Name: Rabie A. Ramadan

Age: 44

Phone: (+966 561655010)

E-mail: <u>rabie@rabieramdan.org</u>

Web: http://www.rabieramdan.org

Current Positions:

- **Associate Prof.** (Senior Lecturer) at Computer Engineering Department, Faculty of Engineering, Cairo University.
- Associate Prof. (Senior Lecturer) at Computer Science and Engineering College, Hail University, Hail Saudi Arabia.
- **Head of IoT** research group, Computer Engineering Department, Cairo University, Egypt.
- Head and founder of Applied Sensing Technology Research Laboratory (ApplS-LAB), Computer Engineering Department, Cairo University, Egypt.
- Head of Smart Environments and Computational Intelligence Research Group, College of Computer Science and Engineering, Hail University, Saudi Arabia.
- **Director of industrial partnership program**, College of Computer Science and Engineering, Hail University, Saudi Arabia.
- Software Manager and Head of the Artificial Intelligence research group at HighTec communication research Center, Cairo University, Egypt.

Professional Experience:

- 2014- present: Associate professor (Senior Lecturer), Computer Engineering Department, Cairo University, Egypt.
- 2014-present: Associate professor (Senior Lecturer), College of Computer Science and Engineering, Hail University, Saudi Arabia.
- July 2009- May 2014: Assistance Professor (Lecturer), Computer Engineering Department, Cairo University, Egypt.
- July 2008 May 2011: Assistance Professor (Lecturer), Media and Information Technology Department, German University in Cairo (GUC).
- October 2007- July 2009: Assistance Professor (Lecturer), Systems and Computer Department, Alazhar University, Egypt.
- May 2005- October 2007: Developer and Research Engineer at Banc.
 Of America Securities, Frisco, Dallas, TX, USA.
- January 2003- October 2007: Research Assistance, Computer Science and Engineering, Southern Methodist University, USA.
- May 1994- January 2003: Research Associate, Systems and Computers Department, Alazahr University, Egypt.

Education:

- May 2007: Ph.D. in Computer Science and Engineering, Southern Methodist University, Dallas, TX, USA.
- May 2005: Masters in Computer Science and Engineering, Southern Methodist University, Dallas, TX, USA.
- May 1998: Masters in Computer Engineering, Cairo University, Egypt.

June 1994: B.SC. in Systems and Computer Engineering , Alazhar University, Egypt.

Prizes and Awards:

- Awarded the *Certificate of Excellence* by the college of Computer Science and Engineering for chairing and organizing the first International conference at the University of Hail, KSA.
- Awarded by the IEEE Computational Intelligence Society (CIS) the 2011 IEEE CIS Outstanding Chapter Award for the IEEE CIS Egypt Chapter which I was the cofounder of the chapter and co-chaired in 2008-2010.
- Co-led the First place team in the RoboCup 2010 which is an International Intelligent Robotics Competition, (Festo Logistics League), Singapore, June 2010.
- Co-led the Second place team in the RoboCup 2009 which is an International Intelligent Robotics Competition, (Festo Hockey League), Graz, Austria, June 2009.
- Southern Methodist University Graduate Studies & Research Award as the best researcher of the year (2006), Southern Methodist University, USA.
- Southern Methodist University CSE IAB and Turner Construction company Award for the best project (2005), USA.
- Southern Methodist University, School of Engineering
 Outstanding Student Award, (2006), USA.

Research Statement:

My research work focuses mainly in two fields which are: Internet of Things (IoT) and Computational Intelligence.

Most of my research in the field of IoT includes: Mobile Computing, Wireless Sensor Networks (WSNs), and Network Energy Consumption.

My work in the field of Computational Intelligence includes: Ambient Intelligence, Smart Environment, Intelligent Environments Fuzzy Logic, Genetic Algorithms, Swarm Intelligence, Neural Networks, and Computational Intelligence Applications.

I have published over 90 papers including top ranked journals and conferences in the field of IoT, Wireless Sensor Networks, Ambient Intelligence, Smart Environments, Secure Networks, Networks Energy Consumption, Embedded Systems, Robotics and different applications of Computational Intelligence.

I consistently was able to secure external and internal funds in sustainable manner for my research as Principle Investigator (PI) and Co-Investigator (Co-PI) from different Funding agencies, Universities, and Industry with a total amount of (\$18,742,859). These agencies include: Framework Programme 7 (EU) (FP7), ITEA 3, Intel company, Vodafone telecommunication Company, Egypt National Telecom Regularity Authority, Egypt Information and Communication Technology Outsourcing (ITIDA), Nahdet El Mahrousa, Hail University, Modern University for Technology and Information (MTI), and German University in Cairo (GUC).

For knowledge transfer, I constantly sustain and excellent relationship with industry for realistic problem solving approaches as well as teaching up to date knowledge based on practical experience. For instance, I have excellent relationship with Vodafone, Smartec Company, Microsoft, CISCO, and Intel. In addition, I was able to cooperate with CERN, the largest physics organization in the world building a grid node at Egyptian Universities. Moreover, I am the software Manager and head of Artificial Intelligence research group at HighTec for communication research Center, Cairo University.

I served different roles in many of the journals and conference including IEEE World Congress on Computational Intelligence (IEEE WCCI), (Canada, 2016), 7th International Conference on Ambient Systems, Networks and Technologies, ANT, (Madrid, Spain, 2016), 8th International Conference on Computational Intelligence and Communication Networks, CICN, (India, 2016), International Conference on Data Mining (DMIN2016), International Conference on Communication, Management and Information Technology, ICCMIT, (Cosenza, Italy, 2016), International Conference on Computer Science and Artificial Intelligence, CSAI, (China, 2016), Recent Advances in . RACS, (Saudi Computer Systems Arabia, 2016) National Computing Colleges Conference, NCCC, Saudi Arabia, 2016) and I have served as committee member for many other conferences since 2006.

For journals, I also served different roles in the following journals: IEEE's Transactions on Parallel and Distributed Systems Journal, IEEE Transactions on Neural Networks and Learning Systems

, International Journal of Memetic Computing, Springer, The Computer journal, oxfordjournals, International Journal of Intelligent Engineering Informatics, IGI, International Journal of System Dynamics Applications (IJSDA), inderscience, International Journal of Robotics and Automation., actapress, and International Journal of Sensor Networks (IJSNet), and Journal of King Abdulaziz University, Saudi Arabia.

Research Achievements:

A. Current Funded Projects:

Europe Egypt Network for Particle Physics.

