

# **Curriculum Vitae**

**Prof. Dr. Jabir S. Aziz**



## **1. Personal Issues**

Full Name	Jabir Salman Aziz
Date and Place of Birth	July 1st, 1953 –Babylon, Iraq
Nationality	Iraqi
Marital Status	Married
Designation	Professor
Present Position	Electronics and Communications Engineering Department, College of Engineering, AL-Nahrain University, Baghdad, Iraq
E-mail	<a href="mailto:jsaziz53@yahoo.com">jsaziz53@yahoo.com</a>
Phone	07902386235

## **2. Languages**

Original Language	Arabic
Foreign Language	English, French

## **3. Academic qualification**

Degree	Specialization	College / University	City - Country	Year
B. Sc.	Electrical Engineering	MEC	Baghdad - Iraq	1977
M. Sc. (DEA)	Communication Engineering	ENSAE	Toulouse - France	1980
Ph. D.	Microwave Engineering	ENSAE	Toulouse - France	1982

#### **4. Academic Experience**

Period	Designation	University - City
1982-1987	Senior Lecturer	MEC - Baghdad
1987-2003	External Lecturer (Assist. Prof.)	University of Technology and Al-Nahrain University- Baghdad
2003-2005	Assist. Prof.	Al-Mansour University College – Baghdad
2005-2007	Assist. Prof.	College of Engineering - Al-Nahrain University – Baghdad
2007- 2010	Head of Electronics & Communication Department	College of Engineering - Al-Nahrain University – Baghdad
2010-4/5/2014	Prof.	College of Engineering - Al-Nahrain University – Baghdad
4/5/2014 – 28/6/2015	Head of Medical Engineering Department	College of Engineering - Al-Nahrain University – Baghdad
28/6/2015	Prof.	College of Engineering - Al-Nahrain University – Baghdad

#### **5. Practical Experience**

Period	Designation	Company - City
1987-1991	Researcher	Technical Research Center - Baghdad
1991-1994	Chief of Researchers	Military Research and Development Commission - Baghdad
1994-2001	Director of Research Center	Electronic Warfare Research Center – Baghdad
2001-2003	Director General	AL-battany Reseach Company (Space Technology and Remote Sensing Research Company)-Baghdad

#### **6. Acknowledgments**

- Awarded the Iraqi Government Shield in recognition of the efforts in Scientific Research, in the scientific day 17 Jan. 1999.

- Awarded Al- Mustanseria University Shield in recognition of the efforts in the Scientific Conference of Communications and Computer Engineering, Dec. 2010.
- Awarded the Ministry of Higher Education and Scientific Research Shield in recognition of the efforts in Scientific Research, 6 April 2011.
- Awarded University of Kerbala Shield in recognition of the efforts in the 1st International Conference on Engineering Sciences Applications, ICESA, 24-25<sup>th</sup> December 2014.
- Awarded University College for Humanitarian Studies shield in recognition of the efforts in Scientific Research, April 2016, Al-Najaf Al-Ashraf – Iraq.

## **7. Published papers**

- 53 published papers (Details in Annex-1)

## **8. Students Supervision**

- 34 Students were supervised in M.Sc. Level (Details in Annex-2),
- 5 Students were supervised in Ph.D. level (Details in Annex-3),
- 2 Ph.D. students currently supervised.

## **9. Design and Consultancy**

- Design of more than 20 Communication Projects during the period 1987-2003.
- Design of Communication Network for NAMAB Bulk Fuel Facility Project, 2009.
- Local Consultant of Iraqi Inter-Banking Network (IIBN) Project (funded by the World Bank for the benefit of the Central Bank of Iraq), 2008-2009.
- Head of team work concerning the Regulations of Non-Ionizing Radiation Protection for the Ministry of Environment.
- Scientific Consultant for the Al-Rafidain University College, since 2008.
- Scientific Consultant for Ministry of Environment, 2013-2014.

## **10. National Committee**

- ❖ Member of the National Committee for Technology Transfer in the field of Electronics and Communications.
- ❖ Member of the National Committee for Radio Science.

- ❖ Member of the National committee for communication transmission regulation, Ministry of Communications, 2010.
- ❖ Member of the National committee for Non-Ionizing Radiation Regulations Revision, Ministry of Environment, 2012.
- ❖ Member of the Permanent National Technical Committee for the Specifications of Electrical Devices in the Central Council of quality control, 2012.
- ❖ Chairman of the Central Objections Committee for Scientific Promotion at Al-Nahrain University, 2015-2016.
- ❖ Chairman of the Committee of Scientific Promotions, College of Engineering, Al-Nahrain University, Baghdad, 2017.
- ❖ Member of the Committee of Scientific Promotions, Al-Rafidain University College, Baghdad, 2014-2017.
- ❖ Member of the Committee of Scientific Promotions, Al-Mansor University College, Baghdad, 2016-2017.

