Wafaa Mohammed Ridah Shakir, Ph.D.

Contacts Al-Furat Al-Awsat Technical University, Computer **Information** Systems Department,

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Research Interests Optical Communications Signal Processing

Sensor Networks

Blind Source Separation Independent Component

Analysis Blind Equalization Space-Time Processing Technology for Education

Academic Positions	Assistance Professor	2018- Present
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Director of Scientific Affairs Unit

Al-Furat Al-Awsat Technical University/Iraq

Post-doctoral Fellow, 2017-2018

University of Queensland/ Australia

Head of Computer Systems Department,

Al-Furat Al-Awsat Technical University/Iraq 2015-2017

H. Herbert Humphrey Fellow,

Pennsylvania State University / USA 2014- 2015

Head of Electronic Department

Foundation of Technical Education/Iraq 2011- 2014

Lecturer 2012-2018

Foundation of Technical Education/ Iraq Technical Institution of Babylon / Department of Electronic, Iraq

Assistant Lecturer 2005- 2012

Foundation of Technical Education/ Iraq Technical Institution of Babylon / Department of Electronic, Iraq

Researcher 1998-2002

University of Technology, Baghdad, Iraq

Education	University of Technology, Baghdad, Iraq Doctor of Philosophy (Ph.D.) in Wireless Communication Engineering, awarded in July 2011 Dissertation: Multi-Mode Wireless Receiver Based On Independent Component Analysis Supervisor: Prof. Sattar B. Sadkhan, Chairman of IEEE Iraq Section University of Technology, Baghdad, Iraq Master of Science (M.Sc.) in Communication Engineering, awarded in October 2004 Thesis: Performance Study and Simulation of TCM and Distributed Space Time Coding Supervisor: Prof. Mahmoud, Waleed Ameen, IEEE Senior	2007- 2011
	Bachelor of Engineering (B. Eng.) in Electrical and Electronics Engineering, awarded in July 1998 University of Baghdad, Baghdad, Iraq	1994- 1998
Honors & Awards	Hubert H. Humphrey Fellowship Pennsylvania State University, University of California, Davis	2014-2015
	Honor degree in Master Program University of Technology, Baghdad, Iraq	2004
Relevant Trainings &Qualifications	World Bank Group Internship Washington, D.C., USA	2015
	Certificate in Learning and Teaching in Higher Education training, Foundation of Technical Education,	2014
	Education Leadership Program, University of Baghdad	2012
	Training Program for Teaching Assistants, Foundation of Technical Education	2004
Memberships of Professional Bodies	Institute of Electrical and Electronics Engineers (IEEE)	

Teaching	Analog and Digital Communications Visual & Audio Equipment Computers Applications (I &II) Maintenance of Electronic Equipment Maintenance of Electrical Equipment and Applications of Computers Microcomputers Design	1998-2002
	Optical Systems Design Electronic Circuits (I &II) Analogue and Digital Communications Computer Skills &Applications of Computers MATLAB and Applications of Computers	2003-2018
Administrative Duties	Director of Scientific Affairs Unit Al-Furat Al-Awsat Technical University/ Iraq	2018-Present
	Head of Computer Systems Department, Al-Furat Al-Awsat Technical University/ Iraq	2015-2017
	Head of Electronic Department/ Technical Institution of Babylon/ Foundation of Technical Education/ Iraq.	2011-2014
	Examinations Officer Foundation of Technical Education/ Iraq	2000-2014
	Member, Departmental Management Board, Departments of Electronic & Communication Engineering	2011-2014
	Member, Research Committee, Department of Electrical Engineering and Electronics	2011-2014

Publications

- Shakir, W. M. R. (2019). On performance analysis of hybrid FSO/RF systems. *Wireless Personal Communications*, Springer.
- Shakir, W. M. R. (2019). On performance analysis of hybrid FSO/RF systems. *IET Communications*, 13 (11), 1677-1684.
- Shakir, W. M. R. (2019). Errors Rate Analysis of the Hybrid FSO/RF Systems over Foggy-Weather Fading-Induced Channel. *IEEE 4th Scientific International Conference-Najaf* (4th-SICN-2019), Najaf, Iraq.
- Shakir, W. M. R. (2018). Performance evaluation of a selection combining scheme for the hybrid FSO/RF system. *IEEE Photonics Journal*, 10 (1), 1-10.
- Shakir, W. M. R. (2017). Performance evaluation of diversity combining scheme for the hybrid FSO/RF system. 2017 IEEE 2nd Information Technology, Networking, Electronic and Automation Control Conference (ITNEC), China, 984-989.

