Personal information

Surname(s) / First name(s)	**Umrani, Abdul Waheed**
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Email(s)	waheed.umrani@faculty.muet.edu.pk
Nationality(-ies)	Pakistani
Date of birth	January XX, 19XX
Gender	Male
Research Interest	My research interests focus in the areas of Digital Communications (including optical) over Propagation Channels, Multiple Antenna Systems (MIMO) and their Channel Modeling, Cognitive Radios (Spectrum Sharing and Co-operative Diversity Systems), Social aspects of ICTs related to health and education.

Employment History

2015 – present	Professor at Department of Telecommunication, MUET, Jamshoro, PK
2013 – 2015	Professor at Communications Engineering, Dawood UET, Karachi, PK
2012 – 2013	Professor at Department of Telecommunication, MUET, Jamshoro, PK
2010 – 2012	Associate Professor at Department of Telecommunication, MUET, Jamshoro, PK
1996 – 2009	Lecturer at Department of Electronic and Telecommunication Engineering, MUET, Jamshoro, PK

Education

2008	Ph.D. in Communication Engineering - Nanyang Technological University, Singapore
2002	M.E. in Communication Engineering - Nanyang Technological University, Singapore
1995	B.E. in Electronics - MUET, Jamshoro, PK

Honors and Awards

2012	Erasmus-Mundus Post-doc Fellowship - Politecnico di Milano, IT
2002 - 2006	PhD Research Scholarship - Nanyang Technological University, SG
1999 - 2001	Master of Engineering Research Scholarship - Nanyang Technological University, SG
1995	Gold Medalist and Best Graduate Award - MUET, Jamshoro, PK
1995	First Class First Position - B.E. in Electronics, MUET, Jamshoro, PK

Areas of Expertise

–	Digital Communications
–	Channel Modeling
–	Cognitive Radios
–	Multiple Antenna Systems

Professional Training

2015	HEC-BC Leadership Training for Senior Administrators at Glasgow, UK - HEC-British Council
2010	Academic Training to enhance professional competency - Higher Education Commission, Pakistan
2007	Hannover Messe, Hannover, Germany - Participated as an official delegate from Academia in this mammoth fair sponsored by Engineering Development Board Pakistan
2004	FPGA for Wireless Communications - Xilinx, Singapore
2004	Firmware of WCDMA and HSPDA - Rohde and Schwartz
2004	Specialized Software: Advanced Design System (ADS) - Agilent, IE3D an Electromagnetic Simulator by ZELAND

2000	Hands on Training - Earth Station Installation of LEO Equatorial Satellite launched by Singapore

Professional Activities

20XX - 20XX	Acting Vice Chancellor - Dawood University of Engineering and Technology, Karachi
20XX - 20XX	Dean Faculty of Engineering - Dawood University of Engineering and Technology, Karachi
20XX - 20XX	Director CIRCLE - Dawood University of Engineering and Technology, Karachi
20XX - 20XX	Member Syndicate, Senate and Academic Council - Dawood University of Engineering and Technology, Karachi
2008 - 20XX	Acting Chairman - Department of Telecommunication, MUET, Jamshoro, PK
2010 - 2015	Member Senate and Academic Council - MUET, Jamshoro, PK

Memberships

20XX - 20XX	Life Member - Pakistan Engineering Council (Electro-4171)
2000 - present	Member IEEE Communication Society, USA
20XX - 20XX	Fellow IACSIT, Singapore (Member No. 8033389)
2012	Member COST2012: MCM8 Action IC0802 (Propagation tools and data for integrated Telecommunication, Navigation and Earth Observation systems) - DLR, Germany
2007 - present	Member National Curriculum Revision Committee, Higher Education Commission Pakistan - in the subjects of Electronic Engineering, Telecommunication Engineering and Computer System Engineering
2010 - 20XX	Vice President, IEEE Communication Society (Karachi Chapter)
2003	Member Organizing Committee IEEE ICICS-PCM 2003, Singapore
2008 - 2013	Member Technical Program Committee for IMTIC 2008, IMTIC 2012, and IMTIC 2013, MUET, Pakistan
2012	Session Chair in ICCSS'12, IMTIC 2008, IMTIC 2012
20XX - 20XX	Reviewer of the following journals: IEEE Communication Letters, Progress in Electromagnetic Research and IEEE Antennas and Wireless Propagation Letters

Additional information

Annexes

1	List of publications

Attachment 1: List of publications

Publications

[1] K. A. Memon, F. A. Umrani, A. W. Umrani, and N. A. Umrani, "Throughput of coded optical cdma systems with and detectors," *Journal of Optical Communications*, vol. 33, pp. 143–145, September 2012.

[2] S. A. Memon, A. W. Umrani, F. A. Umrani, and A. K. Baloch, "A peak to average power ratio reduction of multicarrier cdma system using error control selective mapping," in *Progress in Electromagnetic Research (PIER) Symposium Proceedings*, pp. 1193–1196, 2011.
http://piers.org/piers/.

[3] S. M. Z. S. Shah, A. W. Umrani, and A. A. Memon, "Pmepr reduction for ofcdm using slm and pts," in *19th IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pp. 308–311, December 2012.

