

Academic Curriculum Vitae



Personal Information:

Full Name: Dr. Samah AbdulKareem Mustafa

Academic Title: Professor

Email: samah.mustafa@su.edu.krd



Education:

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|---|-----------------------------------|---------------|-----------|
| - Electrical department/
College of Engineering,
Mosul University | B. Sc degree
(My rank was 1st) | Mosul, Iraq | 1988-1992 |
| - Electrical department/
College of Engineering,
Mosul University | MSc degree | Mosul, Iraq | 1996-1998 |
| - Electrical department/
College of Engineering,
Baghdad University | PhD degree | Baghdad, Iraq | 2001-2004 |

Employment:

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|-----------------------------------|--|--------------|--------------|
| - Permanent Academic staff | College of Engineering,
Salahaddin University-Erbil | Erbil, Iraq | 1999-present |
| - Legal Main Contact & Instructor | Local Cisco Network Academy | Erbil, Iraq | 2006-2010 |
| - Assist. Manager & Instructor | Regional Cisco Network Academy | Erbil, Iraq | 2006-2009 |
| - Visitor Lecturer | Software Engineering Department/
Technical College | Kirkuk, Iraq | 2003-2004 |
| - Visitor Lecturer | Technical Institution | Kirkuk, Iraq | 1992-1996 |

Qualifications

- Visiting Faculty, 2009-2010
Electrical Eng. & Computer Science Department/
School of Engineering & Berkeley Wireless Research
Center, University of California, Berkeley, USA
- Postdoctoral study, 2012-2013
School of Information Technology & Electrical Engineering
The University of Queensland, QLD, Australia
- Academic Trainings, 2006
CATC/Cisco Networking Academy,
Lebanese American University, Lebanon.

Name of courses:

1. IT Essentials I: PC Hardware & Software.
 2. IT Essentials II: Network Operating Systems.
 - 3-6. Cisco Certified Network Associate CCNA1, CCNA2, CCNA3 & CCNA4.
- Intensive English Program (June –Aug. 2009), ELS Language Center, Berkeley, CA, USA

Teaching experience:

Undergraduate Teaching courses

- Analog and Digital Communications
- Propagation and Radiation
- Computer Architecture
- State Machine
- Mathematics
- Electronics
- Data Communication and Computer Networking
- Electronic & Communication Lab

Postgraduate Teaching Courses

- Spread Spectrum System
- Digital Communication
- Communication Electronic Circuits
- Computer Networking
- Wireless Communications

Supervise Postgraduate Students

- Master Science in Electronic and communication Engineering
- Doctoral Philosophy in Wireless Communication Engineering