## **11. Other Scientific Activities**

- ❖ Translation of scientific book from French to Arabic language (Radar bases Moderns).
- ❖ Member of the scientific committee of many scientific symposiums and conferences.
- ❖ Member in the organizing committee of many scientific symposiums and conferences.
- ❖ Member of revision scientific committee for the study plan of MTC, Al-Mansor, Al-Rafidain, and Al-Nahrain Colleges.
- ❖ Chairman of the Scientific Committee for Electronic and Communications Department - Al-Nahrain University, 2016-2017.

## **12. Conferences and Scientific Visits**

- Participation in many scientific conferences, in USA, Japan, Algeria, UAE, and most of the national scientific symposiums and conferences in the field of Electronics and Communications.
- Scientific visits for many factories, and industrial zones in France, Germany, UK, Russian, China, Japan, Bulgaria, and Poland.

### 13. Journal Editorial boards

- Member of the Council Board of AL-Rafidain Journal, 2010 – to date.
- Member of the Editorial Board of Engineering College Journal, Al-Nahrain University, 2009 – 2011.
- Director of the Editorial Board of Engineering College Journal, Al-Nahrain University, 2015 – 2016.

### 14. Conferences and Journal Reviewer

- Designated reviewer for the First International Conference on Future Communication (ICFCN-12) April 2012.
- Designated reviewer for the First National Conference on Engineering Sciences (FNCES-12) Nov. 2012.
- Designated reviewer for many national and international engineering and scientific journals.

### 15. Member ship of Professional bodies

- Iraqi Engineers Union
- Iraqi Engineering Society.
- IEEE member ship.

### 16. Teaching Experience (Courses Taught)

Under graduate Level		Post graduate Level	
1	Communication Theory	1	Advance Wireless Communications
2	Communication System	2	Microwave Engineering
3	Wireless and mobile Communications	3	Satellite Communications
4	Microwave Theory	4	Communication Networks
5	Satellite Communications	5	Microwave Remote Sensing
6	Antenna and Propagation	6	Antenna and Propagation
7	Radar Theory	7	Advance Radar Theory
8	<i>Electromagnetic Fields</i>	8	Radar Systems
9	<i>Electrical Engineering</i>	9	Electronic Warfare Systems
10	<i>Electrical Circuit Theory</i>	10	Telemedicine

## **Annex- 1:**

### **Scientific Papers Published by Dr. Jabir Salman Aziz:**

1. *Digital Frequency Processor for FM-CW Radar, Fourth Scientific Conference, Scientific Research Council, Oct. 1986, Baghdad, Iraq.*
2. *Digital Moisture Meter for Monitoring the Rate of Heating of Food grain. Fourth Scientific Conference, Scientific Research Council, Oct. 1986, Baghdad, Iraq.*
3. *Complex Permittivity Measurement of Soils in the Middle and South of Iraq at 3cm Wavelength, Fourth Scientific Conference, Scientific Research Council, Oct. 1986, Baghdad, Iraq.*
4. *Optimized Radar Anticollision Warning System, First Inter- Arab Conference On Electrical Systems, Constantine-Algeria, Oct. 1986.*
5. *Design of Microwave Applicator for Preservation of Food Grain First, Inter-Arab Conference on Electrical Systems, Constantine-Algeria, Oct. 1986.*
6. *Soil Field Capacity: Measurement and Empirical Formule Mediterranean Electrotechnical Conference (Melecon, 87), Rome, Italy, March 1987*
7. *Bistatic Scattering of EMW by Rough Surfaces: Investigation and Modeling, RSSP1, MTC, Baghdad July 1987.*
8. *Side Lobe Reduction for Wide Band Radar Signals Using Digital Filters, RSSP1, MTC, Baghdad July 1987*
9. *Adaptive Digital Threshold Level Controllers for Sea Cultter, RSSP1, MTC, Baghdad July 1987.*
10. *Soil Field Capacity and Soil Saturation, RSSP1, MTC, Baghdad July 1987.*
11. *Effective of Electromagnetic Radiation Hazards and Safety Precautions, First Seminar on Engineering Applications of Science Research, April 1987 Tourist City at Habbanya- Iraq*
12. *Radar Anti Collision Warning System, Journal of Space and Astronomy Research Vol. 4 No. 2 Aug. 1987.*
13. *The Design and Construction of Digital Humidity Meter, Journal of Electronics and Computers Research, Vol. 1, No. 2, Oct. 1987.*
14. *Spectral Reflectance of Ferrocement against Microwave Remote Sensing Technique, First Iraqi Technological Conference, University of Technology, Baghdad-Iraq, March 1995.*
15. *Design and Implementation of Modified (2-18) Ghz Spiral Antenna, 1<sup>st</sup> National Conference on Computer Communication and Control Systems Engineering, University of Technology Dec. 2000, Baghdad-Iraq.*