[4] S. M. Z. S. Shah, A. W. Umrani, and A. A. Memon, "Performance comparison of ofdm, mc-cdma and ofcdm for 4g wireless broadband access and beyond," in *Progress in Electromagnetic Research (PIER) Symposium Proceedings*, pp. 1396–1399, 2011.
http://piers.org/piers/.

[5] A. W. Umrani, "Performance of sub-optimum decorrelating receiver for multi-user cdma communication systems over auto-regressive fading channels," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 25, no. 4, pp. 285–296, 2006.

[6] A. W. Umrani, "Ds cdma system performance over a leo satellite channel," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 22, no. 1, pp. 1–11, 2003.

[7] A. W. Umrani, A. K. Baloch, and F. A. Umrani, "Coherent bpsk receiver for multi-user cdma communication systems over auto-regressive fading channels: Performance comparisons," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 24, no. 2, pp. 183–188, 2005.

[8] A. W. Umrani and V. K. Dubey, "Corrections to "ber performance of a uniform circular array versus a uniform linear array in a mobile radio environment"," *IEEE Transactions on Wireless Communications*, vol. 5, pp. 732–732, April 2006.
A short one page.

[9] A. W. Umrani and V. K. Dubey, "Effect of angle of arrival on transmit diversity and beamforming systems under correlated fading," *Electronics Letters*, vol. 41, pp. 293–294, March 2005.

[10] A. W. Umrani and V. K. Dubey, "Effect of angle of arrival on transmit diversity and beamforming systems under correlated fading," in *IEEE/Sarnoff Symposium on Advances in Wired and Wireless Communication*, pp. 109–112, April 2005.

[11] A. W. Umrani and V. K. Dubey, "Ds cdma system performance for linear and circular antenna arrays in a cellular environment," in *IEEE 9th International Multitopic Conference (INMIC)*, pp. 1–5, December 2005.

[12] A. W. Umrani and V. K. Dubey, "Deterministic simulations of spatial fading correlation for mimo communication channels," in *7th International Multi Topic Conference (INMIC)*, pp. 78–83, December 2003.
Islamabad, Pakistan, 8-9 December 2003.

[13] A. W. Umrani and V. K. Dubey, "Uplink spatial fading correlation of mimo channel," in *IEEE 58th Vehicular Technology Conference (VTC)*, vol. 1, pp. 94–98, October 2003.

[14] A. W. Umrani and V. K. Dubey, "Performance of a 2d-rake receiver over spatially correlated, slow rayleigh fading channel," in *Proceedings of the 2003 Joint Conference of the 4th International Conference on Information, Communications and Signal Processing, and 4th Pacific Rim Conference on Multimedia (ICICS-PCM)*, vol. 1, pp. 396–400, December 2003.
Singapore, 15-18 December 2003.

[15] A. W. Umrani and V. K. Dubey, "Downlink performance of multi-beam multi-satellite cdma-based leo satellite system with power control," in *IEEE Globecom Global Telecommunications Conference*, vol. 2, pp. 1140–1144, 2000.

[16] A. W. Umrani and V. K. Dubey, "Role of paf in a multi-satellite cdma based leo satellite system," in *IEEE-VTS Fall VTC 52nd Vehicular Technology Conference*, vol. 4, pp. 1909–1913, 2000.

[17] A. W. Umrani, V. K. Dubey, and B. S. Chowdhry, "Dual diversity performance of ds cdma system performance over a leo satellite channel," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 23, no. 3, pp. 145–156, 2004.

[18] A. W. Umrani and Y. L. Guan, "Performance of direct sequence cdma for uniform linear and uniform circular antenna arrays in a cellular radio environment," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 29, no. 1, pp. 1–7, 2010.

[19] A. W. Umrani, Y. L. Guan, and F. A. Umrani, "Effect of steering error vector and angular power distributions on beamforming and transmit diversity systems in correlated fading channel," in *Progress in Electromagnetic Research (PIER)*, vol. 105, pp. 383–402, 2010.
http://piers.org/piers/.

[20] A. W. Umrani, F. A. Umrani, and A. A. Ursani, "A novel beamforming technique for cdma 2000 wireless communications: Performance analysis," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 30, no. 1, pp. 65–74, 2011.

[21] F. A. Umrani, B. S. Chowdhry, and A. W. Umrani, "Simulation design of doppler filter bank (dfb) for pulsed doppler radar to measure wind velocities," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 29, no. 1, pp. 91–98, 2010.

[22] F. A. Umrani, T. O'Farrell, and A. W. Umrani, "Performance analysis of pdc-ocdma system with apd mismatch," in *Wireless Networks, Information Processing and Systems* (D. Hussain, A. Rajput, B. Chowdhry, and Q. Gee, eds.), vol. 20 of *Communications in Computer and Information Science*, pp. 306–313, Springer Berlin Heidelberg, 2009.

[23] F. A. Umrani, A. A. Ursani, and A. W. Umrani, "Monte-carlo simulation for pdc-based optical cdma system," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 29, no. 4, pp. 673–680, 2010.

[24] A. A. Ursani, A. W. Umrani, and F. A. Umrani, "Unsupervised texture segmentation: Comparison of texture features," *Mehran University Research Journal of Engineering and Technology (MURJ)*, vol. 29, no. 4, pp. 653–660, 2010.