Funding Agency: FP7
Budget: (309,700 EUR)

Period: 2013-2016

Partners:

- i. Politecnico di Bari, Itali
- ii. Ecole Polytechnique, Leprince-Ringuet Laboratory (LLR), France
- iii. Cairo University, Computer Engineering Dept. Egypt.
- iv. Ain Shams University, Physics Department, Egypt
- v. Helwan University, Physics Department, Egypt
- Internet of Things and Disease Spreading Challenges

Funding Agency: Hail University

Budget: (25,000 RS) Period: 2016-2017

- Big Data Handling: Hajj as Case Study

Funding Agency: Hail University

Budget: (30,000 RS) Period: 2016-2017

- Studying the Impact of Using English Language in Security Measures for Non-English Users

Funding Agency: Hail University

Budget: (38,400 RS) Period: 2015-2017

B. Completed Funded Projects:

- 10028 Web of Objects

Funding Agency: ITEA 3 Budget: (12,459,000 €)

Period: 2012-2014

Partners:

C 1' II '	I D' T 1	NTM (A
Concordia University,	InnoPiaTech,	NMA
Canada	Republic of Korea	Technologies,
		Egypt
CEA, France	Institut Mines-	Odonata, France
	Télécom, France	
DEIMOS, Spain	KAIST, Republic of	Prodevelop,
	Korea	Spain
ETIC, Spain	KT, Republic of	Smartec, Egypt
	Korea	- the company
		that I was
		participating
		through.
ETRI, Republic of	Kwangwoon	Sogeti High
Korea	University, Republic	Tech, France
	of Korea	
Hankuk University of	Miksystem, Republic	Technical
Foreign Studies,	of Korea	University of
Republic of Korea		Madrid (UPM),
		Spain
Telespazio, Spain	University of Cairo,	Visual Tools,
	Egypt	Spain
Thales, France	University Paris-Est	
	Marne-la-Vallée,	
	France	
University of	Universidad	
Technology in	Politécnica de	
Catalunya, Spain	Valencia, Spain	
https://itac2.oug/pupic.ot/yyah.of.chic.eta.html		

https://itea3.org/project/web-of-objects.html

- Tool for Extensive Management and Performance Optimization (TEMPO) for 3G

Funding Agency: National Telecom Regulatory Authority (NTRA) –

ITIDA

Budget: (3 million L.E. (Egyptian Pound))

Period: first round 2012-2013 - second round 2013-2015

Partner: Vodafone Egypt telecommunication Company

Grid Node for ALICE at CERN

Funding Agency: MTI University, Cairo, Egypt

Budget: (100,000 L.E)

Period: 2010 -2012

Partners: Physics Department, MTI University

C. Submitted Projects for Funding:

- Internet of Things and Smart Environments

Funding Agency: King Abdul Aziz City for Science and Technology

Budget: (1.9 million RS)

Period: 2016-2018

- Efficient Searching with Privacy in Universities Cloud Data

Funding Agency: King Abdul Aziz City for Science and Technology

Budget: (1.5 million RS)

Period: 2016-2018

- Measuring the Quality of Experience through Social Networks

Funding Agency: NTRA Egypt

Budget: (1.5 million RS)

Period: 2016-2017

D. Conferences and Journals Organizing Activities

- Editor of the book entitled "Advanced Machine Learning Technologies and Applications," Springer, 2012.
- Guest Editor for a special issue on "Thematic Issue on 'Intelligent Cloud Computing," Journal of Memetic Computing, May 2016.
- Guest Editor for a special issue on ""Security in Wireless Sensor Networks – Countermeasures and Challenges", Int. J. of Intelligent Engineering Informatics, December 2015.
- Guest Editor for a special issue on "Reliability and Fault Tolerant Strategies and Protocols in Wireless Sensors Network, "International Journal of System Dynamics Applications (IJSDA), April 2015.
- Member of the Editorial Board of the International Journal of Service Science, Management, Engineering, and Technology (IJSSMET).IGI.
- Member of the Editorial Board of the International Journal of System Dynamics Applications (IJSDA), IGI.
- Organizer of Special Session on "UZZ-IEEE 2016: Bio-inspired Fuzzy Logic Approaches - Interdisciplinary Emergent Technologies", in conjunction with *IEEE WCCI 2016* conference, July 2016.
- Organizer of special session on "Internet of Things and Smart Systems,
 "International Conference on Communication, Management and
 Information Technology (ICCMIT 2016), April 2016.
- Organizer of special session on "THPC-2016: Tasks on High Performance Computing," In conjunction with the 7th International Conference on Ambient Systems, Networks and Technologies (ANT-2016).2016,
- Organizer of special session on "WNTEST: Wireless Networks

- and Energy Saving Techniques ," In conjunction with the 7th International Conference on Ambient Systems, Networks and Technologies (ANT-2016) .2016 ,
- Chair of Recent Advanced in Computer Systems, Hail, Saudi Arabia, December 2015.
- Member of the program committee of IEEE Symposium on Intelligent Agents, associate with EEE Symposium Series on Computational Intelligence (SSCI 2013), April 2013.
- Program Co-Chairs of International Conference on Advanced Machine Learning Technologies and Applications (AMLTA12), December 2012.
- Organizer of Special Session on "Recent Advances on Sensor and Actor Networks, "International Conference on Engineering and Technology (ICET 2012), October 2012.
- Organizer of special session on "Wireless Sensor Networks and its Applications," International conference on Intelligent Systems Design and Applications (ISDA), December 2010.
- Organizer of Special Session on "Agents for Ad Hoc and Sensor Network Activities," IEEE Symposium Series on Computational Intelligence, April 2009.

E. Funding Agencies Referee Activities

- Serving as a referee for the EU Research Council
- Serving as a referee for the USA National Science Foundation (NSF).
- Serving as a referee for the Egypt Information and Communication Technology Outsourcing (ITIDA)

- Serving as a referee for King Abdul Aziz City for Science and Technology.

