

Ahmed Samir Fahmy, PhD

Personal Information

Nationality: Egyptian

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E-mail: fahmy AT eng.cu.edu.eg;

Education

- **Philosophy Doctorate (June 2006)**

Topic: *Integrated system for applying and imaging tissue deformations.*

Department of Electrical and Computer Engineering

Whiting School of Engineering - Johns Hopkins University

Baltimore, Maryland, USA

- **Master of Science (June 2003)**

Department of Electrical and Computer Engineering

Whiting School of Engineering-The Johns Hopkins University

Baltimore, Maryland, USA

- **Master of Science (June 2000)**

Topic: *Unconventional Reconstruction Techniques in Magnetic Resonance Imaging*

Department of Systems and Biomedical Engineering

Faculty of Engineering-Cairo University

Cairo, Egypt

- **Bachelor of Science (June 1997)**

Department of Systems and Biomedical Engineering

Faculty of Engineering-Cairo University

Cairo, Egypt

Research interests

- Image and Signal Processing
- Statistical and Stochastic Image and Signal Analysis
- Medical Imaging

Publications:

**(17) Peer reviewed
Journal articles**

1. Eman Magdy, Mohamed Ibrahim, Quan D Nguyen, **Ahmed S Fahmy**, "Computer-aided analysis of fluorescein angiograms using color leakage," IET Image Processing, *in press*, 2015.
2. Ahmed Al-agamy, Ayman Khalifa, **Ahmed S Fahmy**, "A Greedy Framework for Optical Flow Tracking of Myocardium Contours," IET Image Processing, vol. 8, no. 4, pp 207-212, 2014.
3. Avan Suinesiaputra, [...], **Ahmed S. Fahmy**, [...], Alistair A. Young, "A Collaborative Resource to Build Consensus for Automated Left Ventricular Segmentation of Cardiac MR Images Medical Image Analysis," Medical Image Analysis, vol 18(1), pp 50-62, 2014.
4. Ahmed Al-agamy, Nael F Osman, **Ahmed S Fahmy**, "Myocardium Segmentation in Strain-Encoded (SENC) Magnetic Resonance Images

