Wael Sh. Abd Alaziz
Curriculum Vitae

PERSONAL DETAILS

Birth	1982
Address	Iraq, Thi-Qar, Alsharta 64007
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PERSONAL PROFILE

Practical engineer has about 10 years of telecommunication (mobile and antenna) and electrical works experience belong to good companies. This experience rely on excellent theoretical information base which helped to give my academic studies an industrial perspective. At college I studied Electronic and Communication Engineering and excelled in the subject. My time there helped me to gain more confidence in my academic ability, with my teachers constantly challenging me to achieve more and set my goals high. I learnt the correct procedures to analyse problems, evaluate findings and develop solutions to determine the best course of action. After college I worked with many companies as a communication engineer, control engineer and admin. I really enjoyed my time at work and am happy to say that whilst there I learnt something new every day.

AREAS OF EXPERTISE

- Wireless Communication
- Energy Harvesting Optimization
- Channel Coding
- Digital Signal Processing
- Trellis Coding
- Non-Binary Codes
- Wired and Wireless MIMO
- Impulsive Noise
- Noise Reduction Techniques
- Machine Learning (ML)
- Deep Learning
- Convex Optimization
- OFDM and VOFDM
- BTS/BSC/IN
- Power Line Communication
- IT Functions
- Microwave/RF
- Channel Estimation
- Error Detection and Correction
- Antennas
- Scada/ Electrical Substation Control Unit
- Fire Alarm
- PC Rebuilds
- Network Analysis
- Programming

- Earthing/Lightening Protect
- Windows/Linux
- DB, Control Panels

EDUCATION

PhD. in Communication Engineering   2014-2018
Newcastle University, UK

PhD. degree in communication engineering at the (EEE) school of electrical and electronic engineering; the subjects of study is channels coding performance and analysis with thesis title "Investigation of Non-Binary Trellis Codes Designed for Impulsive Noise Environments" under supervision of Dr. Martin Johnston (`Martin.Johnston@newcastle.ac.uk`) and Dr. Stephane Le Go (`Stephane.Le-Go@newcastle.ac.uk`).

Intensive English Program   Jan-Nov 2013
University of South Carolina, USA

English Program for Internationals Institute (EPI): EPI's intensive English program provides an opportunity for international students to improve their English language skills before entering a university in the United States. It is also appropriate for individuals who need English skills for professional reasons. There are five class times each day with three classes held each day: writing/grammar, reading/vocabulary, and speaking/listening.

MSc. Masters in Communication Engineering   2009-2011
University of Maharishi Markandeshwar, India

M.Tech. degree in communication system engineering; the subjects of study involved analysis and design networks, Mobile communication, Radar and digital communication systems. The graduation project "Design and Development of Multi-Band Microstrip Fractal Antenna for Wireless Applications" with supervisor Dr. Kuldip Pahwa.

BSc. in Communication Engineering   2000-2004
University of Technology, Iraq

B.Sc. degree in communication engineering, Subjects involved electromagnetic, electrical network analysis, electrical power & Machines, electronic CCT, control engineering, satellite and optical communication, antenna and propagation, data analysis, communication and micro processing engineering.

WORK EXPERIENCE

Assistant Dean for Administrative Affairs   2022-present
University of Sumer, Full-time

Assistant Dean for Administrative Affairs and lecturer for the computer science and information technology college at university of Sumer.

Head of Computer Information Systems Department   2019-2022
University of Sumer, Full-time

Head of information system department and lecturer for the computer science and information technology college of university of Sumer.

Reviewer Since 2017

IEEE, IET, VTC, CSNDSP, ICICT, International Journal of Communication Systems, Hindawy, Newcastle University and University of Sumer

Registered reviewer with IEEE Transactions on Wireless Communications, IET Micro &Nano Letters,Vehicular Technology Conference, International Symposium on Communication Systems, Networks and Digital Signal Processing, International conference of Information and Communication Technology, Hindawi, ARC Conference which takes place at Newcastle University School of (EEE) and Sumer University Journal of Pure Science .

Lab. Demonstrator Feb-Apr 2017

Newcastle University, school of electrical and electronic engineering (EEE)/ UK., (Part-time)

Demonstrator on EEE1005: Signals and Communications Laboratory.

Electronics and Electrical Site Engineer 2011-2012

Snafee general contracting company/ (Iraq)., (Full-time)

Installing and configuring Schneider electrical network management and substation controlunit (SCADA). Also, installing and configuring Schneider Sepam (20,40 and 80).

Teacher 2008-2009

Iraqi Ministry of Education Thi-Qar General Directorate of Education., (Full-time)

Teacher of Electronics and computer science. In addition, responsible of electronics andcomputer labs.

Telecommunication Engineer 2006-2008

3G & CDMAx/ Furat Phone Co. / Iraq., (Full-time)

Installing BTS, BSC, IN and MSC hardware racks in the main site. Connecting, operating,Testing and maintaining feeders (coaxial cables) between BTS cards and antennas by using Master site device tester. Connecting and testing many communication links such as coaxial, fibre, UTP, STP and Cat 5. Programming wireless telephone devices (type Hawaii Co.).Electrical works such as wiring outdoor and indoor cables and installing rectifiers, surgearrestors (DC and AC), 3 phases UPS, chargers, batteries racks, lightening protection andearthen systems.

Admin & Finance 2005-2006

Agency for Cooperation and Technical Development (ACTED). (Iraq).,(Full-time)

Admin and finance of Nassriyah base.

IT SKILLS

- IE3D PC Program for Antennas Design.

- Simulate and design difierent electronics devices by using Electronics Work Benchand Circuit Maker programs.

- Designing programs by using Visual Basic, Python, and Matlab.

- Creating and managing data base by using SQL programming language.

- Using Microsoft Office professionally.

- Computer hardware and software maintenance with excellent knowledge in Windowsand Linux.

- Easergy MV electrical network management and substation control unit.

- Using LaTeX professionally.

PUBLOICATIONS

- 'Exact BER Performance Analysis of an Elementary Coding Techniques for NOMA System on AWGN Channel', W Abd Alaziz, B Abood, RM Muttasher, MA Fadhel and BA Jebur, RADIOENGINEERING 33.1 (2024): 45-53.

- 'A Low-Complexity Coding Scheme for NOMA', Wael Abd-Alaziz, Bilal A. Jebur, Harih Fakhrey, Zhen Mei and Khaled Rabie, IEEE Systems Journal, 2023.

- 'Performance Analysis of NB-Convolutional Coded OFDM on PLC Channel', W Abd-Alaziz and M. Johnston, Engineering Letters, P1242-1247, 2021 .

- 'Non-binary Trellis Codes on the Synthetic Statistical MIMO Power Line Channel', W Abd-Alaziz, M. Johnston, S Le Go , Power Line Communications and its Applications (ISPLC), 2018 IEEE, Pages 1-5.

- 'Non-binary Turbo-Coded OFDM-PLC System in the Presence of Impulsive Noise', W Abd-Alaziz, Z Mei, M Johnston, S Le Go , IEEE Signal Processing Conference (EUSIPCO), 2017 25th European, 2576-2580.

- 'Non-binary turbo codes on additive impulsive noise channels', Wael Abd-Alaziz, Martin Johnston, Stephane Le Go , Communication Systems, IEEE Networks and Digital Signal Processing (CSNDSP), 2016 10th International Symposium.

- 'Multi-band microstrip rectangular fractal antenna for wireless applications', W Shalan and K Pahwa, International Journal of Electronics Engineering 3 (1), 103-106.

LANGUAGES

- Arabic (mother tongue)
- English (fluent)

REFERENCES

Available upon request