F. International Conferences Program Committee Membership

- Member of the International Programme committee for the International Conference on Data Mining, Nevada, USA, 2016
- Member of the International Programme committee for the International conference on Advancement on Informatics, Business and Management, Czech Republic, 2016
- Member of the International Programme committee for International conference on Advanced Research on Circuits and Systems, Czech Republic, 2016.
- Member of the International Programme committee for International conference on Progress in Computer Sciences and Information Technology International Conference (PROCSIT), Kedah, Malaysia, 2016.
- Member of the International Programme committee for 8th International Conference on Computational Intelligence and Communication Networks (CICN 2016), dehradun, India 2016.
- Member of the International Programme committee for the 3rd International Workshop on Mobile Applications (MobiApps'2016), Vienna, Austria, 2016.
- Member of the International Programme committee for The 10th International Conference on Future Networks and Communications, FNC 2016 Montreal, Quebec, Canada, 2016.
- Member of the International Programme committee for the International Conference on Ambient Systems, Networks and

- Technologies (ANT-2016), Madrid, Spain, 2016.
- Member of the International Programme committee for The 10th International Conference on Future Networks and Communications, FNC 2015 Belfort, France, 2015.
- Member of the International Programme committee for the 2th ACS/IEEE International Conference on Computer Systems and Applications, AICCSA 2015, Marrakech, Morocco, 2015.
- Member of the International Programme committee for the International Joint Conference on Neural Networks (IJCNN), Killarney, Ireland, 2015.
- Member of the International Programme committee for the International Conference on Ambient Systems, Networks and Technologies (ANT-2015), London, United Kingdom, 2015.
- Member of the International Programme committee for the International Conference on Ambient Systems, Networks and Technologies (ANT-2014), Hasselt, Belgium, 2014.
- Member of the International Programme committee for The 9th International Conference on Future Networks and Communications, FNC 2014, Niagara Falls, Ontario, Canada, 2014.
- Member of the International Programme committee for the International Conference on Ambient Systems, Networks and Technologies (ANT-2013), Halifax, Nova Scotia, Canada, 2013.
- Member of the International Programme committee for the International Conference on Emerging Technologies (ICET), Islamabad, Pakistan, 2012.
- Member of the International Programme committee for the 37th IEEE

- Conference on Local Computer Networks (LCN), Clearwater, Florida, USA, 2012.
- Member of the International Programme committee for the 9th IEEE International Conference on Control & Automation (IEEE ICCA'11), Santiago, Chile, 2011.
- Member of the International Programme committee for the IEEE Symposium on Computers & Informatics (ISCI), Kuala Lumpur, Malaysia, 2011.
- Member of the International Programme committee for the IEEE Symposium Series on Computational Intelligence SSCI 2011, Paris, France, 2011.
- Member of the International Programme committee for The Third International Workshop on Advanced Computational Intelligence, IWACI2010, Suzhou, China, 2010.
- Member of the International Programme committee for the 18th International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2010, Split Bol (island of Brac), 2010.
- Member of the International Programme committee for the Third International Workshop on Advanced Computational Intelligence (IWACI), Suzhou, China, 2010
- Member of the International Programme committee for International Conference on Autonomous and Intelligent Systems, AIS 2010, Povoa de Varzim, Portugal, 2010
- Member of the International Programme committee for the International Joint Conference on Neural Networks (IJCNN),

- Barcelona, Spain, 2010.
- Member of the International Programme committee for the IEEE International Conference on Fuzzy Systems (FUZZ), Barcelona, Spain, 2010.
- Member of the International Programme committee for the 6th International Conference on Intelligent Environments (IE'10), Kuala Lumpur, Malaysia. 2010.
- Member of the International Programme committee for the 4th WSEAS International Conference on CIRCUITS, SYSTEMS, SIGNAL and TELECOMMUNICATIONS, 2010
- Member of the International Programme committee for the First KES International Symposium on Intelligent Decision Technologies, IDT'09, Himeji, Japan, 2009.
- Member of the International Programme committee for the International Conference in Sensor Networks , SensorNets2009, Monastir, Tunisia, 2009.
- Member of the International Programme committee for the 5th International Conference on Intelligent Environments (IE'09),), Barcelona, Spain, 2009
- Member of the International Programme committee for the Fourth International Multi-Conference on Computing in the Global Information Technology, ICCGI 2009, French Riviera, France, 2009
- Member of the International Programme committee for the International Conference on Wireless Information Networks and Systems, WINSYS 2009, Milan Italy, 2009.
- Member of the International Programme committee for The 34th IEEE

Conference on Local Computer Networks (LCN), Zürich, Switzerland, 2009

- Member of the International Programme committee for the international Multi-Conference on Computing in the Global Information Technology, ICCGI 2006, Bucharest, Romania, 2006.

G. Research Infrastructure Development

- Internet of Things Lab, Cairo University

I am the founder of Intel Internet of Things Lab at the faculty of Engineering. I was the Principle Investigator for a project submitted to Intel Company for an Internet of Things lab equipment's. The lab serves many of the courses such as embedded systems and Wireless Sensor Networks.

Applied Sensing Technology Research Laboratory (ApplS-LAB),
 Cairo University.

I am a founder of the ApplS-LAB at Computer Engineering Department, Cairo University. The lab serves the research of Wireless Sensor Networks (WSNs).

- Ambient Intelligent Center (AMIC) at German University in Cairo (GUC).

I was a cofounder of Ambient Intelligent Center (AMIC) at German University in Cairo. AMIC is a research center that utilizes the Ambient Intelligent techniques and concepts in the field of smart environments. The center started by developing a

unique testbed at GUC which is an intelligent classroom. The center opens many of the research ideas and offer masters and PhD programs for GUC students and others.

- Robotics labs and the Robotics research group, German University in Cairo (GUC).

I took a part of establishing the Robotics labs and the Robotics research group in the German University in Cairo. This lab was used for RobocUp Competition preparation in 2009 and 2010 as well as a base for Robotics research.

- Brain Computer Interface lab , Hail University.

I am the founder of the Brain Computer Interface Lab at Hail University. The lab is a fruitful effort with the Fraunhofer institute cooperation during the year of 2015. It is expected to receive the lab equipment sometime before the end of 2016.

H. Students Supervision

Previous Ph.D. and Masters Students:

- Dr. Amira Abdul Mageed, currently working at Ain Shams University, Egypt.
- Ahmed Ezz Eldin, Ph.D. candidate, Florida University, USA.
- Fady Medhat, Ph.D. candidate, The University of York, England, United Kingdom.
- Shereen Mohamed , teaching Assistant at Al-Azhar university .
- Bassant El Samadony, Cairo University

- Eman ElShahed, Ain Shams university
- Sahar kamal, Alazhar University.
- Bassam Shosha , Arab Academy for Science ,Technology , Maritime Transport.
- Marwa Hassan, Ph.D. candidate, Cairo University.
- Mohamed Nabil, Arab Academy for Science, Technology,
 Maritime Transport.
- Shamsan Mohamed, Cairo University.
- Ahmed Essamt, Cairo University.
- Mohamed Abdel-Aal, Helwan University.

Current Ph.D. Student Students:

- Fatma H. El-Fouly, Monofia University, Egypt
- Mostafa Abo Amer, Ain Shams University

Current Masters Students

- Karen Medhat, Cairo University.
- Amr Helal, Cairo University.
- Eman Sabry, Arab Academy for Science, Technology, and Maritime Transport.
- Alamir Labib, Cairo University.
- Ahmed Shawki, Cairo University.

