient methods, time domain modeling of EM (FDTD Method), conformal boundary approximation, modeling of biological tissue and dispersive media, Ultra-Wide Band (UWB) microwave methods for breast cancer imaging and image reconstruction, and through rubble survivor detection.

2) Electronics manufacture, PCB assembly, soldering and fine pitch technology, electronic circuit design, analogue and digital circuits, EMC, microelectronics fabrication, plasma etching and large area electronics. Manufacturing systems, modeling and simulation of manufacturing systems and computer aided test.

ACADEMIC AWARDS, FELLOWSHIPS, & GRANTS

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| 2009 | Best recommended paper : BINAJAJ, S., ZANOON, T. F. & ABDULLAH, M. Z. " <i>Iterative and single-step solutions of multi-offset ultra wide band data in the time domain</i> " in IEEE International Workshop on Imaging Systems and Techniques, 2009 IST '09., 11-12 May 2009, Shenzhen, China. |
| 2009 | Postgraduate Fellowship Award from University Sains Malaysia (USM). |
| 2011 | Best PhD Thesis Award, Awarded by School of Electric and Electronic Engineering, University Sains Malaysia (USM). |
| 2013 | Scientific Research Council Grant AAUJ, JD 5000; Super resolution investigation of UWB tomography |
| 2014 | Zamalah Short Research Visit Scholarship , \$US 7000 (July-Sept 2014) |
| 2016 | Scientific Research Council Grant AAUJ, JD 5000; Design of an antenna array phantom for 3D microwave breast cancer imaging. (On going project) |

PUBLICATIONS

Journal/Proceedings

- **ZANOON, T.,** "Disaster Recovery and Through Rubble Detection by Means of Quasi-Real Time UWB Multilateration Reconstruction", IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE), 11-13 Dec. 2016, Langkawi, Malaysia. DOI: 10.1109/APACE.2016.7916460
- **ZANOON, T. F.,** and ABDULLAH, M.Z, "A hybrid image reconstruction approach for ultra-wide band microwave tomography featuring radar based and iterative methods" IEEE International Conference on Imaging Systems and Techniques (IST) 14-17 Oct. 2014. Santorini, Greece. DOI: 10.1109/IST.2014.6958438
- SEW S. TIANG, MOHAMMED SADOON, **TAREQ F. ZANOON**, MOHD F. AIN, AND MOHD Z. ABDULLAH, "Radar Sensing Featuring Biconical Antenna and Enhanced Delay and Sum

Algorithm For Early Stage Breast Cancer Detection", Progress In Electromagnetics Research B, Vol. 46, 299-316, 2013.