- Shakir, W. M. R. (2017). Performance Evaluation of Diversity Combining Scheme for the Hybrid FSO/RF System. 2017 21st Conference on Open Innovations Association (FRUCT 2017), Helsinki, Finland, 204-213.
- Shakir, W. M. R. (2017). Performance Analysis of FSO Modulation Schemes with Diversity Reception over Atmospheric Turbulence Channel. *Journal of Kerbala University*, 15(2), 104-113.
- Shakir, W. M. R. (2017). A Spatial Diversity for Free Space Optical over Atmospheric Turbulence Channel: A Performance Analysis. Journal of Babylon University, 1,(25).
- Shakir, W. M. R. (2016). Performance Analysis of Free Space Optical with Diversity Reception over Atmospheric Turbulence Channel. *Research & Reviews: Journal of Engineering and Technology*, 5(3), 83-89.
- Shakir, W. M. R. (2014). Blind estimation of cdma systems based on ica. *Journal of Babylon University, Pure and Applied Sciences,* 9 (22), 2255-2265
- Shakir, W. M. R. (2014). Blind detection method of mimo space time coded wireless systems based on ica. Engineering &Technical Journal, 32(4)-A, 842-854.
- Shakir, W. M. R. (2013). Blind interference cancellation for mimo wireless systems based on ica algorithm. *Scientific Journal of Kerbala University*, 11(3), 173-183.
- Shakir, W. M. R., Sadkhan, S., Akkar, H., (2013). The wlan/ wcdma blind multimode wireless receiving system. *Journal of Engineering & Technical*, 31(3), 386-399.
- Shakir, W. M. R. (2012). Blind channel estimation for MIMO wireless systems. Al- Taqani Journal, 25(5).
- Shakir, W. M. R., Sadkhan, S., Akkar, H., (2012). BPSK receiver based on independent component analysis. In *IEEE First International Conference on Future Communication Networks*, Baghdad, Iraq, 105 –110.
- Shakir, W. M. R., Sadkhan, S., Akkar, H., (2010). Blind receiver of ofdm system based on ica for single-input single-output systems. In *International Arab Conference On Information Technology (ACIT'2010)*, University of Garyounis, Benghazi, Libya.
- Shakir, W. M. R., Sadkhan, S., Akkar, H., (2009). Blind multiuser detection for ds-cdma downlink based on independent component analysis (ica). In *First Conference on Computer Techniques Applications*, Babylon University, Babylon, Iraq.

Review Studies

The World Bank Publishers (2015), Education in Federal States, Lessons from Selected Countries.

Professional activities

Elsevier Data in Brief Journal Scientific Reviewer (2018-present).

IEEE 4th Scientific International Conference-Najaf (4th-SICN-2019), Najaf, Iraq.

IEEE 3rd Australian Microwave Symposium, Brisbane, Australia, 6-7 February, 2018.

IEEE 2nd Information Technology, Networking, Electronic and Automation Control Conference (ITNEC), China, 2017.

IEEE 21st Conference on Open Innovations Association (FRUCT 2017), Helsinki, Finland, 2017 Scientific Reviewer Committee, Al-Sadiq International Conference on Multidisciplinary in IT, 2016.

Teaching and Learning Technology (TLT) Symposium, Penn State University, PA, USA, March, 2015

AMA's Comprehensive Project Management Workshop, N.Y., USA, 2015.

The Pennsylvania Educational Technology Expo and Conference (PETE&C), Hershey, PA, USA, February, 2015

3rd International Conference on e-Learning, e-education and e-Government Systems (ICEEES'15), January, 2015

Association for the Study of Higher Education (ASHE), Washington, D.C., USA, November, 2014 IEEE International Conference on Electrical, Communication, Computer, Power and Control Engineering (ICECCPCE), 2013

IEEE International Conference on Advanced Research in Engineering and Technology (ICARET), 2013.

Workshop for Developing the Curriculum of Technical Departments, Foundation of Technical Education, Iraq, 2013.

IEEE First International Conference on Future Communication Networks, Baghdad, Iraq, 2012 The First Conference on Computer Techniques Applications, Babylon University, Babylon, Iraq, 2009.

Workshop for Developing the Curriculum of Technical Departments, Ministry of Higher Education and Scientific Research, Baghdad, Iraq, 200