External Examiner Duties:

- King Abdul Azziz University, Saudi Arabia.
- Ain Shams University, Egypt
- Alazhar University, Egypt.
- German University in Cairo, Egypt.

I. Publications

A. Submitted Papers

- Fatma H. Elfouly, **Rabie A. Ramadan**, Mohamed I. Mahmoud, and Moawad I. Dessouky, "Efficient Data Reporting in a Single and Multi-object Tracking Using WSNs," submitted to the international Journal of Wireless Personal Communications, Springer.
- Fatma H. Elfouly, Rabie A. Ramadan, Mohamed I. Mahmoud, Moawad I. Dessouky, and Fathi. Abd El-Sami "Performance Analysis and Enhancement of FFT and DWT-OFDM using FRMMF and Helical Interleaving for Wireless Communication," submitted to the international Journal of Wireless Personal Communications, Springer.
- Fatma H. Elfouly, **Rabie A. Ramadan**, Mohamed I. Mahmoud, Moawad I. Dessouky, and Fathi. Abd El-Sami "Efficient RTAEB Data Reporting Algorithm for Object Tracking in Wireless Sensor Networks," submitted to the international Journal of Communication Systems.
- Fatma H. Elfouly, **Rabie A. Ramadan**, Mohamed I. Mahmoud, Moawad I. Dessouky, and Fathi. Abd El-Sami "Optimal and Meta-Heuristic Algorithms for Object Tracking in Multi-Sink Wireless Sensor Networks," submitted to the international Journal of Ambient Intelligence and Smart Environments.
- Fatma H. Elfouly, Rabie A. Ramadan, Mohamed I. Mahmoud, Moawad I. Dessouky, and Fathi. Abd El-Sami "REBTAM: Reliable Traffic Aware Energy Balance Data Reporting Algorithm for Object Tracking in Multi-Sink Wireless Sensor Networks," submitted to the international Journal of Wireless Networks, Springer.
- Ibrahim Elsadon, Rabie A. Ramadan, and Ahmed Khder, "The impact of English Language in Security Measures on Users' Ability to Identify Trustworthy Websites " submitted to Journal: Organizational Behavior and Human Decision Processes.
- Ahmed B. Altamimi, Rabie A. Ramadan, "On Internet of Things Modeling" ready to be submitted
- Rabie A. Ramadan and Ahmed B. Altamimi, "Disease Spreading Based Data Uncertainty - Internet of Things as a Source of Data" ready to be submitted.

B. Journal Papers

- Fatma H. Elfouly, Rabie A. Ramadan, Mohamed I. Mahmoud, and Moawad I. Dessouky, <u>"Resource Aware and Reliable Data Reporting Algorithm for Object Tracking in WSNs,"</u> at the International Journal of Intelligent and Fuzzy systems, 2016.
- Fatma H. El-Fouly, Rabie A. Ramadan, Salah Ali, "OFDM FOR WSNS USING CONTINUOUS PHASE MODULATION WITH FRS INTERLEAVER," Journal of communications, actapress, Vol. 3, 2014.
- Ahmed E. El-Din, Rabie A. Ramadan, Magda B. Fayek, "Fuzzy Based Clustering and Data Aggregation for Multi-Modal WSN (C-DAMM)
 " International Journal of Robotics and Automation., actapress, Vol 29, 2014.
- Rabie A. Ramadan, "Clustering based fuzzy logic for multimodal sensor networks: A preprocessing to decision fusion," Journal of Ambient Intelligence and Smart Environments, Volume 2, Number 3 / 2010 pp. 271-286, 2010, http://iospress.metapress.com/content/v48742215174/
- Ahmed E. El-Din and **Rabie A. Ramadan**," <u>Efficient Mixed Mode Summary for Mobile Networks</u>", International Journal of Wireless & Mobile Networks (IJWMN), Vol. 5, No 4, 2013.
- Ahmed E. El-Din and **Rabie A. Ramadan, "Smart Secure HEED for Wireless Sensor Networks",** the International journal of Sensor Networks (IJSNet), Vol. 14, No. 4, 2013.
- Ramadan R., Abdelghany K., El-Rewini, H. "Optimal and Approximate Approaches for Deployment of Heterogeneous Sensing Devices," in EURASIP JWCN journal, special issue in "Mobile Multi-Hop Ad Hoc Networks", 2007.
- Rabie A. Ramadan, "Fuzzy Brain Storming Optimization (FBSO) algorithm" International Journal of Intelligent Engineering Informatics, 2016.
- Shereen Mohamed, Rabie A. Ramadan, Neveen Gali, "Classification of <u>EEG Signals for Motor Imagery Based on Mutual Information and <u>Adaptive Neuro Fuzzy Inference System</u>," International Journal of System Dynamics Applications (IJSDA), 2016.
 </u>

- Karen Medhat, Rabie A. Ramadan, and Ihab Talkhan "<u>Towards</u> <u>Distributed Layered Intrusion Detection System for Large Scale Wireless Sensor Networks,"</u> International Journal of Intelligent Engineering Informatics, 2016.
- Fatma Elfouly, **Rabie A. Ramadan**, Mohamed Mahmoud and Moawad Dessouky, "SWARM INTELLIGENCE BASED RELIABLE AND ENERGY BALANCE ROUTING ALGORITHM FOR WIRELESS SENSOR NETWORK" invited paper Facta Universitatis, Series: Electronics and Energetics, 2016.
- Fatma H. El-Fouly, **Rabie A. Ramadan**, Mohamed I. Mahmoud, Moawad I., "SWARM INTELLIGENCE FOR BALANCING ENERGY AND RELIABLE ROUTING IN WSNS," The Mediterranean Journal of Electronics and Communications, No. 4, Vol. 9, October 2013.
- Fatma Hanafy El-Fouly, **Rabie A. Ramadan**, Mohamed Ibrahim Mahmoud and Moawad Ibrahim Dessouk, "SWARM Intelligence for Balancing Energy and Reliable Routing in Homogenous WSNS," international journal of Applied Mechanics and Materials" (ISSN:1662-7482), 2013.
- Sahar Kamal, **Rabie Ramadan** and Fawzy Elrefai, "Smart outlier detection of wireless sensor network by fuzzy logic," Facta Universitatis, Series: Electronics and Energetics, 2016.
- Rabie A. Ramadan, Basant El Samadony, Nevin Darwish, "Fuzzy Based Centroid Localization for WSNs," International Journal of Intelligent Engineering Informatics, 2015.
- Rabie A. Ramadan, S. Refat, Marwa A. Elshahed, Rasha A. Ali, "Basics of Brain Computer Interface," Brain-Computer Interfaces, Intelligent Systems Reference Library Volume 74, pp 31-50, 2015.
- Eman M. Elshahed, Shahinaz M. Al-tabbakh and Rabie A. Ramadan, "Sleep awake Scheduling Mechanism for Hierarchical Wireless Sensor Networks Based on Adaptive Gur Game," European Journal of Scientific Research, Volume 127 No 4, 2014.
- F. Medhat, **R. Ramadan**, I. Talkhan, "<u>Efficiency of Clustering in Multimodal WSN,"</u> International Journal of System Dynamics Applications, IGI-Global, USA, 2013.
- F. Medhat, R. Ramadan, I. Talkhan, "<u>Utilizing a Multimodal Wireless Node Features for the Benefit of WSN lifetime</u>", CiiT International Journal of Wireless Communication, 2012.

