

SHORT BIOGRAPHY

Summary Biography (Please follow links above for details)

Dr. Yasser M. Kadah received his B.Sc. and M.Sc. degrees from the Biomedical Engineering Department at Cairo University in 1989 and 1992 respectively. He received his Ph.D. in Biomedical Engineering from the University of Minnesota in 1997. He worked as a research assistant with the Department of Radiology, University of Minnesota Medical School in 1996-1997 and as a post-doctoral fellow at the Center of Magnetic Resonance Research at the University of Minnesota in 1998. He became an Assistant Professor of Biomedical Engineering at Cairo University from 1998 to 2003. He also worked during the same period as the director of research and development at IBE technologies, Egypt. He also was a Research Associate with the Biomedical Imaging Technology Center at the Biomedical Engineering Department, Emory University and Georgia Institute of Technology, from December 2002 till July 2004. He is currently an Associate Professor of Biomedical Engineering at Cairo University. Among his outstanding achievements was leading the research and development team that developed the know-how technology and manufactured the first Egyptian and Arab ultrasound imaging system that was introduced to the market in 2000. He was the principal scientist in the development of its second generation in 2004 and is currently the principal investigator working on the third generation of this ultrasound system under two government grants awarded to Cairo University. Along his career, he received several awards and recognitions including the record for highest undergraduate GPA in the department of Biomedical Engineering at Cairo University, the Islamic Development Bank Merit Scholarship (1993-1996), his biography was selected to appear in Marquis Who's Who in the World in 2002, winning the E.K. Zavirosky stipend from the international society of magnetic resonance in imaging in 2002, awarded the 2005 National Encouragement Award from the

Academy of Scientific Research and Technology, Ministry of Higher Education and Research, Egypt, as well as the Award for Best Professor in Biomedical Engineering from the Cairo University Faculty Club in 2007. He was also selected to receive the 2008 Scientific Distinction Award from Cairo University. He is a Senior Member of the Institute of Electrical and Electronic Engineers (IEEE) since 2003. He is currently an active member of the International Society of Magnetic Resonance in Medicine (ISMRM), the International Society of Optical Engineering (SPIE), the American Institute of Ultrasound in Medicine (AIUM) and the Association for the Advancement of Medical Instrumentation (AAMI). His research interests include medical imaging and in particular MRI and ultrasound imaging, and multi-dimensional signal processing for biomedical applications.

ملخص السيرة الذاتية للأستاذ الدكتور ياسر مصطفى ابراهيم قدح

حصل على بكالوريوس الهندسة الحيوية الطبية من كلية الهندسة - جامعة القاهرة عام 1989 و ماجستير الهندسة الحيوية الطبية من كلية الهندسة - جامعة القاهرة في يناير 1992 ثم دكتوراه الفلسفة في الهندسة من قسم الهندسة الحيوية الطبية - جامعة مينيسوتا - الولايات المتحدة الأمريكية في يوليو عام 1997. كما نال دبلوم الدراسات الاسلامية من المعهد العالي للدراسات الاسلامية في مايو 2006. وقد عمل في العديد من الجامعات و الشركات العالمية. فقد عمل كاستشاري لمشروع جهاز الموجات فوق الصوتية الطبي لشركة يونيفرسال سونيكس - نيو جيرسي - الولايات المتحدة الأمريكية و العالمية للالكترونيات - القاهرة - مصر (مارس 1994 الى سبتمبر 1994) و عمل كأستاذ أبحاث زائر - قسم الهندسة الكهربائية و معمل الرؤية بالحاسب و معالجة الصور - جامعة لويفيل - كنتاكي - الولايات المتحدة الأمريكية (يوليو 1997 الى فبراير 1998) و كباحث بقسم الأشعة التشخيصية و مركز أبحاث الرنين المغناطيسي - جامعة مينيسوتا - الولايات المتحدة الأمريكية (فبراير 1998 الى يوليو 1998) ثم كاستشاري قسم البحوث و التطوير - القطاع الطبي - العالمية للالكترونيات - القاهرة - مصر (يوليو 1998