- using Graph-Cuts,” IET Image Processing, vol. 7, no. 5, 2013.
5. Walid AbdelMoula, Mahmood Shah, **Ahmed S Fahmy**, ‘Segmentation of Choroidal Neovascularization in Fundus Fluorescein Angiograms,’ IEEE Trans. on Biomed. Eng., vol. 60, no. 5, pp. 1439-45, 2013.
 6. Ahmed Mahfouz, **Ahmed S Fahmy**, ‘Fast localization of the optic disc using projection of the image features’, IEEE Trans on Image Processing, vol. 19, no. 12, 2010.
 7. Mina E. Khalil, **Ahmed S. Fahmy**, Nael F. Osman, "Correction of Left Ventricle Strain Signals Estimated from Tagged MR Images", International Journal Future Generation Communication and Networking, vol 3(4), 2010.
 8. Ashraf Hamdan, Thomas Thouet, Sebastian Kelle, Ernst Wellnhofer, Ingo Paetsch, Rolf Gebker, Bernhard Schnackenburg, **Ahmed S. Fahmy**, Nael F. Osman, Axel Bornstedt, Eckart Fleck, “Strain-encoded MRI to evaluate normal left ventricular function and timing of contraction at 3.0 Tesla,” J MagnResonImag. 2009; 29(4):799-808
 9. **Ahmed S. Fahmy**, Nael F Osman, “Inherent Fat Cancellation in complementary Spatial Modulation of Magnetization”, MagnReson Med,” 2009; 61(1): 234-238.
 10. Ashraf Hamdan, Thomas Thouet, Kelle Sebastian, Ingo Paetsch, Rolf Gebker, Ernst Wellnhofer, Bernhard Schnackenburg, **Ahmed S. Fahmy**, Nael F. Osman, and Eckart Fleck, “Regional Right Ventricular Function and Timing of Contraction in Healthy Volunteers Evaluated by Strain-Encoded MRI,” J. MagResnImag. 2008; 28(6): 1379–85.
 11. Ibrahim ES, Stuber M, **Ahmed S Fahmy**, Abd-Elmoniem KZ, Sasano T, Abraham MR, Nael F Osman, “Real-time MR imaging of myocardial regional function using strain-encoding (SENC) with tissue through-plane motion tracking,” J MagnResonImag. 2007; **26**:1461-1470.
 12. **Ahmed S. Fahmy**, Li Pan, Nael F Osman “Artifact-free black-blood cine cardiac imaging in a single breath-hold,” MagnResonImag. 2006; 24(10): 1303-1310.
 13. Sayed M Shah, Tatlipinar S, Quinlan E, Sung JU, Tabandeh H, Nguyen QD, **Ahmed S. Fahmy**, Zimmer-Galler I, Symons RC, Cedarbaum JM, Peter A Campochiaro “Dynamic and quantitative analysis of choroidal neovascularization by fluorescein angiography,” Invest Ophthalmol Vis Sci. 2006;47(12):5460-5468.
 14. **Ahmed S. Fahmy**, Li Pan, Matthias Stuber, Nael F Osman “Correction of Through-Plane Deformation Artifacts in Stimulated Echo Mode Cardiac Imaging,” MagnReson Med 2006; 55:404-412.
 15. **Ahmed S. Fahmy**, Axel Krieger, Nael F Osman “An Integrated System for Real-time Detection of Stiff Masses with a Single Compression,” IEEE Trans. On Biomedical Engineering, vol 53, issue 7, July 2006.
 16. Yasser M. Kadah, **Ahmed S. Fahmy**, Refaat E Gabr, Keith Heberlein,

Xiaoping P Hu "Progressive Magnetic Resonance Image Reconstruction Based on Iterative Solution of a Sparse Linear System" *int. J. of Biomed. Imaging.*, Article 49378, 2006.

17. Yasser M. Kadah, Ayman A Abaza, **Ahmed S. Fahmy**, Abu-Bakr M Youssef, Keith Heberlein, Xiaoping P Hu "Floating Navigator Echo (FNAV) for in-plane 2D translational motion Estimation," *Magnetic Resonance in Medicine*, vol 51, issue 2, pp 403-407, Feb 2004.

Publications:

**(54) Peer reviewed
conference articles**

1. Mai Wael, **Ahmed S Fahmy**, "Classification of cardiac MRI type and orientation," *IEEE Int'l Conf. on Image Processing (ICIP)*, Paris, France, Oct 2014.
2. Safaa M ElDeeb, Ayman M Khalifa, **Ahmed S. Fahmy**, "Hybrid intensity-and phase-based optical flow tracking of tagged MRI," *IEEE Engineering in Medicine and Biology Conference (EMBC)*, Chicago, USA, Aug 2014.
3. Hossam El-Rewaify, Ayman Khalifa, **Ahmed S. Fahmy**, "Accurate estimation of the myocardium global function from reduced magnetic resonance image acquisitions," *IEEE Engineering in Medicine and Biology Conference (EMBC)*, Chicago, USA, Aug 2014.
4. **Ahmed S Fahmy**, Safaa M ElDeeb, Ayman M Khalifa, "HARP tracking using locally-uniform deformation assumption," *Proc. of 17th SCMR conference, Journal of Cardiovascular Magnetic Resonance* 16 (Suppl 1), P370, 2014.
5. Safaa ElDeeb, **Ahmed S Fahmy**, "Error analysis of fundus image registration using quadratic model transformation," *CIBEC*, Cairo, Egypt, Dec 2014.
6. Mahmoud Serag, Mai Wael, Inas Yassin, **Ahmed S Fahmy**, "Cardiac MRI View Classification using Autoencoder," *CIBEC*, Cairo, Egypt, Dec 2014.
7. Hossam El-Rewaify, Ayman Khalifa, **Ahmed S. Fahmy**, "Combining Long and Short Axis Myocardial Contours for Accurate Reconstruction of the Left Ventricular Surface," *IEEE Proc. of MECBME conference*, Qatar, 2014.
8. Aya M. Naguib, Ahmed M. Ghanem, Ahmed S. Fahmy, "Content based image retrieval of diabetic macular edema images," *IEEE Computer-Based Medical Systems (CBMS)*, 2013: 560-562.
9. Amro Ahmed, Mohamed Abouelhoda, Ayman M Khalifa, Ahmed S Fahmy, "Estimation of the myocardium rotation from standard cine MRI sequences," *IEEE Int'l Conf on Acoustics, Speech and Signal Processing (ICASSP)*, Canada, 2013.
10. Mostafa Hanout, Eman Magdy, Owhofasa O. Agbedia, Mohamed A. Ibrahim, Millena G. Bittencourt, Mohammad A. Sadiq, Daniel Ferraz, Ahmadreza Moradi, Ahmed S. Fahmy, Quan Dong Nguyen, "Correlation