16. *Design and Implementation of Digital Radar Video Graphic Adapter (RVGA), 1st National Conference on Computer Communication and Control Systems Engineering, University of Technology Dec. 2000, Baghdad-Iraq*
17. *Frequency Estimation of Frequency-Hopping Signals Using Modern Techniques. Third National Conference on Computer, Communication, Control and System Engineering, University Of Technology, Dec. 2000, Baghdad, Iraq.*
18. *Parameter Estimation of Frequency-Hopping (FH-SS) Signals Using Modified Autocorrelation Techniques, International Conference on Communication Technology, ICCT'06, 27-30 Nov. 2006, IEEE Publisher.*
19. *Analysis and Formulation of Deception Capabilities against Monopulse Tracking Systems, Engineering and Development journal, Vol. 10, No. 4, Dec. 2006, College of Engineering, Al- Mustanseria University.*
20. *Protection of transmitting systems by using ground bounce technique, Engineering and Development journal, Vol. 12, No. 4, Dec. 2008, College of Engineering, Al- Mustanseria University.*
21. *Modulation and Frequency Estimation of FHSS Signal in the Presence of Interference Environments, (Letter No. 782, dated 12-10-2008), First Regional Conference of Engineering Science, College of Engineering, Nahrain University, 5-6 Nov. 2008.*
22. *Design and Implementation of a Telemetry System for Environmental Application, Khwarizmi Engineering Journal, Al-Khwarizmi College of Eng., Baghdad University, Vol. 5, No. 4, pp 39-50 (2009).*
23. *Path Profile Analysis of a LOS System Using 3-D Digital Map, Accepted paper, Journal of College Engineering, Nahrain University.*
24. *Design and Implementation of Radio Link Performance Analysis (RPLA) System, (Letter No. 398, dated 20\4\2009), First Information Technology Conference.*
25. *Design of Telemedicine System for Rural and Urban Areas in Iraq, ARPN Journal of Engineering and Applied Sciences, ISSN 1819-6608, [http://www.arpnjournals.com/jeas/volume\\_04\\_2009.htm](http://www.arpnjournals.com/jeas/volume_04_2009.htm)*
26. *Design and Implementation of Low Cost Multi-purpose SCADA System using Embedded Ethernet, Medwell Journals, Journal of Engineering and Applied Sciences 4 (3), ISSN: 1816-949X, Pages: 210-214, 2009.*
27. *Analysis of Biological Effects of Microwave Energy and Safe Distance Calculations, Presented on the Third Scientific Conference for Al-Rafidain University College, 21-11- 2009 and Accepted in the Journal of the Al-Rafidain University College for Science (Letter No. 664 dated 9/11/2009).*
28. *Bandwidth Enhancement of Microstrip Patch Antenna, Medwell Journals, Journal of Mobile Communication, 4 (3), pp54-59, 2010.*
29. *Dual Band MSA Designs for GPS and GSM Applications, ARPN Journal of Engineering and Applied Sciences, ISSN 1819-6608, Vol. 5, No. 5, May 2010.*