الى ديسمبر 2002) و أخيرا عمل كباحث زائر بمعمل تقنيات التصوير الطبي - قسم الهندسة الحيوية الطبية - جامعتي اموري ومعهد جورجيا للتكنولوجيا (جورجيا تيك) - أتلانتا - جورجيا - الولايات المتحدة الأمريكية (ديسمبر 2002 الى يوليو 2004). و يعمل الآن أستاذا بقسم الهندسة الحيوية الطبية والمنظومات - كلية الهندسة - جامعة القاهرة. و قد نال العديد من الجوائز المحلية و العالمية والتكريم أهمها : الحصول على جائزة جامعة القاهرة للتفوق العلمي في العلوم الهندسية لعام 2008 وجائزة الدولة التشجيعية في العلوم الهندسية في 2006 و الترقية لدرجة كبير أعضاء جمعية في 2003 و الحصول (IEEE) مهندسي الكهرباء والالكترونيات على جائزة اي كي زافيووسكي من الجمعية الدولية للرنين في 2002. وقد نشر أكثر من (ISMIRM) المغناطيسي في الطب 150 بحث في الدوريات العلمية و المؤتمرات الدولية المحكمة وبراءة اختراع أمريكية. و قد قام بالاشراف على 54 رسالة ماجستير و 12 رسائل دكتوراه تم منحها من قسم الهندسة الحيوية الطبية حتى عام 2010 و يشرف الآن على 10 رسائل دكتوراه و 10 رسائل ماجستير بكلية الهندسة جامعة القاهرة. و هو عضو عامل في الجمعية الدولية للرنين المغناطيسي في الطب منذ عام 1995 والجمعية الدولية لهندسة البصريات منذ عام 2001 و الجمعية الدولية لهندسة الأنسجة منذ 2006. كما خدم كرئيس اللجنة العلمية و مقرر مؤتمر القاهرة الدولي الثالث للهندسة الطبية 2006 وشارك في اللجنة الفنية في ست مؤتمرات دولية أخرى. و يتركز الانتاج العلمي له في مواضيع التصوير الطبي و معالجة الاشارات الحيوية الطبية و الأجهزة الطبية

PERSONAL INFORMATION

Full Name: Yasser Mostafa Ibrahim Kadah

Nationality: Egyptian

Work Address: Biomedical Engineering Department, Cairo University, Giza, Egypt

Phone: +20-23-570-3426 (office)

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Email: ymk (at) k-space.org

EDUCATION

B.Sc., Systems and Biomedical Engineering (July 1989)

Systems and Biomedical Engineering Department, Cairo University, Giza, Egypt

Graduation Project Title: Computer-Assisted Diagnosis in Ultrasound Imaging

Overall GPA: 3.98, Rank: 1st

M.Sc., Systems and Biomedical Engineering (January 1992)

Systems and Biomedical Engineering Department, Cairo University, Giza, Egypt

Thesis Title: Design of Linear Array Ultrasound Machine

Overall Grade Point Average (GPA): 3.5

Rank: 1st

Ph.D., Biomedical Engineering (July 1997)

University of Minnesota –Twin Cities, Minneapolis, Minnesota, U.S.A.

Thesis Title: Novel Reconstruction Techniques in Magnetic Resonance Imaging

Overall Grade Point Average (GPA): 3.92

Minor Field of Study: Electrical Engineering

Diploma, Islamic Studies (May 2006)

Higher Institute of Islamic Studies, Giza, Egypt

Overall Grade: Very Good

WORK HISTORY

- Professor of Biomedical Engineering, Faculty of Engineering, Cairo University, Giza, Egypt – March 2009: Present.