- between Fluorescein Leakage Maps Generated by Automated Leakage Quantification of Fluorescein Angiogram and Retinal Thickness Maps Created by OCT in Eyes with Neovascular AMD,” Annual meeting Assoc. for Research in Vision and Ophthalmology (ARVO), Florida, USA, May 2013.
11. Owhofasa O. Agbedia, Eman Magdy, Mohamed A. Ibrahim, Yasir J. Sepah, Raafay Sophie, Mostafa Hanout, Millena G. Bittencourt, Diana V. Do, Ahmed S. Fahmy, Quan Dong Nguyen, “Reliability of Automated Leakage Quantification of Fluorescein Angiography in Eyes with Diabetic Macular Edema,” Annual meeting Assoc. for Research in Vision and Ophthalmology (ARVO), Florida, USA, May 2013.
 12. Ahmed Fathy, Ahmed S Fahmy, Mohamed ElHelw, Seif El-Dawlatly, “EEG Spectral Analysis for Attention State Assessment: Graphical Versus Classical Classification Technique,” IEEE Int’l Conf on Biomed Eng. and Sciences, Malaysia, 2012.
 13. Mohamed S ElBaz and Ahmed S Fahmy, “Active Shape Model with Inter-profile Modeling Paradigm for Cardiac Right Ventricle Segmentation,” MICCAI, Nice, France, October 2012.
 14. Eman Magdy, Owhofasa O Agbedia, Mohamed Ibrahim, Quan D Nguyen, Ahmed S Fahmy, “Quantitative assessment of diabetic macular edema using fluorescein leakage maps,” IEEE Int’l Conf. on Image Processing (ICIP), Florida, USA, October 2012..
 15. Safaa M. ElDeeb, Walid Abdelmoula, Syed M Shah, Ahmed S Fahmy, “Quantitative Assessment of Age-Related Macular Degeneration Using Parametric Modeling of the Leakage Transfer Function: Preliminary results,” IEEE Engineering in Medicine and Biology Conference (EMBC), San diego, USA, September 2012.
 16. EmanMarzaban, Ahmed S. Fahmy, “Comparison between Horn-Schunck and Lucas-Kanade methods for myocardium segmentation in short axis cardiac Cine MR images,” Computer Assisted Radiology and Surgery (CARS), Italy, 2012.
 17. Ayman Khalifa, Lamees Nasser, Ahmed S. Fahmy, “Motion tracking of the right ventricle from magnetic resonance tagged images,” Computer Assisted Radiology and Surgery (CARS), Italy, 2012.
 18. Mona Ragab, Ahmed S. Fahmy, “Evaluation of the cardiac function from tagged magnetic resonance images,” IASTED int’l Conf. Imaging and Signal Processing in Healthcare and Technology (ISPHT), Baltimore, USA, 2012.
 19. Owhofasa O. Agbedia, Mohamed Ibrahim, Yasir J. Sepah, MillenaBittencourt, Eman Magdy, Raafay Sophie, AnamAkhlaq, Hong T. Liu, Ahmed S. Fahmy, Quan D. Nguyen, “Quantitative Assessment of Diabetic Macular Edema using Digital Subtraction of Early and Late Acquisitions of Fluorescein Angiograms,” Annual meeting Assoc. for Research in Vision and Ophthalmology (ARVO), Florida, USA, 2012.
 20. Ahmed S Fahmy, Nael F Osman, Heba A Shalaby, “Maximum