- Alaa Hamouda, Ahmed Y. Khedr, and Rabie A. Ramadan, <u>"Automated Red Blood Cell Counting"</u>, International Journal of Computing Science, PP.13-16, 2012.
- Mohamed O. Abdel-Aal, Rabie A. Ramadan, Ahmed A. Shaaban, and Mohamed Z. Abdel-Meguid, "Reliable Data Reduction Approaches in WSNs: Greenhouse Plant Disease Detection as a Case Study", CiiT International Journal of Wireless Communication, March 2012.
- Ahmed Y. Khdr, Rabie A. Ramadan, and Salah Abd Elmageed, "QMR: QUINE-MCCLUSKEY FOR RULE MINIMIZATION IN RULE-BASED SYSTEMS," International Journal of Intelligent Computing & Information Science at Ain shams university, Egypt, 2011.
- Mina G. Asham, Moataz M. Soliman, and Rabie A. Ramadan, "Genetic Coloring Approach for Timetabling Problem," International Journal of Computer Applications (IJCA), special edition on "ARTIFICIAL INTELLIGENCE TECHNIQUES- Novel Approaches & Practical Applications," 2011.
- Hosam Rahal , **Rabie Ramadan**, and Samir Shaheen, <u>"Scheduling in Stochastic Sensor Networks: A survey,"</u> Al Azhar University Engineering Journal AUEJ, December , 2008
- Rabie A. Ramadan, Ahmed Youssef, Ashraf Elmarakaby, and Ala Hanouda, "Towards E-Health using Sensor Networks: A Survey," Al Azhar University Engineering Journal AUEJ, December 2008.
- **Ramadan R.**, Houri M., Al-Nawisa A., Jafala W., Fahim W., Aziz A., Mahjoub D., and El-rewini H., "Introduction to sensor Networks," Journal of Computer Science and Engineering, in Arabic, April 2007.

C. Conference Papers

- Rabie A. Ramadan, Ahmed Y. Khder, "An Imperial Study of Best practices in Teaching and Learning," at the 1st National Computing Colleges Conference, NCCC, 2016.
- Eman Sabry, **Rabie A. Ramadan**, Abdel Azem, and Hussien Elgouz, <u>Evaluating IPTV Performance Using OPNET</u>, ICCMIT'16, 2016.
- Rabie A. Ramadan, Ahmed Y. Khder, "Brain Storming Algorithm for Coverage and Connectivity Problem in Wireless Sensor Networks," ICCMIT'16, 2016.

- Fatma Elfouly, **Rabie Ramadan**, Mohamed Mahmoud and Moawad Dessouky, "Efficient Data Reporting in a Single and multi-object Tracking Using WSNs, "at 2015 IEEE Symposium Series on Computational Intelligence, http://ieee-ssci.org.za/, 2015.
- Rabie Ramadan and Ahmed Youssef, "Light Fidelity (Li-Fi) Is it Possible to Replace Wi-Fi?", at International Conference on Recent Advances in Computer Systems (RACS-2015), 2015.
- Shahinaz Al-Tabbakh ,Eman Elshahed, **Rabie A. Ramadan**, and Hayam El-Zahed, "Energy management of wireless sensor network based on modelling by game theory approaches,"

 9th European Modelling Symposium on Mathematical Modelling and Computer Simulation, 2015.
- Karen Medhat, **Rabie A. Ramadan**, and Ihab Talkhan "<u>Distributed Intrusion Detection System for Wireless Sensor Networks</u>," 9th International Conference on Next Generation Mobile Applications, Services and Technologies 2015.
- Fatma H. El-Fouly, Rabie A. Ramadan, Mohamed I. Mahmoud, and Moawad I. Dessouky, "RTAEB: Reliable Traffic Aware Energy Balance Routing in Wireless Sensor Networks," The Second International Conference On Advances in Computing, Control and Networking ACCN 2015.
- Basant El Samadony , Rabie A. Ramadan, Nevin Darwish, <u>"Enhanced Trilateration Localization Using Fuzzy Logic for WSN,"</u> at the International conference on Intelligent Information Processing, Security and Advanced Communication (IPAC'2015) , 2015.
- Hosam Rahal and Rabie A. Ramadan, "A Novel Multi-Threshold Energy (MTE) Technique for Wireless Sensor Networks, "International Conference on Communication, Management, and Information Technology "ICCMIT15, 2015.
- Ola E. Elnaggar, Rabie A. Ramadan, Magda B. Fayek, "WSN in Monitoring Oil Pipelines Using ACO and GA," 6th International Conference on Ambient Systems, Networks and Technologies) ANT-2015),2015.
- Bassam W. Aboshosha , Rabie A. Ramadan and Abdel Moneim Wahdan , "Lightweight Cryptographic Algorithm Variable Key Length Encryption Algorithm (VEA)," 24th international Conference in Computer Theory , ICCTA , 2014 .