- Senior Research Scientist, Center for Informatics Sciences, Nile University, Egypt – August 2008: May 2009.
- Associate Professor of Biomedical Engineering, Faculty of Engineering, Cairo University, Giza, Egypt – December 2003: January 2009.
- Consultant, Development Research and Technology Planning Centre, Cairo University, Giza, Egypt – February 2008: February 2010.
- Consultant, Research and Development, International Biomedical Engineering Technologies (IBE Tech), Giza, Egypt – July 2004 : January 2008.
- Consultant, Center for Software and Advanced Biomedical Engineering Consultations, Cairo University, Giza, Egypt – March 2006: May 2008.
- Research Associate, Emory University / Georgia Institute of Technology Biomedical Engineering Department, Atlanta GA, U.S.A. – December 2002: July 2004.
- Assistant Professor of Biomedical Engineering, Faculty of Engineering, Cairo University, Giza, Egypt - September 1998:September 2003.
- Consultant, Research and Development, International Electronics – Biomedical Division, Cairo, Egypt – August 1998: Dec. 2002. (Started the R&D department that later developed and manufactured the first Egyptian diagnostic ultrasound system, which sold more than 1200 units in Egypt so far, among several other things)
- Post-Doc Associate, Center for Magnetic Resonance Research, Department of Radiology, University of Minnesota Medical School, Minneapolis, Minnesota – Feb. 1998:July 1998.
- Visiting Research Professor, Electrical Engineering Department, University of Louisville, June 1997:Feb. 1998.
- Research assistant, Department of Radiology, University of Minnesota Medical School, Minneapolis, Minnesota – Aug. 1996: June 1997.
- Research Assistant, Department of Engineering Math and Computer Science, University of Louisville, Jan. 1993-August 1993.
- Lecturer assistant, Systems and Biomedical Engineering Dept., Cairo University, Cairo, Egypt – 1989:1998 (on-leave of absence between 1993-1998 for Ph.D. study and post-doc training)
- Consultant, International Electronics-Cairo and Universal Sonics (Now DRS)-New Jersey for BIO-CALC package development on VLCUS-1000 ultrasound machine – Feb. 1994: Oct. 1995

- Senior Design Engineer, WISSAM Electronic Design and Manufacturing, Cairo, Egypt - May 1991:Jan. 1993.
- Junior Biomedical Engineer, summer internship in U.S. Naval Medical Research Unit 3 (NAMRU-3), Cairo, Egypt - 1988.

INDUSTRIAL PROJECTS

1. Development of a PC-based low-end ultrasound system. (consultant for International Electronics, Medical Division, 1998-2000)
2. Development of a line of embedded medical products including soft lasers and oxygen concentrator (consultant for IBE Technologies, 1999-2000)
3. Development of a PC-based multi-parameter patient monitor (consultant for International Electronics, Medical Division, 2000-2002)
4. Development of a PC-based ultrasonic bone densitometer (consultant for International Electronics, Medical Division, 2000-2002)
5. Development of a multiecho diffusion tensor imaging sequence (consultant for Siemens Medical Systems)
6. Development of a processing strategy to improve image reconstruction in ultrasound imaging (consultant for IBE Technologies, 2004-2006)
7. Assistance in implementation of ISO 13485 (consultant for IBE Technologies, 2004-2006)
8. Development of an image quality assurance procedure (consultant for IBE Technologies, 2004-2006)
9. Development of specifications and tender bid evaluation for MRI systems (consultant for CASBEC, Cairo University)
10. Development of digital beamformer for ultrasound imaging applications (Principal Investigator, Development Research and Technology Planning Centre, Cairo University,
11. Development of PC-based Doppler ultrasound imaging system (Principal Investigator, Development Research and Technology Planning Centre, Cairo University, February 2008- February 2010).
12. Development of a PC-Based High-End 4D Ultrasound Imaging System (Principal Investigator, Faculty of Engineering, Cairo University, January 2010- ongoing).

MAJOR RESEARCH GRANTS AWARDED

Project #1

Project Title: Design and development of a PC-based Doppler ultrasound imaging system

Value of Contract: EGP 700,000.00

Principal Investigator: Yasser M. Kadah

Affiliation: Development Research and Technological Planning Centre (DRTPC) – Cairo University

Starting Date: February 2008

Period: 2 Years

Awarding Authority: The R&D Project Programme (Joint program between Ministry of Scientific Research STDF and Ministry of Industry)

Beneficiary Industrial Entity: International Biomedical Engineering Technologies, Egypt

Intellectual Property Ownership: Owned by Ministry of Scientific Research STDF and licensed to beneficiary industrial entity

Project #2

Project Title: Design and development of a high-end beamformer for ultrasound imaging applications

Value of Contract: EGP 850,000.00

Principal Investigator: Yasser M. Kadah

Affiliation: Development Research and Technological Planning Centre (DRTPC) – Cairo University

Starting Date: February 2008

Period: 2 Years

Awarding Authority: Industrial Modernisation Centre (IMC) – The R&D Project Programme (Joint program between Ministry of Scientific Research STDF and Ministry of Industry)