- Likelihood Estimator for Signal Intensity and Frequency Shift of STEAM-based MR Imaging Techniques,” IEEE 7th Int. Conf. on Intelligent Computer Communication and Processing (ICCP), Romania, 2011.
21. Ahmed O. Al-Agamy, Ahmed S. Fahmy, “Segmentation of Strain-Encoded Magnetic Resonance Images Using Graph-Cuts,” IEEE 7th Int. Conf. on Intelligent Computer Communication and Processing (ICCP), Romania, 2011.
 22. Ahmed S Fahmy, Ahmed O. Al-Agamy, Ayman Khalifa, “Myocardial Segmentation Using Contour Constrained Optical Flow Tracking”, IntConf on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2011, Toronto, Canada. LNCS, Springer-Verlag, Berlin-Heidelberg; Vol. 7085, pages 120-128, 2012
 23. Jang won Heo, JeongHee Lee, Yasir J. Sepah, R Channa, Morgan Renner, Ahmed S. Fahmy, A Khwaja, Zubir Rentiya, Q D. Nguyen, D V. Do, “Evaluation of Fluorescein Angiograms in Eyes with Diabetic Macular Edema Treated with Ranibizumab over a 24-Month Period,” Association of Research in Vision and Ophthalmology (ARVO), abstract #5330, Fort Lauderdale, FL, May 2011.
 24. Ahmed Fahmy, Walid AbdelMoula, Ahmed Mahfouz, Syed Shah, “Segmentation of Choroidal Neovascularization lesions in Fluorescein angiograms using parametric modeling of intensity variation,” accepted for publication in IEEE-Int’l Symp. of Biomed. Imag., 2011, Chicago, USA.
 25. Maha El-Shahawy, Ahmed El-Antably, Nermin Fawzy, Khaled Samir, Mustafa Hunter, Ahmed Fahmy, “Segmentation of Diabetic Macular Edema in Fluorescein Angiograms,” accepted for publication in IEEE-Int’l Symp. of Biomed. Imag., 2011, Chicago, USA.
 26. M. ElSayeh, M. Haroon, B. Tawfik Ahmed S. Fahmy, "RFID-based indoors localization of tagless objects", CIBEC 2010 Conf. Proc., Cairo, Egypt.
 27. Ahmed ElAgamy, Nael F. Osman, Ahmed S. Fahmy, " Segmentation of ascending and descending aorta from magnetic resonance flow images", CIBEC 2010 Conf. Proc., Cairo, Egypt
 28. Mustafa El Attar, Nael F. Osman, Ahmed S. Fahmy, "Segmentation of left ventricle in cardiac MRI images using adaptive multi-seeded region growing", CIBEC 2010 Conf. Proc., Cairo, Egypt
 29. Mina E. Khalil, Ahmed S. Fahmy, Nael F. Osman, "Correction of Left Ventricle Strain Signals Estimated from Tagged MR Images", International Conference on Image and Signal Processing, ICISP'2010, Quebec, Canada.
 30. Mustafa El Attar, Nael F. Osman, Ahmed S. Fahmy, "Myocardial Segmentation Using Constrained Multi-Seeded Region Growing", Image Analysis and Recognition, Lecture Notes in Computer Science,

