

Magdi Fikri

7 Mohamed Ghoneim Street, 4th Qtr., Heliopolis, Cairo, Egypt
Tel: Home (+202) 24174043, Office (+202)35678888, Mobile (+2010) 2955722
e-mail: magdi.fikri@gmail.com

CURRENT POSITION

Professor with the Electronics and Communications Dept., Faculty of Engineering, Cairo University, since 1988.

RESEARCH PROJECTS

- Participated in the FRCU project "Speech recognition of isolated Arabic words and its utilization to assist the handicapped", 1982.
- P.I. of the STC project "Computer-based process control of the DC casting machines and coke calciner at EGYPT ALUM".
- P.I. of several projects for upgrading and automation of industrial processes at the Aluminium Co. of Egypt and the Egyptian Iron and Steel Co.
- P.I. of the Academy of Science and Technology project "Preliminary Design of an Egyptian Satellite: Electronics, Electrical and Communication Systems".
- P.I. of Schlumberger -Cairo University research project "Multichannel Blind Deconvolution of Seismic Signals".
- P.I. Ministry of Defence project "Frequency Hopping VHF Transceiver".
- P.I. Ministry of Defence project "SDR-based Transceiver".
- P.I. of the ITAC project "Security System Based on Human Iris Recognition".

AREAS OF SPECIAL INTEREST

- Speech and image signal processing.
- Wireless Communication Systems.
- Signal Processing for Communications.
- Software Defined Radio
- Power Line Communications.
- Microprocessor applications in measurements and control.
- Digital communication systems.
- Computer applications in industry

PROFESSIONAL EXPERIENCE

- Development of computer-based process control for the coke calciner at the Aluminum Company of Egypt, 1991 -1993, and its upgrade in 2002.
- Development of microprocessor-based controller for the DC casting machine at the Aluminum Co. of Egypt, 1991 -1993.
- Development of PC-based monitoring and control system for 7 homogenizing furnaces at theAluminum Co. of Egypt, 1994 -96.
- Development of PLC control for the cylinders cutting saws at the Aluminum Co. of Egypt, 1995 -96.
- Development of control system for the coiling subsystem in the wire casting machine at the Aluminum Co. of Egypt, 1998 -2000.
- Member of Board of Directors, Engineering Office for Integrated Projects, 1988 -present
- Member of Board of Directors, SAKR Factory for Advanced Industries, 1996-1998

- Member of Board of Directors, Top Technology Company for Electronic and Electric Equipment, 1999 -2002.
- Member of Board of Directors, National Institute of Telecommunications, 2002 -2006
- Member of Board of Directors, Scientific Computing Centre, Cairo University, 2003 –2005
- Consultant & Member of Board of Directors, Faculty of Engineering, MIU, 2009 - present

SELECTED PUBLICATIONS:

- Mohamed Essam, M. Abd Elnaby, Magdi Fikriy and F. E. Abd El-Samie, “A Fast Accurate Algorithm for Iris Localization Using Coarse-to-Fine Approach”, JEC-ECC 2012, Alexandria, Egypt, March 6-9, 2012.
- Wael A. Murtada, Mohamed M. Zahra, Magdi Fikri, Mohamed I. Yousef and Salwa El-Ramly, “Design and Implementation of an Efficient Software Communications Architecture Core Framework for a Digital Signal Processors Platform” , American Journal of Engineering and Applied Sciences, Volume 4, Issue 3, Pages 429-434, November 29 2011, DOI: 10.3844/ajeassp.2011.429.434.
- M. Amin, M. Nafie, M. Mikri & M. Abdallah, "An Interference Mitigation Scheme for Multi-user Multi-cell MIMO Systems", 2010 International Computer Engineering Conference (ICENCO) , Cairo, Dec. 2010
- A. Maghawry, Magdi Fikri, “Space and Ground Segments Link Performance Verification for Small Satellite TT&C Transponders”, 24rd Annual AIAA/USU Conference on Small Satellites, Utah State University, Logan, Utah USA, Aug 2010.
- H. Mahmoud, M. Khairy and M. Fikri, “Concatenated Coding and Online SNR Estimation for FH-SS Systems in the Presence of Partial Band Interference”, Journal of Engineering & Applied Science, Vo. 54, No. 5, Oct. 2007, PP. 533-553.
- Hatem A. Darwish and M. Fikri, “Practical Considerations for Recursive DFT Implementation in Numerical Relays”, IEEE Transactions on Power Delivery, January 2007
- Hossam M. S., Sherif Abd El-Azim, Magdi Fikri, “New Prediction Technique For Lossless Compression of Multispectral Satellite Images”, ICGST International Conference on Graphics, Vision and Image Processing (GVIP-05) 19-21 December 2005
- Hossam M. S., Sherif Abd El-Azim, Magdi Fikri, “Lossless Compression of Multitemporal and Multispectral Satellite Images”, 1st International Computer Engineering Conference, ICENCO'2004
- Farouk, R.; Fikri, M.; Salama, A.E.; “The design of a wideband matching network for a short wire monopole using analog synthesis”, International Conference on Electrical, Electronic and Computer Engineering, 2004. ICEEC '04. 5-7 Sept. 2004 Page(s):567 – 570
- Abdel-Ghaffar, H.F.; Abdel-Magied, M.F.; Fikri, M.; Kamel, M.I.; “Performance analysis of fieldbus in process control systems”, Proceedings of the American Control Conference 2003 Volume 1, 4-6 June 2003 Page(s):591 - 596 vol.1
- Hefnawy, S. A. Mashali, M. Rashwan, M. Fikri, “Integrated automatic recognition system for different target motion analysis”” Proceedings of SPIE Vol. 4115, 31 July-3 August 2000
- Hefnawy, S. A. Mashali, M. Rashwan, M. Fikri , “Fast and efficient indexing approach for object recognition” , Proceedings of SPIE Vol. 3837, 20-21 September 1999

- Hefnawy, S. A. Mashali, M. Rashwan, M. Fikri , "Joint Time-Frequency Analysis for Automatic Recognition of Dynamic Targets", WSEAS International Multiconference on Circuits, Systems, Communications and Computers, Athens, Greece, July 4-9, 1999
- Khairy, M.; Fikri, M.; Badawi, A., "A new digital correlator for bandlimited direct sequence spread spectrum signals", IEEE Global Telecommunications Conference, GLOBECOM '95, 13-17 Nov. 1995 Page(s):1894 - 1898 vol.3
- Khairy, M.; Fikri, M.; Badawi, A., "A new technique for the correlation of bandlimited direct sequence spread spectrum signals", Sixth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, 1995. PIMRC'95. Volume 3, 27-29 Sept. 1995 Page(s):1272
- Fikri, M.; El-Sayed, M.A.H, "New algorithm for distance protection of high voltage transmission lines", IEE Proceedings-Generation, Transmission and Distribution, IEE Proceedings C Volume 135, Issue 5, Sept. 1988 Page(s):436 – 440
- El-Sayed, M.A.H., Fikri, M. "An accurate algorithm for high resistance earth-fault distance protection ", Electric Power Systems Research , Volume 11, Issue 2 , October 1986, Pages 95-101
- Elghonemy, M.; Fikri, M.; Hashish, M.; Talkhan, E, "Speaker independent isolated Arabic word recognition system", IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '86. Volume 11, Apr 1986 Page(s):697 – 700