Beneficiary Industrial Entity: International Biomedical Engineering Technologies, Egypt

Intellectual Property Ownership: Owned by Ministry of Scientific Research STDF and licensed to beneficiary industrial entity

Project #3

Project Title: Development of a PC-Based High-End 4D Ultrasound Imaging System

Value of Contract: EGP 2,700,000.00

Principal Investigator: Yasser M. Kadah

Affiliation: Cairo University

Starting Date: January 2010

Period: 2 Years (In Progress)

Awarding Authority: ITIDA (Ministry of Telecommunications)

Beneficiary Industrial Entity: International Biomedical Engineering Technologies, Egypt

Intellectual Property Ownership: Owned by industrial entity

TEACHING ACTIVITY

- Medical Equipment III/IV (BME seniors) (2010-2011)
- Advanced Topics in Systems Engineering (2010-2011)
- Ultrasound Bioinstrumentation (BME graduate students), 2009-2010.
- Advanced Topics in Biomedical Engineering (BME PhD Level), 2009-2011.
- Physics in Medicine and Biology (BME PhD Level), 2009-2011.
- Medical Equipment I/II (BME juniors), 2007-2011.

- Medical Electronics III/IV (BME seniors), 2007-2009.
- Multidimensional Signal Processing (BME Seniors), 2007-2008.
- Medical Equipment (BME seniors) (1998-2002, 2004-2006).
- Digital Signal Processing (BME graduate students) (2000-2002, 2004-2005, 2006-2008).
- Biomedical Image Processing (BME graduate students) (1998-2000).
- Advanced Topics in Biostatistics I (BME seniors) (2000-2001)
- Systems I: Matrix Computation (BME graduate students) (2001-2002).

✘ Graduation Projects (BME seniors):

- ✦ Cortical flattening (1998-1999)
- ✦ Inhomogeneity correction in MRI (1998-1999)
- ✦ Functional MRI physiological monitoring (1998-1999)
- ✦ Ultrasound bone densitometer design (1998-1999)
- ✦ Ultrasound analog front end design (1998-1999)
- ✦ EEG sleep analysis (1999-2000)
- ✦ PC-based pulse oximeter design (1999-2000)
- ✦ Mechanical sector ultrasound system design (1999-2000)
- ✦ Continuous-wave Doppler ultrasound system design (1999-2000)
- ✦ Tool sterilizer design (1999-2000)
- ✦ A-mode ultrasound system design (1999-2000)
- ✦ Software for psycho-physiological studies (1999-2000)
- ✦ Electro-surgical unit design (1999-2000)
- ✦ Deformable models and finite element analysis of human brain (1999-2000)
- ✦ Data coding for medical information transmission (2000-2001)
- ✦ PC-based Doppler signal processing (2000-2001)
- ✦ DSP-based Doppler signal processing (2001-2002)
- ✦ Beamformer design in ultrasound imaging (2001-2002)
- ✦ Embedded bile checker design (2001-2002)
- ✦ Embedded pulse oximeter design (2001-2002)
- ✦ Ultrasound imaging system (2004-2005)
- ✦ Brain-Computer Interface (BCI) (2004-2005, 2005-2006)
- ✦ FPGA-based Doppler processing (2005-2006)
- ✦ FPGA-based B-mode ultrasound imaging (2005-2006)
- ✦ Computer aided diagnosis for digital mammography (2005-2006)
- ✦ Bioinformatics data processing (2005-2006)
- ✦ Hearing Aid design (2006-2007)
- ✦ Infant incubator with monitoring (2006-2007)
- ✦ Electrosurgical unit design (2006-2007)
- ✦ Embedded brain-computer design (2006-2007)
- ✦ 4D ultrasound imaging (2008-2009)
- ✦ Digital ultrasound beamformer (2008-2009)
- ✦ Parallel computing toolbox in medical image reconstruction (I/II). (2010-11)
- ✦ Embedded digital A-mode ultrasound device. (2010-11)
- ✦ Embedded real-time DSP on FPGAs for medical devices.

(Total Number of Supervised Project Students : 193 students)

PAST GRADUATE STUDENTS

Ph.D. Students

1. Nahed H. Solouma (Ph.D. 2001): Now an Associate Professor at Cairo University.
2. Mohamed I. Owis (Ph.D. 2001): Now an Assistant Professor at Cairo University.