- vol 6112, pp 89-98, 2010.
31. Ahmed Mahfouz, Ahmed Fahmy, " ultrafast optic disc localization using dimensionality reduction of the search space" International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Sept 2009, London, UK
 32. Ahmed Mahfouz, Ahmed Fahmy, 'ultrafast optic disc localization using projection of image features' IEEE int'l conf on Image Processing (ICIP), Nov 2009, Cairo, Egypt.
 33. Ahmed S Fahmy, Axel Krieger, Michael A Jacobs, Nael Osman "A Compression Device for Detecting Breast Lesions using MRI" Proc. of International Conf. on modeling, simulation and applied optimization (ICMSAO) , Sharjah, January 2009.
 34. Abdalla G Motaal, Mostafa A AlAttar, Nael F Osman, Ahmed S Fahmy, "Cardiac MRI STEAM images denoising using Bayes' classifier," Proc. of Cairo International Biomedical Engineering Conference (CIBEC), Cairo, Egypt, December 2008.
 35. Mostafa A AlAttar, Abdalla G Motaal, Nael F Osman, Ahmed S Fahmy, "Performance evaluation of cardiac MRI image denoising techniques," Proc. of Cairo International Biomedical Engineering Conference (CIBEC), Cairo, Egypt, December 2008.
 36. Ashraf Hamdan, Thomas Thouet, Ahmed Fahmy, Nael F Osman, Eckart Fleck and Ingo Paetsch, "Regional right ventricular function and timing of contraction in healthy volunteers using strain-encoded MRI at 3 tesla," Journal of Cardiovascular Magnetic Resonance 2008, vol. 10 (Suppl 1):A251.
 37. Ahmed S Fahmy "Background Noise Removal in Cardiac Magnetic Resonance Images Using Bayes Classifier" IEEE Proc. International Conf. Engng in Medicine and Biology (EMBC), Vancouver, August 2008.
 38. Sherin M El-Metwali, Nael F Osman, Yasser M Kadah, Ahmed S. Fahmy "Two clustering techniques of myocardium using C-SENC images: A comparison with multi-stage clustering," IEEE Proc. International Conf. on Computer Engineering & Systems, November 2007.
 39. Li Pan, Ahmed S. Fahmy, Amy Spooner, Robert G. Weiss, Matthias Stuber, Nael Osman, "Detection of regional dysfunction in post-infarction patients using strain encoded (SENC) imaging at 3 Tesla," Proc. ISMRM 14th International Conf., Seattle, May 2006.
 40. Ahmed S. Fahmy, Li Pan, Nael Osman, "Acquisition of black-blood cine cardiac images at 3.0 Tesla," Proc. ISMRM 14th International Conference, Seattle, May 2006.
 41. Li Pan, Ahmed S. Fahmy, Robert G. Weiss, Amy Spooner, Matthias Stuber, Nael Osman, "Real-time imaging of regional function of the heart using fast-SENC at 3 Tesla" Proc. ISMRM 14th International