Research and publications

- Mustafa, S. (2009): Simulation of a Multi-Carrier System in a Non-Linear Flat-Fading Channel, The Journal of Engineering Research TJER, vol.6, no.2, pp. 47-51
- Mustafa, S. and Hikmat, V. (2009): Performance Evaluation of DWMT Downlink Scheme over UTP-3 Cable, ELEKTRIKA, Universiti Teknologi Malaysia, vol.11, no.2, pp. 20-26.
- Mustafa, S. and Qadir, S. (2010): Performance Evaluation of Interpolation Techniques in MC-CDMA System, Journal of Duhok university, vol.5, no.4, pp. 34-42.
- Jan Rabaey et al, White paper http://www.tkn-berlin.de/fileadmin/fg112/Papers/papers_all/rabaey10connectivity_brokerage_enabling.pdf
- Mustafa, S. (2011): Fuzzy-based TCP Congestion Control Mechanism, Journal of Software Engineering, vol.6, no.1, pp 1-7.
- Mustafa, S. (2012): Multi Symbol Encapsulation and Discrete Cosine Transform in Multi access System, Research Journal of Information Technology, vol.4, no.4, pp. 212-219, 2012.
- Mustafa, S., et al. (2013): Novel Pre-Processing Techniques for Accurate Microwave Imaging of Human Brain. IEEE Antennas and wireless propagation letters, Vol.12, pp. 460 - 463.
- Mohammed, B., Mustafa, S., et al. (2013): Microwave System for Brain Imaging. IEEE Transaction on Instrumentation and Measurements, Vol. 63, no. 1, pp. 117-123, January 2014.
- Mustafa, S. Abbosh, A. (2014), Modeling Human Head Tissues Using Fourth-Order Debye Model in Three-Dimensional Finite-Difference Time-Domain, IEEE Transaction on Antenna and Propagation, Vol. 62, Issue 3, pp. 1354-1361, March 2014.
- Mohammed, B., Mustafa, S., et al. (2014): Investigation of noise effect on image quality in microwave head imaging systems, IET Microwaves, Antennas and Propagation, Vol. 9, Issue 3, pp. 200-205, Feb. 2015.
- Mustafa, S. (2015): Interference Estimation and Mitigation in Wireless Network, International Journal on Computing and Digital System, Vol.4, Issue 4, pp.233-243.
- Mustafa, S. (2016): Capture Aware Multiple Access Protocol in Wireless Network, The Journal of Engineering Research, Journal of Engineering Research, vol. 15, no. 1, 2018.
- Mustafa, S. (2018): Wavelet Matched Filters at Microwave Frequencies for Stroke Diagnosis, IEEE Transaction on Antenna and Propagation, Vol 66, Issue11, 2018.
- Qureshi A. Mustansar, Z. Mustafa S. 2018: Finite-element analysis of microwave scattering from a three-dimensional human head model for brain stroke detection, vol.5, No. 7, 2018.
- Mustafa S. 2019: Reliability of Trigonometric Transform-based Multi-Carrier Scheme, ARO-THE SCIENTIFIC JOURNAL OF KOYA UNIVERSITY, vol. 6, no. 2, 2018.
- Hasan, J., Mustafa, S. (2019): An Efficient Partner Selection Method to Overcome the Interference Effect in Wireless Networks, IEEE Access, Vol.7, 2019.
- Shaikhah S., Mustafa S. (2019): Nyquist Filter Design, IET Communications, vol.13, no.16, pp.2573-2579.
- Hasan J., Mustafa S. (2020): Capacity of Cooperative Spatial Modulation (CSM) System with Optimum Relay Selection, Wireless Communications and Mobile Computing, vol. 2020.
- Shaikhah S., Mustafa S. (2020): Robust Filter Bank Multicarrier System as a Candidate for 5G, Physical Communication, vol. 43.
- Hasan, J., Mustafa, S. (2023): Partner selection method in cooperative spatial modulation (CSM) system, Physical Communications, vol 57.
- Ismail, D., Mustafa, S. (2023): Diagnosis of a brain stroke using wideband microwave scattering, Royal Society Open Science, vol. 10,no.3,2023.