30. *Design and Implementation of GPS-Based Direction Finding System, The 2nd Regional . Conf. for Eng. Sci., College. of Eng. , Al-Nahrain University , 1-2/12/2010.*
31. Complex Discrete Wavelet Transform-Based Image Denoising, *Engineering and Technology Journal*, Vol. 29, No. 5, 2011.
32. Miniaturized Koch Pre-fractal Bandpass Filter, *Journal of Mobile Communication*, 5 (5-6), pp57-61, 2011.
33. Coverage and Capacity Enhancement in Cellular Network by Using Digital Relays and Load Balance, *Journal of Mobile Communication*, 5 (5-6), pp52-56, 2011.
34. Design and Simulation of RFID Aperture Coupled Fractal Antennas, INTECH, *International Journal of Radio Frequency Identification and Wireless Sensor Networks (IJRWSN)*, 2012, Vol. 2, PP 1-14.
35. Design of Miniaturized Fractal RFID Tag Antenna With Forced Impedance Matching, *International Journal of Electromagnetics and Applications (Vol.2, No.5, September 2012)*
36. Design and Simulation of Miniaturized Minkowski Fractal Aperture-Coupled Antenna for 5.8 GHz RFID Applications, *Journal of Emerging Trends in Computing and Information Sciences*, VOL. 3, NO. 7, July 2012.
37. Design and Implementation of General Purpose Remote Terminal Unit (R.T.U), *Global Journal of Researches in Engineering, Electrical and Electronics Engineering*, Volume 12 Issue 7 Version 1.0, July 2012.
38. Design of a Novel Patch Antenna with Enhanced Gain and Side Lobe Reduction, *Engineering and Technology Journal*, Vol. 30, NO.16, 2012.
39. Performance Prediction of Carbon Nanotube Dipole Antenna Using the Complex Permittivity Approach, *Journal of Emerging Trends in Computing and Information Sciences*, VOL. 3, NO.12 Dec, 2012.
40. Performance Investigation of Loop and Helical Carbon Nanotube Antennas, *Journal of Emerging Trends in Computing and Information Sciences*, VOL. 3, NO.12 Dec, 2012.
41. A Design Methodology for Miniaturized Fractal Slot RFID Antennas Using Particle Swarm Optimization, *Journal of Emerging Trends in Computing and Information Sciences*, Vol. 4, No. 5 May 2013.
42. Design and Implementation of Miniaturized Antennas for Wireless Sensor Network Applications Using Particle Swarm Optimization, *International Journal of Electromagnetics and Applications* 2013, 3(4): 81-95.
43. SAR Simulation in Human Head Exposed to RF Signals and Safety Precautions, *IJCSET*, September 2013, Vol 3, Issue 9, 334-340.
44. Design Of A Dual Band GSM Micro-Strip Patch Antenna, *International Journal of Scientific & Technology Research* Vol. 3, Issue 7, July 2014.



45. Design of a Dual Band GPS Micro-strip Patch Antenna, International Journal of Electrical and Electronics Research, Vol. 2, Issue 2, pp: (92-95), April - June 2014.
46. Design and Simulation of UWB Monopole Disk Antenna, International Journal of Computer Science Engineering and Technology (IJCSET), Dec 2014, Vol. 4, Issue 12,404-411.
47. An Interlaced E-shaped Antenna for LTE (Band-Class-13) Handset Applications, Loughborough Antennas and Propagation Conference (LAPC), 2015.
48. A Meandered line-PIFA Antenna for LTE (Band-Class-13) Handset Applications, Loughborough Antennas and Propagation Conference (LAPC), 2015.
49. Design and Simulation of an Enhanced Bandwidth Microstrip Antenna Using Metamaterial, IJCSET (www.ijcset.net) | December 2015 | Vol 5, Issue 12, 399-405.
50. CubeSat Communication System, a New Design Approach, IJCSET (www.ijcset.net) | December 2015 | Vol 5, Issue 12, 399-405.
51. Compact High Isolation Meandered-Line PIFA Antenna for LTE (Band-Class-13) Handset Applications, Progress In Electromagnetics Research C, Vol. 67, 153–164, 2016.
52. Design and Implementation of a PIFA Antenna for Multi-band LTE Handset Applications, Loughborough Antennas & Propagation Conference (LAPC), 2016.
53. Design and Implementation of a Secure Reliable and Software Reconfigurable CubeSat Communications Subsystem, The First International Conference for the University College for Humanitarian Studies, April 19-20, 2016, Al-Najaf Al-Ashraf – Iraq.

## **Annex- 2:**

### ***M.Sc. Thesis Supervised by Dr. Jabir S. Aziz:***

1. *Bistatic Reflection and Scattering of E.M Waves Investigations & Modeling, May 1986, Jawad K. Ali.*
2. *Modeling of Radar Wave Propagation, Jan. 1988, Kaiser S. Mahdy.*
3. *The Effect of Atmospheric Reflection on Tracking Radar, Sep. 1990, Emad S. Ahmed.*
4. *Radar Techniques for High Resolution Planetary Mapping, Sep. 1990, Abdul-Karim I. Ali.*
5. *Design and Implementation of (2-18) GHz Spiral Antenna Applied In Microwave Passive Direction Finding Systems, Feb. 2000, Falleh S. Khalifa*