3. Bassem K. Ouda (Ph.D. 2002): Now an Assistant Professor at Cairo University.
4. Yasser Sherif (Ph.D. 2003): Now an Assistant Professor at Laser Institute, Cairo Univ.
5. Nour Shabrawy (Ph.D. 2007): Now Manager of consultations at CASBEC, Cairo University.
6. Shereen Elmetwally (Ph.D., 2008): Now an assistant professor at Cairo University
7. Mai Mabrook (Ph.D., 2008): Now an assistant professor at Misr University for Science and Technology.
8. Rania Aboulseoud (PhD., 2008): Now an assistant professor at Fayoum University.
9. Mohamed Alolfe (Ph.D., 2009): Now an assistant professor in Yemen.
10. Fadhl Alakwaa (Ph.D., 2009): Now an assistant professor in Yemen.
11. Wael Abdel-Rahman (Ph.D., 2009): Now an assistant professor in Benha Higher Institute of Technology.
12. Haitham Mohamed (Ph.D., 2010): Now an Application Specialist at Siemens Medical Systems.

M.Sc. Students

1. Ahmed S. Fahmy (M.Sc. 2000): Now an Assistant Professor at Cairo University.
2. Khaled Z. Abdel-Monem (M.Sc. 2000): Now a Post Doc at Johns Hopkins University.
3. Abdel-Monem Al-Sharkawy (M.Sc. 2001): Now a Post Doc at Johns Hopkins University.
4. Ahmed M. Ghanem (M.Sc. 2001): Now a Lecturer Assistant at Suez Canal University.
5. Ayman M. Khalifa (M.Sc. 2001): Now a Lecturer Assistant at Helwan University.
6. Ahmed H. Abou-Zeid (M.Sc. 2001): Now a Marketing manager, Chemilab Medical.
7. Nour S. Shabrawy (M.Sc. 2002): Now manager of Biomedical Consultations.
8. Ayman A. Abaza (M.Sc. 2002): Now a lecturer assistant, Cairo University.
9. Diaa Yosry (M.Sc. 2002): Now a Researcher at Electronics Research Institute.

10. Ahmed M. Nasr (M.Sc. 2002): Now Service Manager, Fatemia Medical.
11. Mohamed Mostafa (M.Sc. 2002): Now Product Specialist, Philips Medical Systems.
12. Momen Abou-Alwafa (M.Sc. 2002): Now a Product Specialist, Toshiba Middle East.
13. Mona Hamed (M.Sc. 2002): Now a Ph.D. student at Cairo University.
14. Tamer Youssef (M.Sc. 2003): Now a Lecturer Assistant at Cairo University.
15. Refaat E. Gabr (M.Sc. 2003): Now a Lecturer Assistant at Cairo University.
16. Zyad Farouk (M.Sc. 2003): Now a Senior Design Engineer at IBE Tech, Giza, Egypt.
17. Nader Metwalli (M.Sc. 2004): Now a graduate student at the Biomedical engineering department of Emory/Georgia Tech.
18. Haitham Mohamed (M.Sc. 2004): Now a Product Specialist with Siemens Medical Systems, Egypt.
19. Walid Atabany (M.Sc. 2004): Now an assistant lecturer at Helwan University.
20. Mai Mabrook (M.Sc. 2004): Now an assistant lecturer at Misr University for Science and Technology.
21. Ashraf Mahroos (M.Sc. 2005): Now a Product Specialist with Serona - Egypt.
22. Islam Abdel-Azeem (M.Sc. 2006): Now a Senior Engineer at the New Kasr Al-Aini Teaching hospital.
23. Mohamed Al-Olfe (M.Sc. 2006): Now a Biomedical Engineer in Yemen.
24. Asmaa Farahat (M.Sc. 2006): Now an assistant researcher at the Electronics Research Institute, Egypt.
25. Inas Yassine (M.Sc. 2006): Now an assistant lecturer at Cairo University.
26. Ahmed Ehab (M.Sc. 2006): Now a Ph.D. student at West Virginia University.
27. Vidan Ghoneim (M.Sc. 2006): Now a Lecturer Assistant at MUST.
28. Heba Afifi (M.Sc. 2006): Now a biomedical engineer in an Egyptian hospital.
29. Mawia Hassan (M.Sc. 2006): Now a biomedical engineer in Sudan.
30. Akram Amara (M.Sc. 2007): Now a biomedical engineer in Sudan.