- **ZANOON, T.F.**; HATHAL, M.S.; ABDULLAH, M.Z., "*Microwave imaging at resolution and super-resolution with ultra-wide band sensors*," IEEE International Conference on Imaging Systems and Techniques (IST), 2012 , vol., no., pp.538,543, 16-17 July 2012, Manchester, UK. doi: 10.1109/IST.2012.6295578.
- HATHAL, M.S.; **ZANOON, T.F.**; AIN, M.F.; ABDULLAH, M.Z., "*Experimental ultra wide band imaging using heterogeneously dense breast phantom for early cancer detection*," IEEE International Conference on Imaging Systems and Techniques (IST), 2012, Manchester, UK. 16-17 July 2012 , Manchester, UK. doi: 10.1109/IST.2012.6295484.
- **ZANOON, T. F.**, and ABDULLAH, M.Z, "Quantitative Imaging in the Time Domain Featuring Gradient Based Minimization and Broyden Updating", IEEE Microwave and Wireless Component Letters, Volume : 21, Issue: 11, PP: 628-630, 2011, doi:10.1109/LMWC.2011.2168602.
- **ZANOON, T. F.**, and ABDULLAH, M.Z., "*Early stage breast cancer detection by means of time-domain ultra wide band sensing*". Measurement Science and Technology, Volume: 22, 114016 doi:10.1088/0957-0233/22/11/114016, 2011.
- **ZANOON, T. F.**, HATHAL, M. S. & ABDULLAH, M. Z. "*Comparing image reconstruction algorithms for microwave camera featuring ultra wide band sensor*". IEEE International Workshop on Imaging Systems and Techniques, IST 2011., 17-18 Oct. 2011, Penang, Malaysia. 112-117.
- ABDULLAH, M. Z., BINAJJAJ, S., **ZANOON, T. F.** & PEYTON, A. J. "*High resolution imaging of dielectric profiles by using a time-domain ultra wideband radar sensors*". Measurement, 44, PP: 859-870. 2010
- **ZANOON, T. F.**, BINAJJAJ, S. & ABDULLAH, M. Z. "*Electromagnetic tomography featuring ultra wide band sensor with conformal finite difference (CFDTD) modeling of dispersive media*". IEEE Symposium on Industrial Electronics & Applications, 2009. ISIEA 2009., 4-6 Oct. 2009, Kuala Lumpur, Malaysia. 377- 382.
- **ZANOON, T. F.**, BINAJJAJ, S. & ABDULLAH, M. Z. "*Imaging with ultra-wide band sensor: application to underwater inspection of concrete structures*". The 1st AUN/Seed-Net Electrical and Electronics Engineering Regional Conference International Symposium on Multimedia and Communication technology (ISMAC), 22-23 Jan. 2009. Bangkok, Thailand
- BINAJJAJ, S., **ZANOON, T. F.** & ABDULLAH, M. Z. "*Iterative and single-step solutions of multi-offset ultra wide band data in the time domain*". IEEE International Workshop on Imaging Systems and Techniques, 2009. IST '09., 11- 12 May 2009, Shenzhen, China. 324-329.

ADMINISTRATIVE DUTIES

- Deputy Dean, Faculty of Engineering and information Technology, Arab American University -Jenin. (2014 – 2015).
- Head of Computer Systems Engineering Dept. Faculty of Engineering and information Technology, Arab American University –Jenin (2016 – Present)

TEACHING DUTIES

Year / level	Course/ Degree	Contact Hours (Per Semester)
1	Advanced Research Methods <i>MSc. Computer Science</i>	48
3	Microprocessors Systems and Applications <i>B.Eng Computer Systems Engineering</i>	48
5	Microprocessors and Microcontrollers <i>B.Eng Telecommunication Engineering</i>	48
5	Special Topic in Telecommunication Engineering: Electronic and Semiconductor fabrication	48
3	<i>B.Eng Telecommunication Engineering</i> Electromagnetic Theory II	48
3	<i>B.Eng Telecommunication Engineering</i> Electromagnetic Theory I	48
3	<i>B.Eng Telecommunication Engineering</i> Electronics I	48
3	<i>B.Eng Telecommunication Engineering</i> Electronics II	48
2	<i>B.Eng Telecommunication Engineering</i> Digital Logic Design	48
1	<i>B.Sc Telecommunication Technology</i> Digital Logic Design	48
2	<i>B.Eng Computer Systems Engineering</i> Programming Fundamentals with C++ <i>B.Sc Information Technology</i>	48
2	Principle of Circuit Analysis <i>B.Sc Telecommunication Technology</i>	48
2	Semiconductors and Microelectronics <i>B.Sc Telecommunication Technology</i>	48
1	Introduction to Information Technology <i>B.Sc Telecommunication Technology</i>	48
3	Measurements and Instrumentations <i>B.Eng Telecommunication Engineering</i>	48
1	Introduction to computers <i>University Requirement Course</i>	48

2	Circuit Analysis Lab. <i>B.Eng Telecommunication Engineering</i>	45
2	Semiconductors and Microelectronics Lab. <i>B.Sc Telecommunication Technology</i>	45
2	Electronics of Cummunications Lab. <i>B.Sc Telecommunication Technology</i>	45
4	Engineering Workshop <i>B.Sc Telecommunication Engineering</i>	45
4	Assembly Lab <i>B.Eng Computer Systems Engineering</i>	45
3	Microprocessors Lab <i>B.Eng Computer Systems Engineering</i>	45