6. *Design and Practical Implementation of Log-Periodic Dipole Antenna*, Jun. 2000, Hussein Ali
7. *Detection of Angle Keyed (PSK) Signal in DSSS System with the Presence of Noise And Jamming (NBT) By Using Transform Domain Processor* March, 2001, Ahmed U. Aftan
8. *Accurate Frequency Measurement Using Digital Signal Processing Techniques for Electronic Warfare Applications* March, 2001, Bahar F. Kadim
9. *Parameter Estimation and Spectrum Analysis for Frequency-Hopping Signals* April, 2002, Anwar K. Abdul-Mahammed.
10. *Path Profile Calculation of a LOS System between any Two Points on 3-D Digital Map*, 2008, Saba Talib.
11. *Enhancement & Design Considerations of Satellite Power sub-System*, 2008, Diyana Adnan.
12. *Design of Direction Finding System Based on GPS*, 2008, Bilal Rabah.
13. *Analysis of Satellite-to-Aircraft Communication using Ray-Tracing modle*, 2008, Ali Mohammad Ali.
14. *Design & Implementation a Multi-Purpose Telemetry System Using Different Communication Scenarios*, 2008, Osama Abbas.
15. *Medical Electrical Measurements Utilizing the Dielectric Properties of Blood Samples*, 2008, Reem Jamal.
16. *Design & Implementation of Marks System for the College of Eng.*, 2008 Shmaa Walid.
17. *Parameter Estimation and Analysis of FHSS signals*, 2008, Wissam Subhi.
18. *Design & Performance Analysis of Line-of Sight (LOS) Radio Link*, 2009, Sarmed Safa.
19. *Design and Implementation of Telemetry Reading of Power*, 2009, Mustafa M. Rada.
20. *Bandwidth Enhancement of Rectangular Patch Antennas using Multi-slots*, 2009, Hatem Hatef.
21. *Design and Simulation of Enhanced Bandwidth of Rectangular Patch Antenna using Slot Technique*, 2009, Lara Khalid.
22. *Complex Discrete Wavelet Transform-Based Image Denoising*, 2009, Arshed Nadhom Mohammed Ali.
23. *Optical Flow Estimation using Framlet Transform*, 2010, Wissam Khassem.
24. *Design and Simulation of Multiband Microstrip Antenna for GPS and GSM Applications*, 2010, Haider A. Sabti.
25. *Design and Implementation of Data Extraction Unit for Consumed Electrical Power Account*, 2010, Mustafa H. Saleh.
26. *Coverage Enhancement of Cellular Network*, 2012, Zaid Shakir.
27. *Fractal Based RF Dual Mode Microstrip BPF Miniaturization*, 2012, Ahmed Abdulghani Mahdi.
28. *Design of Dedicated Remote Terminal Unit Prototype*, 2012, Wael Esam Matti.

29. Design and Simulation of Miniaturized RF Antenna for Wireless Sensing, 2013, Reem Amer.
30. *Resolution Enhancement of Direction of Arrival Estimation*, 2013, Mohammed Al-Hashimy.
31. *Investigation and Simulation of Mobile Phone Effects on Human Health*, 2013, Sahar Aqeel Abdulrazzaq.
32. Design and Simulation of UWB Monopole Disc Antenna, 2015, Samer Nezar Najj.
33. Design and Implementation of CubeSat Communication System, 2015, Ayman Naseer Mohi.
34. Design and Implementation of an Enhanced Bandwidth Ultra-Wide Band Printed Antenna Using Metamaterial structures, 2015, Mustafa Hazim Abbas.

### **Annex- 3:**

#### ***Ph.D. Thesis Supervised by Dr. Jabir S. Aziz:***

1. *Remote Sensing Techniques In The Camouflage Of Structures Using Digital Image Processing Methods*, March 1996, Abdul-Razzak T. Ziboon.
2. *A New Look To Study Soil Sludge And Water Resources In Iraq Using Microwave Remote Sensing*, Dec. 1999, Ali N. Helo.
3. *Design and Analysis of Antenna Miniaturization for Radio Frequency Identification (RFID) Using Fractal Technique*, Dec. 2012, Drgham K. Najj.
4. *Modeling and Simulation of Carbon Nanotube Antennas*, 2013, Moretadha J. Kadhom.
5. *Improved Multiple Antenna Configuration for Handset in LTE 4G MIMO Systems*, 2016, Ahmed A. Naser.