- Marwa M. Hassan, Rabie A. Ramadan and Hatem M. El Boghdadi, "Finding the Best Sink Location in WSN with Reliability Route Analysis," the 5th International Conference on Ambient Systems, Networks and Technologies, 2014.
 - H. Hafez, F. E. Z. El-Taher, **R. A. Ramadan** and A. Gaber, "Scrambling code planning and optimization for UMTS system," 2014 IEEE Wireless Communications and Networking Conference (WCNC), Istanbul, 2014, pp. 1968-1973. doi: 10.1109/WCNC.2014.6952571
- Eman Elshahed, **Rabie A. Ramadan**, Shahinaz Al-Tabbakh and Hayam El-Zahed, "Modified gur game for WSNs QoS control," the 5th International Conference on Ambient Systems, Networks and Technologies, 2014.
- Ahmed E. El-Din, Rabie A. Ramadan, Amira A. Elmagid and Salah Aly,
 "Novel Scheme of Fuzzy Based Concealing Sink Node with Fake Holes (F-CSH)," the 5th International Conference on Ambient Systems, Networks and Technologies, 2014.
- Elhoussini F. Ashmouni, **Rabie A. Ramadan and** Ali A. Rashed, "Espresso for Rule Mining," the 5th International Conference on Ambient Systems, Networks and Technologies, 2014.
- Tamer Ali, Rabie Ramadan, Mohamed Khairy, "MPOT: 3D Mote Placement Optimization Tool for Wireless Sensor Networks," IEEE World Forum on Internet of Things (WF-IoT), 2014.
- Rabie Ramadan, Tamer Ali, Mohamed Khairy, "Mote Deployment Algorithms in 3D WSNs," IEEE World Forum on Internet of Things (WF-IoT), 2014.
- Rabie A. Ramadan, "<u>Agent Based Single Path Adaptive Routing in Emergency Sensor Networks</u>," International Conference on Advances in Information Technology (ICAIT 2013), 2013. (published by Lecture Notes in Information Technology (ISSN: 2070-1918).
- Fatma Hanafy El-Fouly, Rabie A. Ramadan, Mohamed Ibrahim Mahmoud and Moawad Ibrahim Dessouk, "SWARM Intelligence for Balancing Energy and Reliable Routing in Homogenous WSNS," International Conference on Electronics, Communications and Networking (ICECN 2013), 2013.
- Fatma Hanafy El-Fouly and Rabie A. Ramadan, <u>"SWARM</u> Intelligence Based Energy Balance and Reliable Routing for Heterogeneous Wireless Sensor Networks," at International Conference

- on Information and Communication Technology for Education (ICTE2013)., 2013.
- Mahmoud Nabil, **Rabie A. Ramadan**, Hamed El-Shennawy, and Adel El-Hennawy, "**Localization of Random Mobile Vehicles**," at International Conference on Information and Communication Technology for Education (ICTE2013)., 2013.
- Ahmed E. El-Din, Rabie A. Ramadan and Magda B. Fayek, "'VEGK:

 Virtual ECC Group Key for Wireless Sensor

 Networks," at International Conference on Computing, Networking and
 Communications (ICNC 1013), 2013.
- Ahmed E. El-Din and Rabie A. Ramadan, "MMSLC: Mixed Mode Summary Based Lossless Compression Technique for Mobile Networks Log Files," international Workshop of Networks and Communications (NC 2013), 2013.
- Mohamed Taher Alrefaie, Alaa-Aldine Hamouda, and **Rabie A. Ramadan, "A Smart Agent to Trade and Predict Foreign Exchange**<u>Market"</u>, IEEE SYMPOSIUM SERIESON COMPUTATIONALINTELLIGENCE, Singapore 2013.
- Ahmed E. El-Din, <u>Rabie A. Ramadan</u> and Magda B. Fayek, <u>"'VEGK: Virtual ECC Group Key for Wireless Sensor Networks,"</u> at International Conference on Computing, Networking and Communications (ICNC 1013), 2013.
- Rabie A. Ramadan, Ahmed Ezzat AbdElGawad, and Mohammed Alaa, "JustThink: Smart BCI Applications," Proceedings of Seventh International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2012) and Advances in Intelligent Systems and Computing Volume 201, pp 461-472, 2013.
- Ahmed E. El-Din, **Rabie A. Ramadan** and Magda B. Fayek , "A Novel Fuzzy HEED Security using VEGK for Wireless Sensor Networks," The Eighth IEEE International Workshop on Wireless and Sensor Networks Security (WSNS'12), LV, USA, 2012.
- Amira A. A.Elmgid, <u>Rabie A. Ramadan</u>, Shahinaz M. Al-tabbakh, S. M. El-Ghanam, S.A. Kamh, Mahmoud Marie, <u>"Radiation Detection Based Heterogeneous Wireless Sensor Network</u>, "International Conference on Engineering and Technology (ICET 2012), 2012.
- Mohamed O. Abdel-Aal, <u>Rabie A. Ramadan</u>, Ahmed A. Shaaban, and Mohamed Z. Abdel-Meguid, <u>"Energy Saving and Reliable Data Reduction Techniques for Single and Multi-Modal WSNs"</u>, at International Conference on Engineering and Technology (ICET 2012), 2012.

- Ahmed E. El-Din, **Rabie A. Ramadan** and Magda B. Fayek, <u>"Secure Clustering based SEP using Virtual ECC Group Key for Wireless Sensor Networks,"</u> at International Conference on Engineering and Technology (ICET 2012), 2012.
- Mahmoud Nabil, **Rabie A. Ramadan** and Hamed Elshenawy, "A comparative Study of Localization Algorithms in WSNs," at The 1st International Conference on Advanced MAchine Learning Technologies and Applications, AMLTA12, 2012.
- Rabie A. Ramadan, "Towards Smart Egypt Role of Large Scale WSNs," at The 1st International Conference on Advanced Machine Learning Technologies and Applications, AMLTA12, 2012.
- F. Medhat, R. Ramadan, I. Talkhan, "Smart Clustering for Multimodal WSNs," EVENTH INTERNATIONAL CONFERENCE ON BROADBAND AND WIRELESS COMPUTING, COMMUNICATION AND APPLICATIONS, NOVEMBER 12-14, 2012, ASTSA 2012, Vectoria, Canada, 2012.
- Mohamed O. ABDEL-ALL, Rabie A. RAMADAN, Ahmed A. SHAABAN and Mohamed Z. ABDEL-MEGUID, "An Efficient Data Reduction Technique for Single and Multi-Modal WSNs," the 7th International Conference on Intelligent Environments IE'11, 2011.
- Mostafa A. Salama, Heba F. Eid, Rabie A. Ramadan, Ashraf Darwish,
 Aboul Ella Hassanien, "Hybrid Intelligent Intrusion Detection
 Scheme, "The 15th Online World Conference on Soft Computing in Industrial Applications WWW, WSC15, November 15-27, 2010.
- Rabie A. Ramadan, Hani Hagras, Moustafa Nawito, Amr El Faham Bahaa Eldesouky ,"The Intelligent Classroom: Towards an Educational Ambient Intelligence Tesbed," 6th International Conference on Intelligent Environments IE'10, 2010, http://intelligentenvironments.org/conferences/ie10.
- Hani Hagras, **Rabie A. Ramadan**, Moustafa Newito, Ahmed El Molla, Mina Zaher, Hala Gabr and Hussien Fahmy," <u>A Fuzzy Based Hierarchical Coordination and Control System for a Robotic Agent Team in the Robot Hockey Competition</u>," IEEE World Congress on Computational Intelligence (WCCI 2010), (FUZZ-IEEE 2010), 2010, http://www.wcci2010.org/fuzz-ieee-2010-invited-speakers.