- Conference, Seattle, May 2006
42. Ahmed S. Fahmy, Li Pan, Nael Osman, "Real-time black-blood cine imaging of the heart at 3.0 Tesla," Proc. SCMR 9th International Conference, Miami, Jan 2006.
 43. Ahmed S. Fahmy, Li Pan, Matthias Stuber, Nael Osman, "Correcting Motion Artifacts in Stimulated Echo Mode (STEAM) Cardiac Imaging," Proc. ISMRM 13th International Conference, Miami, June 2005.
 44. Ahmed S. Fahmy, Nael Osman, "Optimized Fat Suppression Sequence for Cardiac Imaging using Stimulated Echo Mode (STEAM)," Proc. SCMR International Conference, San Francisco, 2005.
 45. Ahmed S. Fahmy, Li Pan, Matthias Stuber, Nael Osman, "Correcting Through-Plane Deformation Artifacts in Stimulated Echo Mode (STEAM) Cardiac Imaging," Proc. SCMR International Conference, San Francisco, 2005.
 46. Ahmed S. Fahmy, Nael Osman, "Quantification of Soft Tissue Deformations using Strain- Encoded Magnetic Resonance Imaging," Proc. SPIE International Conference on Medical Imaging, San Diego, 2004.
 47. Ahmed S. Fahmy, Nael Osman, "Strain Encoded (SENC) Imaging with Multi-tuning: A Fast technique for MR Elastography," Proc. ISMRM 11th International Conference, Toronto, July 2003.
 48. Ahmed S. Fahmy, Nael Osman, "Determining the Through Plane Resolution of Strain Encoded MRE," IEEE Proc. Int. Symp. Biomed. Imag., Washington D.C, July, 2002.
 49. Ahmed S. Fahmy, BasselTawfik, and Yasser M. Kadah, "Gridding Using Optimal Spatially variant Kernel," Proc. ISMRM 10th International Conference, Hawaii, May. 2002.
 50. Ahmed S. Fahmy, BasselTawfik, and Yasser M. Kadah, "Least Squares Resampling of Non-Uniformly Acquired K-space," Proc. SPIE International Conference on Medical Imaging, San Diego, 2002.
 51. Ahmed S. Fahmy, BasselTawfik, and Yasser M. Kadah, "Robust Estimation of Planar Rigid Body Motion in Magnetic Resonance Imaging," Proc. IEEE International Conference on Image Processing (ICIP), Vancouver, Sept. 2000.
 52. Ahmed S. Fahmy, BasselTawfik, and Yasser M. Kadah, "Performance evaluation of a host of linear associative memory techniques in MRI dynamic imaging reconstruction," Proc. International Conference Computer Aided Radiology and Surgery (CARS), San Francisco, June 2000.
 53. Ahmed S. Fahmy, BasselTawfik, and Yasser M. Kadah, "A Local-Field Extrapolation Algorithm for Improving the Spatial Resolution in Magnetic Resonance Dynamic Imaging," Proc. International Conference on Acoustics Speech and Signal Processing (ICASSP), Istanbul, June.

2000.

54. Ahmed S. Fahmy, BasselTawfik, and Yasser M. Kadah, "Dynamic Imaging Reconstruction Using Linear Associative Memories," Proc. SPIE International Conference on Medical Imaging, San Diego, 2000.

Workshops

- **Ahmed S Fahmy**, "RFID-based Hospital Localization Systems", Panel on RFID use in Hospitals. Global Mobility Roundtable (GMR) 2009, American University in Cairo, 1-3 Nov 2009, Cairo, Egypt.
- **Ahmed S Fahmy**, Ahmed O. Al-Agamy, Ayman Khalifa, "Myocardial Segmentation Using Contour Constrained Optical Flow Tracking," Statistical Atlases and Computational Models in the Hearts (STACOM) workshoP, Sep. 2011, Toronto, Canada.

Grants

- **PI: Ahmed S Fahmy**. Title: CVD Screening using mobile phones. Grand Challenges Canada, Canada, Oct 2014- March 2016.
- **PI: Ahmed S Fahmy**. Title: Detection of liver fibrosis using MRI. Misr ElKhair Organization, Egypt, in review.
- **PI: Ahmed S Fahmy**. Title: Cloud-based platform for advanced processing of Cardiac Images. ITIDA Agency-Ministry of communication and information tech, Egypt, May 2013-April 2015.
- **PI: Ahmed S Fahmy**. Title: Evaluation of Cardiac Regional Function from Magnetic Resonance Imaging. STDF Egypt-USA grant, September 2010-September 2012.
- **PI: Ahmed S Fahmy**. Title: SurgiLink: Surgical Guidance Via Mobile Phones. MicroSoft, USA, June 2010-June 2011.
- **PI: Ahmed S Fahmy**. Title: RFID-based hospital positioning system. ITIDA Agency-Ministry of communication and information tech, Egypt, September 2008-September 2010.
- **Co-PI: Ahmed S Fahmy**. Title: Developing and Validating a Tool for Monitoring the Heart of Patients with Iron Overloading. RDI Agency, EU- Egypt joint grant, 2008-2010.
- **Co-PI: Ahmed S Fahmy**. Title: Platform for Advanced Cardiac Image Processing. ITIDA Agency-Ministry of communication and information tech, Egypt, 2007-2009