31. Mohamed Omar (M.Sc. 2007): Now a Lecturer Assistant at MUST.
32. Omer Gaddoura (M.Sc. 2007): Now a Lecturer Assistant in Sudan.
33. Mohsen Gabr (M.Sc. 2007): Now a senior engineer at Fresenius, Egypt.
34. Ahmed Elnokrashy (M.Sc. 2007): Now a senior design engineer at IBE Tech, Egypt.
35. Daaa Al-Rahman Mahmoud (M.Sc. 2007): Now a senior engineer at Toshiba Egypt.
36. Haitham Alhathik (M.Sc. 2007): Now a field engineer at CASBEC, Cairo University
37. Nora Negm (M.Sc. 2007): Now a research assistant at Laser Institute, Cairo University.
38. Banzier Abraham (M.Sc. 2007): Now a biomedical engineer in Sudan.
39. Zeinab Mohammed (M.Sc. 2007): Now a biomedical engineer in Sudan.
40. Osama Hassan (M.Sc. 2007): Now a Lecturer Assistant in Sudan.
41. Tamer Naseif (M.Sc. 2007): Now a Lecturer Assistant at MUST.
42. Eman Khier (M.Sc. 2007)
43. Hamed Hussein (M.Sc. 2008): Now a senior service engineer at Toshiba, Egypt.
44. Shaimaa Saad (M.Sc. 2008): Now a PhD student at Cairo University
45. Michael Ghaly (M.Sc. 2008): Now a Lecturer Assistant at Cairo University.
46. Kawther Tom (M.Sc. 2008): Now a Lecturer Assistant in Sudan.
47. Mazen Abugroon (M.Sc. 2008): Now a Lecturer Assistant in Sudan.
48. Marwa Tawfik (M.Sc. 2008): Now a Lecturer Assistant at Cairo University.
49. Azza Sayed (M.Sc. 2008): Now a Lecturer Assistant at Helwan University.
50. Abeer Selim (M.Sc. 2009): Now a senior engineer at IBM.
51. Michael Habib (M.Sc. 2009): Now a Graduate Student in Australia
52. Enas Ismail (M.Sc. 2009): Now a Lecturer Assistant in Menia University
53. Kamel Taofek (M.Sc. 2010): Now a biomedical engineer at a local company.

54. Reeham Gabr (M.Sc. 2010): Now a senior biomedical engineer at Sheikh Zayed Hospital.

(Currently supervising 10 M.Sc. students and 10 Ph.D. students)

INTERNATIONAL CONFERENCE PRESENTATIONS

- SPIE Medical Imaging 2010, San Diego, U.S.A. (4 presentations).
- The 27th Annual National Radio Science Conference (NRSC'2010), Menouf, Egypt, 2010 (10 presentations).
- 2009 IEEE International Ultrasonics Symposium, Rome, Italy, 2009 (2 presentations).
- International Society of Magnetic Resonance in Medicine 17th Annual Scientific Meeting, Honolulu, U.S.A., 2009 (1 presentation).
- IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology, Nashville, U.S.A., 2009 (1 presentation).
- The 26th Annual National Radio Science Conference (NRSC'09), Cairo, Egypt, 2009 (8 presentations).
- The 4th Cairo International Biomedical Engineering Conference (CIBEC'08), Cairo Egypt, 2008 (10 presentations).
- The 25th Annual National Radio Science Conference (NRSC'08), Tanta, Egypt, 2008 (4 presentations).
- The 2007 International Conference on Computer Engineering & Systems (ICCES'07), Cairo, Egypt (3 presentations).
- IEEE Engineering in Medicine and Biology Conference (EMBC), 2007, Lyon, France (1 presentation)
- Cairo International Biomedical Engineering Conference 2006 (CIBEC'06), Cairo, Egypt (17 presentations).
- ISMRM 14th Scientific Meeting, Seattle, U.S.A., 2006 (1 presentation)
- National Radio Science Conference 2006, Menouf, Egypt (4 presentations).
- ISMRM 13th Scientific Meeting, Miami, U.S.A., May 2005 (1 presentation)
- SPIE Medical Imaging 2005, San Diego, U.S.A., February 2005 (1 presentation)