- Rabie A. Ramadan and Salah A. Ramadan, "Efficient Deployment of Connected Sensing Devices Using Circle Packing Algorithms," International Conference on Autonomous and Intelligent Systems, AIS 2010, http://www.ais.uwaterloo.ca/ais10/
- Salah A. Ramadan **and Rabie A. Ramadan**, "Efficient Deployement Algorithms for Mobile Sensor Networks," International Conference on Autonomous and Intelligent Systems, AIS 2010, http://www.ais.uwaterloo.ca/ais10/
- Rabie A. Ramadan, "<u>Agent Based Multipath Routing in Wireless Sensor Networks</u>," IEEE Symposium Series on Computational Intelligence 2009 (IA 2009).
- Rabie A. Ramadan and Fatma Zewier, <u>"Structured and Real Time Heterogeneous Sensor Deployment in Preferential Areas"</u>, at International Workshop on Advanced Topics in Mobile Computing for Emergency Management: Communication and Computing Platforms, 2009.
- Rabie A. Ramadan, "<u>Leveraging RFID Technology for Intelligent Classroom</u>," at 4th IEEE International Design and Test workshop, idt09, 2009.
- Rabie A. Ramadan, "Data Mining in Multi-Feature Sensor Networks," International Conference on Computer Engineering and Systems (ICCES09), 2009.
- Rabie Ramadan, Ahmed Y. khedr, and Nehal Khaled, <u>"FBASED: Field Based Multiservice Sensor Networks for Routing Purposes,"</u> 4th International Computer Engineering Conference Information Society Applications in the Next Decade (ICENCO), December, 29-30, 2008.
- Rabie A. Ramadan, Mohamed Zaki, and Samir Shaheen, "Hypertext Semantic Search Based Dexter Model on Distributed Heterogeneous Systems," 4th International Computer Engineering Conference Information Society Applications in the Next Decade (ICENCO), December, 29-30, 2008.
- Hosam Rahal, **Rabie Ramadan**, and Samir Shaheen, <u>"Scheduling in Stochastic Sensor Networks: A survey,"</u> 10th Azhar Engineering International Conference AEIC10, December, 2008.

- Rabie A. Ramadan, Ahmed Youssef, Ashraf Elmarakaby, and Ala Hanouda, "Towards E-Health using Sensor Networks: A Survey, "10th Azhar Engineering International Conference AEIC10, December, 2008.
- Rabie A. Ramadan and Bilal Al-Qudah, "Towards Multiservice Sensor Networks," ISCA 21st INTERNATIONAL CONFERENCE ON COMPUTER APPLICATIONS IN INDUSTRY AND ENGINEERING, CAINE, Honolulu, Hawaii, USA, November 12-14, 2008.
- Rabie A. Ramadan and El-Rewini Hesham, "Deployment of Sensor Networks on Critical Infrastructures: A Survey," 4th International Computer Engineering Conference Information Society Applications in the Next Decade (ICENCO), December, 29-30, 2008.
- Rabie A. Ramadan, Ahmed Y. Khedr, and Bilal Al-Qudah "Sensor Replacement Based Energy Mapping," ISCA 21st INTERNATIONAL CONFERENCE ON COMPUTER APPLICATIONS IN INDUSTRY AND ENGINEERING, CAINE, Honolulu, Hawaii, USA, November 12-14, 2008.
- Bilal Al-Qudah and **Rabie A. Ramadan**, "Sensor Deployment Using Billiards Algorithm", 4th International Computer Engineering Conference Information Society Applications in the Next Decade (ICENCO), December, 29-30, 2008.
- Rabie Ramadan, Khaled Abdelghany, Hesham El-Rewini, and Manal Houri "Impact of Heterogeneity on the Deployment of Sensor Networks," 2nd International Workshop on Performance Control in Wireless Sensor Networks (PWSN 2007), Austin, Texas, October 23, 2007.
- Ramadan R., Abdelghany K., and El-Rewini, H., "SensDep: A Design Tool for the Deployment of Heterogeneous Sensing Devices," dssns, pp. 44-53, Second IEEE Workshop on Dependability and Security in Sensor Networks and Systems, 2006.
- Ramadan R., Abdelghany K., and El-Rewini, H., "On the Optimal Deployment of Heterogeneous Sensing Devices," AICCSA, The 4th ACS/IEEE International Conference on Computer Systems and Applications, pp. 898-905, ISBN: 1-4244-0211-5, March 8, 2006.
- Ramadan R, Al-Nawaiseh A., El-Rewini H, and Abdelghany K., "Parallel Meta-Heuristic Approaches for Deployment of Heterogonous Sensing Devices," PDCS, the ISCA 19th International

Conference on Parallel and Distributed Computing Systems to be held September 20-22, 2006.

D. Books and Book Chapters:

- Rabie A. Ramadan, <u>Deployment of Mobile Heterogeneous Sensors on Critical Infrastructure: Sensor Deployment Problem and Its Solutions</u>, VDM Verlag publisher, ISBN 978-3639111866, 2009.
- Karen Medhat, Rabie A. Ramadan, and Ihab Talkhan, "Security in Mission Critical Communication Systems: Approach for Intrusion Detection, book chapter submitted to; "Multimedia Services and Applications in Mission Critical Communication Systems", http://www.igi-global.com/publish/call-for-papers/call-details/1889, 2016.
- Mohamed Mostafa M. Fouad, Nashwa El-Bendary, Rabie A. Ramadan, and Aboul Ella Hassanien, <u>Wireless Sensor Networks: A Medical Perspective</u>; Book Chapter at Wireless Sensor Networks: From Theory to Applications book, CRC Press, 2013.
- Nashwa El-Bendary, Mohamed Mostafa M. Fouad, Rabie A. Ramadan, Soumya Banerjee, and Aboul Ella Hassanien, Smart Environmental Monitoring Using Wireless Sensor Networks, Book Chapter at Wireless Sensor Networks: From Theory to Applications book, CRC Press, 2013.
- Rabie A. Ramadan, "Odor Recognition and Localization Using Sensor Networks," book chapter in "Wireless Sensor Networks: Application-Centric Design" InTech, December 2010, ISBN 978-953-307-321-7

Teaching Profile:

During my career journey, *I have strong record of high quality of teaching*. I taught many undergraduate and graduate courses. In addition to teaching course, I developed two course modules. The first module was for undergraduate which is embedded systems and the second was for the post graduate which is the Wireless Sensor Networks course. In both courses as well as in other courses that I teach, I develop practical modules based on the state of the art of the topic.