Patents

- **Ahmed Fahmy**, et al. A compression device for enhancing normal/abnormal tissue contrast in MRI, US Patent #20100222667.
- **Ahmed Fahmy**. A method and system for the segmentation of digital medical images of the heart using directionally constrained optical flow. Provisional Egypt patent #599/2012.
- **Ahmed S. Fahmy**, et al. RFID-based tagless object localization using back-projection. Provisional Egypt patent #1476/2010.

Employment

- August 2012-present **Associate Professor**
Systems and Biomedical Eng dept., Cairo University-Cairo, Egypt
Center for Informatics Science, Nile University-Cairo, Egypt (Adjunct)
- August 2008-present **Founder and Director**
Medical Imaging and Image Processing (MIIP) Research Lab,
Center for Informatics Science, Nile University.
- August 2008-2012 **Assistant Professor**
Systems and Biomedical Eng dept., Cairo University-Cairo, Egypt
Center for Informatics Science, Nile University-Cairo, Egypt (Adjunct)
- Sept 2001-July 2006 **Research Assistant**
Electrical and Computer Engineering dept., Johns Hopkins University-
Baltimore, MD, USA

Teaching Courses

- Biostatistics
- Stochastic Processes
- Image Processing Level I and II
- Mathematical Methods in Computer Vision
- Stochastic Image Processing and Analysis
- Medical Imaging
- Computer Vision
- Digital Signal Processing

Professional memberships and Honors

- 2013-now: Senior IEEE member.
- 2013: State Award of Engineering Sciences, Egypt.
- 2012: Session Chair, Imaging and Signal Processing in Healthcare and Technology (ISPHT) Conference, Baltimore, USA.
- 2009: Recipient of Travel Grant Award, MICCAI, London, UK.
- 2009: International Scientific Publications Award-Cairo University.
- 2008: Executive Manager, Cairo International Biomedical Engineering Conference (CIBEC'08).
- 2006: Best Abstract Finalist in Int. Conf. SCMR
- Reviewer for a number of international scientific journals such as: IEEE Trans on Medical Imaging; IEEE Trans on Biomedical Engineering; Journal of Magnetic Resonance in Medicine
- 2007: Recipient of Educational Student Stipend, ISMRM, Berlin, GER.

- 2006: Recipient of Educational Student Stipend, ISMRM, Seattle, WN.
- 2005: Recipient of Educational Student Stipend, ISMRM, Miami, FL.
- 2001-2005: Research assistant fellowship (Electrical Engineering-The Johns Hopkins University)
- 1999-2001: Vice President of the Scientific Society for Systems and Biomedical Engineering, CairoUniversity
- 1998-2002 :member, IEEE-Signal Processing Society
- 2003, 2005, 2006 : member, ISMRM society
- 2005, 2006 : member, SCMR society

**Experience and
Projects**

- Three-year experience in MRI Pulse sequence development (using **GOAL-Philips** Medical Systems and **EPIC-GE** Medical Systems).
- MRI-compatible Breast Compressing Device
Electronic design and implementation; signal/image processing
- Professional Matlab and C++ Programmer
- Implementation of Upper Limb Prosthesis Controlled by Voice
Mechanical and electronic design and implementation; Speech signal processing and recognition