- 2nd Cairo International Biomedical Engineering Conference, Cairo, December 2004 (4 presentations)
- ISMRM 12th Scientific Meeting, Kyoto, Japan, May 2004 (4 presentations)
- ISMRM 11th Scientific Meeting, Toronto, Canada, July 2003 (3 presentations)
- SPIE Medical Imaging 2003, San Diego, U.S.A., February 2003 (8 presentations)
- ISMRM 10th Scientific Meeting, Honolulu, U.S.A., May 2002 (5 presentations)
- SPIE Medical Imaging 2002, San Diego, U.S.A., February 2002 (5 presentations)
- IEEE Engineering in Medicine and Biology Society Conference (EMBC-2001), Istanbul, Turkey, October 2001 (4 presentations)
- ISMRM 9th Scientific Meeting, Glasgow, Scotland, April 2001 (2 presentations)
- SPIE Medical Imaging 2001, San Diego, U.S.A., February 2001 (6 presentations)
- ISMRM 8th Scientific Meeting, Denver, U.S.A., April 2000.
- ISMRM 4th Scientific Meeting, New York, U.S.A., May 1996. (1 presentation)
- IEEE 1995 International Ultrasonics Symposium, Seattle, U.S.A., October 1995 (2 presentations)
- IEEE Engineering in Medicine and Biology Society Conference (EMBC-95), Montreal, Canada, September 1995 (2 presentations)
- Second IASTED International Conference on Computer Applications in Industry, Alexandria, Egypt, May 1992 (one presentation).
- Mediterranean & African Ultrasound Society Meeting, Cairo, Egypt, January 1990 (one presentation).

TRAINING COURSES/CERTIFICATIONS

- ✘ Radiographic equipment instrumentation and safety course, Wuestec Medical, Mobile, Alabama, U.S.A., 1998.
- ✘ Radiographic Society of North America (RSNA) 1998 Meeting, Chicago, U.S.A.
- ✘ Radiographic Society of North America (RSNA) 1999 Meeting, Chicago, U.S.A.
- ✘ ISMRM Workshop on MRI Hardware Design, Cleveland, Ohio, U.S.A., 2001.

- ✘ ISMRM 2-Day Educational Courses, Honolulu, Hawaii, U.S.A., 2002.
- ✘ MRI Sequence Programming Course, Siemens Medical, Cary, North Carolina, U.S.A., 2002.
- ✘ IRB Basic Certification A for handling human subjects in clinical investigation, Emory University, Atlanta, Georgia, U.S.A. 2003.
- ✘ Training course on Teaching to Large and Small Groups, Cairo University, 2006.
- ✘ Training course on Management of Scientific Research, Cairo University, 2006.
- ✘ Training course on Bioinformatics Principles and Applications, MUST University, 2006.
- ✘ Training course on Decision Making and Problem Solving Skills, Cairo University, 2007.
- ✘ Training course on Time and Work Stress Management, Cairo University, 2007.
- ✘ Training course on Using Technology in Teaching, Cairo University, 2007.
- ✘ Training course on Development of Management Skills, Cairo University, 2007.

HONORS AND PROFESSIONAL AFFILIATIONS

- Lead Guest Editor, International Journal of Biomedical Imaging Special Issue on Parallel Processing in Medical Imaging Applications, to appear in October 2011.
- Associate Editor, Journal of Medical Imaging and Health Informatics (American Scientific Publishers) (since August 2010).
- Included in all 3 official lists for all-time Top 50 Cairo University Authors based on number of publications, number of citations, and h-index (lists of May 2010).
- Certificate of excellence in scientific research supervision for best Masters degree thesis in the faculty of engineering, July 2010.
- First Middle East Conference on Biomedical Engineering (MECBME) Scientific Program Co-Chair, Planned for February 2011.
- Medical Imaging Track Chair, IEEE International Conference on Image processing (ICIP), 2009.
- Professor of the Year, Elected by Biomedical Engineering Department graduating classes of 2005, 2006, 2008, and 2009.
- Awarded the Cairo University Prize for Scientific Excellence, 2008.

