Mohammed F. A. Ahmed

Curriculum Vitae

Education

2006–2011 **Ph.D. in Electrical Engineering**, *University of Alberta*, Edmonton, Canada.
Dissertation: Collaborative Beamforming for Wireless Sensor Networks.

2001–2004 **M.Sc. in Electrical Engineering**, *Assiut University*, Assiut, Egypt.
Dissertation: Image Compression Using Vector Quantization.

1996–2001 **B.Sc. in Electrical Engineering**, *Assiut University*, Assiut, Egypt.
Honours: Very Good with honours and top of 2001 class.

Work experience

2012 – now **Lecturer**, *Assiut University*, Assiut, Egypt.

2006–2011 **Assistant Lecturer**, *Assiut University*, Assiut, Egypt.

2001–2006 **Demonstrator**, *Assiut University*, Assiut, Egypt.

Publications

Journal Publications

J1 G. Kaddoum, M. F. A. Ahmed, and Y. Nijsure,"Code Index Modulation: A High Data Rate and Energy Efficient Communication System," IEEE Comm. Letters (To appear).

J2 M. F. A. Ahmed, Tareq Y. Al-Naffouri, Mohamed-Slim Alouini, and George Turkiyyah,"The Effect of Correlated Observations on the Performance of Distributed Estimation," IEEE Trans. Signal Processing, vol. 61, no. 24, Dec. 2013.

J3 M. F. A. Ahmed and S. A. Vorobyov,"Sidelobe control in collaborative beamforming via node selection," IEEE Trans. Signal Processing, vol. 58, no. 12, Dec. 2010.

J4 M. F. A. Ahmed and S. A. Vorobyov, "Collaborative beamforming for wireless sensor networks with gaussian distributed sensor nodes," IEEE Trans. Wireless Commun., vol. 8, no. 2, pp. 638-643, Feb. 2009.

J5 M. F. Abdel-Latif (Ahmed), T. K. Abdelhamid, H. Selim, and M. M. Doss, "A new VQ index remapping process based on index usage activity for image compression", Journal of Engineering Sciences, JES, Assiut University, pp. 239-247, Jan. 2005.

Conference Publications

C1 Georges Kaddoum, Mohammed F. A. Ahmed, Tareq Y. Al-Naffouri, "Differential On-On Keying: A Robust Non-Coherent Digital Modulation Scheme," in Proc. IEEE International Conference on Information and Communication Technology Research 2015, ICTRC'15, Abu Dhabi, UAE, May 2015.

C2 Yacouba Coulibaly, Georges Kaddoum, and Mohammed F. A. Ahmed, "Mobile Virtual Network Operator Strategy for Migration towards 4G," in Proc. IEEE International Conference on Information and Communication Technology Research 2015, ICTRC'15, Abu Dhabi, UAE, May 2015.

C3   M. F. A. Ahmed, O. M. Haraz, G. Kaddoum, S. A. Alshebili, A. Sebak, "On Using Gaussian Excitation Amplitudes to Improve the Antenna Array Radiation Characteristics," in Proc. IEEE Asia-Pacific Conference on Applied Electromagnetics 2014, APACE'14, Johor Bahru, Malaysia, Dec. 2014, pp. 131–134.

C4   M. F. A. Ahmed, Tareq Y. Al-Naffouri, and Mohamed-Slim Alouini, "On the Effect of Correlated Measurements on the Performance of Distributed Estimation," in Proc. IEEE International Conference on Communications 2013, ICC'13, Budapest, Hungary, Jun. 2013, pp. 3333–3337.

C5   M. F. A. Ahmed and S. A. Vorobyov,"Power control for collaborative beamforming in wireless sensor networks," invited paper, in Proc. 45th Annual Asilomar Conf. Signals, Systems, and Computers, Pacific Grove, California, USA, Nov. 6-9, 2011, pp. 99-103.

C6   M. F. A. Ahmed and S. A. Vorobyov, "Node selection for sidelobe control in collaborative beamforming for wireless sensor networks," in Proc. IEEE 10th Workshop on Signal Processing Advances in Wireless Communications 2009, SPAWC '09, Perugia , Italy, June 2009, pp. 519–523.

C6   Y. M. Y. Hasan, M. F. A. Ahmed, T. K. Abdelhamid, "Image adaptive selective encryption of vector quantization index compression," in Proc. IEEE International Conference on Image Processing, ICIP '09, Cairo , Egypt, Nov. 2009, pp. 1277-1280.

C8   M. F. A. Ahmed and S. A. Vorobyov, "Performance characteristics of collaborative beamforming for wireless sensor networks with Gaussian distributed sensor nodes," in Proc. 33st IEEE Inter. Conf. on Acoustics, Speech, and Signal Processing, ICASSP'08, Las Vegas, Nevada, USA, Mar. 30 - Apr. 4, 2008, pp. 3249–3252.

C9   M. F. A. Ahmed and S. A. Vorobyov, "Beampattern random behavior in wireless sensor networks with Gaussian distributed sensor nodes," in Proc. Canadian Conference on Electrical and Computer Engineering, CCECE'08, Niagara Falls, ON, Canada, May. 4-7, 2008, pp. 257–260.

C10   M. F. Abdel-Latif (Ahmed), T. K. Abdelhamid, M. M. Doss, and H. Selim, "Utilizing repeated adjacencies of vector quantization indices in image compression" In Proceedings of the Fourth IEEE International Symposium on Signal Processing and Information Technology, ISSPIT'04, Rome, Italy, Dec. 2004, pp. 287-290.

C11   M. F. Abdel-Latif (Ahmed), T. K. Abdelhamid, M. M. Doss, and H. Selim, "Utilizing index usage maps for VQ index compression" In Proceedings of the Fourth IEEE International Symposium on Signal Processing and Information Technology, ISSPIT'04, Rome, Italy, Dec. 2004, pp. 291-295.

Professional Activities

Referee for:
- IEEE Transactions on Signal Processing,
- IEEE Transaction on Wireless Communications,
- IEEE Signal Processing Letters,
- IEEE Canadian Conference on Electrical and Computer Engineering,
- IEEE Vehicular Technology Conference.

Honors & Awards

Citations   h-index **5** and i10-index **3**.

2012   IEEE Wireless Communications Letters Exemplary Reviewer.

1996-2001   National Merit Scholarship, Egypt.

2001	Egyptian Syndicate of Engineers Award, Egypt.
2001	Mobinil Education excellence award, Egypt.
1997	Prof. Abu-Elwafa Megahed Award, Assiut University, Egypt.
2006-2010	Scholarship of the Egyptian Ministry of Higher Education, Egypt.

Internships & Training

2006	Leadership Training, Leaders Preparation Institute, Helwan, Egypt.
2004	Teacher Preparation Training, Assiut University, Assiut, Egypt.
2004	Effective Teaching, Assiut University, Assiut, Egypt.
2004	Teaching with Technology, Assiut University, Assiut, Egypt.
19999	Cairo Metro, Cairo, Egypt.

Technical Skills

Programming	C++/C .
Hardware	Koyo DL06 PLC , Xilinx Spartan FPGAs, Intel 8086 Microprocessor, and PIC Microcontrollers.
Operating Systems	MS-DOS, Microsoft Windows, Windows 2000 server, Mac OS X, and Linux variants.
Design & Simulation	Matlab.
Applications	MS Office, LATEX, HTML, PhotoShop, and other common packages for Windows.

Memberships

| 2008-Present | The Institute of Electrical and Electronics Engineer (IEEE), *S'08, M'11* |
| 2001-Present | Egyptian Syndicate of Engineers, *Member*. |