

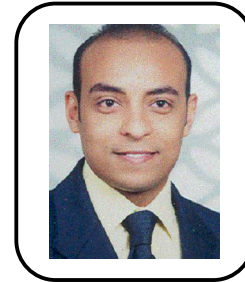
Name: Dr. Mohamed Abd-ElRahman M. Abdou

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## Biography

- **September 2006: Ph.D.** "*Biomedical Engineering: Modified Methods for Medical Image Processing, Telemedicine, and Archiving*", Electrical Engineering Department, Faculty of Engineering, Alexandria University.
- **November 2000: M.Sc.** "*Fuzzy Logic in Robotics: An Inverse Fuzzy Genetic Algorithm for Robot Manipulators*", Electrical Engineering Department, Faculty of Engineering, Alexandria University.
- **June 1996: B.Sc.** Electrical Engineering, Faculty of Engineering, Alexandria University. Grade: Very Good with honor (ranked sixth of the department)
- **1977-1991:** From K.G. till secondary stage at College Saint Marc. Certificate of Termination of Secondary Studies (ranked seventh over Alexandria City).

### ACADEMIC POSITIONS

- **Starting 2008,** Full- time assistant professor, Electrical Engineering Department, Faculty of Engineering, Pharos University in Alexandria (**PUA**) [www.pua.edu.eg](http://www.pua.edu.eg), Acting Head of Electrical Engineering Department.
  - **2006 - 2008,** Full time assistant professor, Knowledge Based Systems Department, Informatics Research Institute (IRI), Mubarak City for Sciences and Technology Applications (**MuCSAT**) ([www.mcsrta.sci.eg](http://www.mcsrta.sci.eg)).
  - **2006 - 2008,** Part- time assistant professor at Faculty of Engineering, **Pharos University in Alexandria.**
  - **1997 - 2006,** Part-time *teaching assistant*, the Basic Sciences Department, **Faculty of Engineering, Alexandria University.**
  - **1997- 2006,** Full time *research assistant*, Knowledge Based Systems Department, IRI, **MuCSAT.**
- 1998- 2002,** Part-time *teaching assistant*, The Department of Basic and Applied Sciences, **Arab Academy for Sciences and Technology (AAST).**

### ***COURSES TAUGHT***

- **Engineering Mathematics:**  
Calculus Ordinary and Partial Differential Equations  
  
Linear Algebra Probabilities and Random Variables  
  
Vector Analysis Transformations (Laplace, Fourier, and Z)  
  
Numerical Analysis
- **Electrical Engineering:**  
Digital Logic Fundamentals and Circuits Electric Circuits  
  
Digital Signal Processing Image Processing  
  
Signals and Systems Fuzzy Logic Control  
  
MATLAB toolboxes and applications Neural Networks

### ***DISTANCE LEARNING***

- Attended a wide number of workshops in distance learning strategies, methods, and administration at Senghor University in Alexandria.
- Certificate of an ***International Distance Learning Instructor***, "Certificat de Formation," Université Senghor & Agence Universitaire de La Francophonie, October 2009.
- **Fall 2009, Course Author**, Scientific Communications Methods and Concepts, Distance Learning, Bordeaux University in France & Alexandria University joint Master Program in Neurobiology, « Mastère a distance en Neurobiologie », <http://auf-foad.org/moodleNEUROBIO/>.

### ***FELLOWSHIPS***

- **August 2009**, selected the supervisor of a PUA undergraduate students group during the first PUA- KTH Student Exchange Program for one month at KTH (Royal Institute of Technology), in Sweden.
- **June 2009**, selected the highest ranked staff member in PUA questionnaire during the academic year 2008-2009.
- **July 2008**, Honored as member of the Jury Selection Board, by The Ministry of Communication and Information, for the 2<sup>nd</sup> Business Plan Competition, Technology Incubators Program.
- **Feb. 2008**, Honored Session Chair, "Computer Graphics and Image Processing Conference," Innsbruck, Austria.
- **2006- ...**, Reviewer of WSEAS Transactions.
- **Feb. 2007**, Selected among the 20<sup>th</sup> most active WSAES reviewers.
- **Unique Academic experience in supporting new established research centers or universities.**

Research Interests	<ul style="list-style-type: none"> <li>• Image Processing</li> <li>• Biomedical Engineering</li> <li>• Fuzzy Logic</li> <li>• Neural Network</li> <li>• Wireless Sensors</li> </ul>
Publications	<ul style="list-style-type: none"> <li>• B.Bayomy, W. Sheta, M. Abdou, "3D- Laser Scanned Image Registration: An Approach in Egyptian Cultural Heritage Environment," <b>under review</b>: Elsevier journal of Image and Vision Computing.</li> <li>• M. Abdou, "A Novel Fuzzy-Wavelet Based Approach for a Perfect Image Denoising Engine," <b>under review</b>: Elsevier journal of Image and Vision Computing.</li> <li>• <i>M. Abdou, A. Konsowa, M. Ossman</i>, "Fuzzy- based Simulation Model for Decolorization of Industrial Waste Water," Journal of Applied Sciences Research, 4 (2), pp. 178-187, 2008.</li> <li>• <i>M. Abdou</i>, "An Introduced Blocked-Wavelet Algorithm for Signal and Time Improvements of Images with Multiple Regions," CGIM 2008, 10<sup>th</sup> IASTED</li> <li>• International Conference on Computer Graphics and Imaging, Innsbruck, Austria, pp.34- 39, Feb. 2008.</li> <li>• <i>M. Abdou, M. Tayel</i>, "Automated Biomedical System for Image Segmentation and Transmission," The International Journal of Robotics and Automation, Vol. 23, Issue 1, 2008.</li> <li>• <i>M. Tayel, M. Abdou</i>, "A Neuro- Difference Fuzzy Technique for Automatic Segmentation in Medical Imaging," 23<sup>rd</sup> National Radio Science Conference (NRSC 2006), Egypt, March 2006.</li> <li>• <i>M. Tayel, M. Abdou</i>, "A Hybrid Segmentation and Compression Channel for Medical Images with Region of Interest," WSEAS Transactions on Signal Processing, Issue 2, Vol. 2, pp. 245- 252, 2006.</li> <li>• <i>M. Tayel, M. Abdou</i>, "A Hybrid Lossless Compression Technique with Segmentation and Modified Arithmetic Coding," ISPRA 2006, Madrid, Spain, Feb. 2006.</li> <li>• <i>M. Tayel, M. Abdou</i>, "Fast and Reduced-Bit Zerotree Coding Algorithm for Progressive Transmission of Medical Images", IASTED 2005, Novosibirsk, Russia, July 2005.</li> </ul> <p><i>M. Tayel, M. Abdou</i>, "Fuzzy Genetic Control and Optimization of Decentralized Robot Manipulators", 10<sup>th</sup> ICCTA August 2000, Alexandria, Egypt.</p>