- Selected to receive the 2007 Best Professor in Biomedical Engineering award from Cairo University faculty Club, 2007.
- Awarded the 2005 State Encouragement Award for Engineering Sciences from the Academy of Scientific Research and Technology, 2006.
- Scientific Program Chair, Third Cairo International Biomedical Engineering Conference, December 2006.
- Elected Senior Member, Institute of Electrical and Electronic Engineers (IEEE), 2003.
- Awarded a Research Achievement Award from Cairo University, 2003.
- Awarded the E.K. Zavirosky award from the International Society for Magnetic Resonance in Medicine (ISMRM) to cover full expenses to attend the ISMRM 10th Scientific Meeting in Honolulu, 2002.
- Biography selected and included in *Marquis Who's Who in the World*, 2002.
- Member of the team that developed and manufactured the first Egyptian ultrasound imaging system (1998-2002)
- Awarded the international IDB Merit Scholarship for distinguished scientists from the Islamic Development Bank, Jeddah, Saudi Arabia (1993-1996).
- Awarded student travel stipend from IEEE Ultrasonics, Ferroelectrics and Frequency Control (UFFC) society to attend 1995 IEEE International Ultrasonics Symposium, Seattle, Washington.
- Awarded student travel stipend from the International Society of Magnetic Resonance in Medicine (ISMRM) to attend the annual meetings of the society of 1996 and 1997.
- Reviewer for the following international publications:
 - Magnetic Resonance in Medicine
 - IEEE Transactions on Medical Imaging
 - IEEE Transactions on Biomedical Engineering
 - IEEE Transactions on Circuits and Systems II
 - Medical and Biological Engineering and Computing
 - Journal of Zhejiang University Science
 - Pattern Analysis and Applications Journal

- BioSystems
- Computer Vision and Image Understanding
- Journal of Engineering and Applied Sciences
- Journal of Mathematical Imaging and Vision

(reviewed more than 60 papers for these journals since 1997).

- Reviewer for the following international conferences:
 - IEEE International Conference on Image Processing (ICIP), 2010, Hong Kong, China.
 - IEEE Engineering in Medicine and Biology Conference (EMBC), 2010, Buenos Aires, Argentina.
 - International Society of Magnetic Resonance in Medicine (ISMRM) Annual 15th Scientific Meeting, Stockholm, Sweden, 2010.
 - IEEE International Conference on Image Processing (ICIP), 2009, Cairo, Egypt.
 - IEEE Engineering in Medicine and Biology Conference (EMBC), 2009, Minneapolis, U.S.A.
 - International Society of Magnetic Resonance in Medicine (ISMRM) Annual 14th Scientific Meeting, Honolulu, U.S.A., 2009.
 - The 4th Cairo International Biomedical Engineering Conference, Cairo, Egypt, 2008.
 - IEEE Engineering in Medicine and Biology Conference (EMBC), 2008, Vancouver, Canada.
 - The 2008 International Conference on Computer Engineering & Systems (ICCES'08), Cairo, Egypt.
 - The 2007 International Conference on Computer Engineering & Systems (ICCES'07), Cairo, Egypt.
 - IEEE Engineering in Medicine and Biology Conference (EMBC), 2007, Lyon, France, 2007.
 - International Society of Magnetic Resonance in Medicine (ISMRM) Annual 14th Scientific Meeting, Seattle, U.S.A., 2006.
 - International Society of Magnetic Resonance in Medicine (ISMRM) Annual 13th Scientific Meeting, Miami, 2005.

- The 2nd Biannual Cairo International Biomedical Engineering Conference, Cairo, 2004.
- IEEE Midwest Symposium on Circuits and Systems, Cairo, 2003.
- Member of the International Society of Magnetic Resonance in Medicine (ISMRM) (1997-present).
- Member of the International Society for Optical Engineering (SPIE) (2001-present)
- Member of the Institute of Electrical and Electronic Engineers (IEEE) (2001-2003, became a Senior Member since 2003)
- Member of the Tissue Engineering and Regenerative Medicine International Society (TERMIS) (2007-present).
- Member of the University of Minnesota Alumni Association (2009-present).
- Member of the Egyptian Syndicate of Engineers (1989-present).
- Top of 1989 graduation class at the Systems and Biomedical Engineering Department, Cairo University, Egypt.
- Ranked 6th on Mathematics Section of the General Secondary Education Exam (out of a total of more than 250,000 students taking the same exam), 1984.