Due to the connection with industry, *I am able to secure many internships and funded graduation projects for my students*. In fact, most of my students' graduation projects are based on real industry problems. Most of these project problems are already proposed by the industry.

Based on my experience as a developer using different languages (C, C++, Java, and C#) at Banc of America Securities and Ibda Companies, I used to teach many programming language courses including "Introduction to programming" and Advanced Programming Techniques". The first course teaches students the basics of the programming languages and the second is an advanced course where memory management and code optimization is the main concern.

In addition to teaching courses, I am the Computer Engineering coordinator of the laboratories committee at Faculty of Engineering, Cairo University. Also, *I am part of the Computer Engineering development program* at Hail University. In addition, I play a major role in the new Information Security Program development at Hail University. Moreover, I am a part of the students exchange program with Fraunhofer institute, German.

This teaching experience formed my teaching philosophy. My philosophy is to foster the environment with:

- 1- Long life learning
- 2- Students and teachers accountability
- 3- Teaching is not one time process
- 4- Study is not disconnected from real world
- 5- Confidence since nothing is impossible

Since I love teaching and dealing with students, I do have the enthusiasm to teach traditional courses as well as develop new courses. I believe that regardless the course materials is simple or hard, the teacher has the greatest impact on students to love or hate the course materials. Therefore, I give myself enough time before the class time to get ready and equipped with different methodologies to convey the class message. I usually use different techniques to convey the lecture message to students. During the class time, for me it is the enjoyable moments answering the questions and diving through students minds with the new subjects.

Teaching is my career that I choose for life and I believe it fits my skills and capabilities. So, for long term plan, my target is to develop my teaching capabilities and knowledge awareness through readings, cooperating with

industry, cooperating with colleagues with the same interest, attending and organizing conferences, leading journals special issues, and by experimenting real life problems. For the short term plan, *I am planning to develop a new course in the field of "Smart Internet of Things" along with its textbook.*

A. Courses I Teach:

The following is my teaching record at different Universities and institutes:

- Southern Methodist University , SMU, USA
 - Advanced Computer Architecture and Parallel Processing
- Computer Engineering Department, Cairo University
 - Introduction to programming
 - Advanced Programming Techniques
 - Data Structures
 - Embedded Systems
 - Digital Logic
 - Introduction to Database
 - Algorithms
 - Introduction to Wireless Sensor Networks post graduate course
- College of Computer Science and Engineering, Hail University
 - Internet of Everything
 - IT Essential
 - Operating Systems
 - Fundamentals of Computer Engineering Digital Logic

- Computer Architecture
- Hardware Simulation Language (VHDL)
- System Design Lab Embedded Systems
- Blackboard Learn
- Security Fundamentals
- Advanced Database

Media and Information Technology Department , German University in Cairo (GUC)

- Computer Organization
- Information Security
- Introduction to Wireless Sensor Networks

- Systems and Computers Department , Alazhar University

- Introduction to Programming
- Data Structures and Algorithms
- Microprocessor

- Al-Shrouk Academy

- Introduction to Programming
- Advanced Level Programming
- Computer Organization
- Computer and Network Security

- Community Services

- Mobile and Social Networks Safe Usage
- Blackboard learn
- Communication Skills
- Presentation Skills
- Personal patterns

B. Soft Skills Courses that I completed:

- Crises Management
- Statistical Analysis (SPSS)
- Time and Meetings Management
- Quality Assurance in Educational Systems
- Leadership skills
- Effective Communication Skills
- Scientific Conferences Management
- Exams and Students Evaluation Systems
- Higher Education Teaching Strategies
- Work Ethics
- Critical Thinking
- Problem Solving Strategies
- Presentation Skills

Administrative Activities:

- Member of a New Security Program Committee, Hail University
- Research Seminar Coordinator, Hail University
- Chair of RACS-2015 Conference, Hail University
- Member of the Stalled Students Committee, Hail University
- Member of the Department Council, Hail University
- Member of the College Council, Hail University
- Member of the Computer Science accreditation program Committee, Hail University
- Member of the Computer Engineering development Program Committee , Hail University
- Chair of the Students activities Committee, Hail University

- Member of the Student Programming Competitions Committee- to participate in the Deans of Computer Science and Engineering competition, , Hail University
- Member of Research Committee for Deans of Computer Science and Engineering Conference, Hail University.
- Member of the Industrial partnership Committee, Hail University
- Member of the Universities Partnership Committee, Hail University.
- Member of students' Academic consultation Committee, Hail University.
- Member of the Academic Research Committee, Hail University.
- Member of the Electronic Education Committee, Hail University.
- Coordinator of the Laboratory committee, Cairo University.
- Member of the Exams Committee, Cairo University.
- Member of Quality Assurance Committee, Cairo University.

Industry Experience and Collaboration:

I have maintained a strong relation with industry for knowledge transfer and working on real world research problems. Through the years, industry becomes a resource of funding as well as part of course development at Universities. Therefore, my relationship with major companies is based on emerging real industrial experience into the curriculum of the Universities courses such as networks and programming courses. In addition, I benefit from industry relationship in finding realistic projects for my students as well as funded projects.

The following is my experience with industry:

- Vodafone Telecommunication Company in the capacity of funding

- as well as partnership on many of the research and students graduation projects.
- *Intel Company* in the capacity of funding and sponsoring the Internet of Things (IoT) lab at Cairo University.
- *Banc of America Securities*, Frisco, Tx, USA where I was working there as a developer using Java, C++, and C#.
- *Smartec Company* in the capacity of representing the company on the Web of Objects funded project as well as many other projects.
- *Microsoft Company* in the capacity of coordinating their Academy and teaching some of their courses such as Security Fundamentals course at Hail University, KSA.
- Cisco networking in the capacity of coordinating their Academy and teaching some of their courses such as IT Essentials and Internet of Everything courses at Hail University, KSA.
- *International Telecommunication Union (ITU)* Regional Office where I was working as Network Administrator and technical support.
- *Ibda Software and Internet Company* where I was the CIO of the company. The company was working on developing multimedia applications and other companies' websites.

Coaching Activities:

• **ThinkQuest 2000**, "Quantum Mechanics made simple", at: http://library.thinkquest.org/C005775/ or at: http://www.thinkquest.org/library/site.html?team_id=C005775

- ThinkQuest 2001, "Satcom Online", at: http://library.thinkquest.org/C0122480/ or at: http://www.thinkquest.org/library/site.html?team_id=C0122480
- ThinkQuest 2006, "Eau de Abnormality" at: http://www.thinkquest.org/library/site.html?team_id=05aug/018 94 or at: http://library.thinkquest.org/05aug/01894/

References

Given Upon Request