Conferences and courses attended

- Mustafa, S. (2009): Frequency Selective Fading Channel Equalization in ZP-OFDM Scheme, in Proc. International Conference on Communication, Computer and Power ICCCP '09, Sultanate of Oman, February, 2009, pp. 424-428.
- Mustafa, S. and Qadir, S. (2009): PERFORMANCE COMPARISON OF OFDMA AND MC-CDMA OVER WIRELESS CHANNEL, in Proc. 5th International Advanced Technologies Symposium IATS09, Turkey, May, 2009, pp. 393-396.
- Mustafa, S. et al. (2011), Wavelet Filter Bank-based nonuniform Multi-Tone Transceiver for Digital Subscriber Line, IEEE 11th International Conference on Computer and Information Technology CIT, Cyprus, August, 2011.
- Mustafa, S. (2012), Low Pass Interpolation in Multiple Access Systemes, IEEE International Multi Conferences on Signals, Systems and Devices, Germany, March, 2012.
- Mustafa, S., Abbosh, A. Henin, B. and Ireland, D. (2012): Brain Stroke Detection Using Continuous Wavelets Transform Matching Filters, CIBEC 2012 the 6th Cairo International Conference on Biomedical Engineering, Egypt, December, 2012.
- J. Marimuthu, A. Abbosh, S. Mustafa, B. Henin, and F. Algashaam (2013): Wideband Bandpass Filter with Wide Stopband for Microwave Imaging System Designed for Stroke Detection, International Conference on Electromagnetics in Advanced Applications ICEAA, Italy, September, 2013.
- A. T. Mobashsher, B. J. Mohammed, A. Abbosh, and S. Mustafa (2013): Detection and Differentiation of Brain Strokes by Comparing the Reflection Phases using Wideband Unidirectional Antenna International Conference on Electromagnetics in Advanced Applications ICEAA, Italy, September, 2013.
- P. T. Nguyen, S. Mustafa, and A. Abbosh (2013): Realistic Numerical Head Model with Tissues Modeled Using Fourth-Order Debye to Test Microwave Systems for Head Imaging, International Conference on Electromagnetics in Advanced Applications, ICEAA, Italy, September, 2013.
- J. Marimuthu, F. Algashaam, S. Mustafa, B. Henin, and A. Abbosh (2013): Wideband Bandpass Filter with Sharp Cutoff and Wide Stopband for Microwave Imaging System Designed for Heart Failure Detection, International Conference on Electromagnetics in Advanced Applications ICEAA, Italy, September, 2013.
- Tan, Y.-Q., Ahdi Rezaeieh, S. Abbosh, A., Antoniadis M.A. and Mustafa S. (2013), Optimum Frequency Range for the Detection of Heart Failure Considering Thickness Variations in Human Body Tissues, International Conference on Electromagnetics in Advanced Applications ICEAA, Italy, September, 2013.
- Ahdi Rezaeieh, S., Tan, Y.-Q., Abbosh, A., Antoniadis, M.A. and Mustafa, S. (2013), Dual-Band Dual-Polarized Antenna for Medical Applications, International Conference on Electromagnetics in Advanced Applications ICEAA, Italy, September, 2013.
- S. Mustafa, and A. Abbosh (2013): Genetic Algorithm to Formulate Fourth Order Debye Model of Main Head Tissues, Asia Pacific Microwave Conference, Korea, Nov. 2013.
- Ahmed Mobashsher, B. J. Mohammed, S. Mustafa and A. Abbosh, (2013): Ultra Wideband Antenna for Portable Brain Stroke Diagnostic System, 2013 IEEE MTT-S International Microwave Workshop Series on RF and Wireless Technologies for Biomedical and Healthcare Applications, Singapore, Dec 2013.

Additional contributions

- Arash Parasa et al. (2010), Connectivity Brokerage from Coexistence to Collaboration, Berkeley Wireless Research Center Winter Retreat,
http://bwrc.eecs.berkeley.edu/php/pubs/pubs.php/1184/poster_winter_retreat_2010.pdf
- S. Mustafa et al. (2010), Interference Mitigation in Connectivity Brokerage Framework, Berkeley Wireless Research Center Summer Retreat,
http://bwrc.eecs.berkeley.edu/php/pubs/pubs.php/1446/Samah_BWRC%20summer%20retreat%202010.pdf

Funding and academic awards

- IWFF Fellowship / University of California, Berkeley / 2009-2010
- Endeavour Research Fellowship / University of Queensland / 2012
- Schulmberge Fellowship / University of Queensland /2012-2013.
- Renewal Schulmberge Fellowship / University of Queensland /2014-2015.

Professional memberships

- Cisco Network Academy
- Association of Kurdistan Engineers
- FFTF Alumni Community

Professional Social Network Accounts:

- ORCID <https://orcid.org/0000-0002-3388-7096>
- Google scholar <https://scholar.google.com/citations?user=PrfVJ5MAAAAJ&hl=en>
- ResearchGate <https://www.researchgate.net/profile/Samah-Mustafa>
- LinkedIn <https://iq.linkedin.com/in/samah-mustafa-0493862a>