

#### EDUCATION

2000 PhD in Comp. Sci. & Eng., University of Louisville  
1998 MS in Comp. Sci., University of Louisville  
1993 BS in Elect. Eng., Zagazig University, Egypt

#### PROFESSIONAL APPOINTMENTS

2015–present Director and Professor, School of Computing, UNF  
2013–2015 Associate Dean and Professor, CCEC, UNF  
2013–2017 Advisor of Data Technology, Northeast Florida Fusion Center  
2009–2010 Research Fellow, Biotech. Grad. Program, American University in Cairo  
2006–2013 Associate Professor, School of Computing, UNF  
2003–2013 Consultant, uReveal Inc., Jacksonville, FL  
2000–2006 Assistant Professor, School of Computing, UNF  
1998–1999 Adjunct Professor, Comp. Info. Sys., University of Louisville  
1997–2000 Research Assistant, Comp. Sci. & Eng., University of Louisville  
1993–1997 Systems Engineer, RITSEC, Egypt

#### HONORS AND AWARDS

2018 Distinguished Professor Runner-Up Award, UNF  
2014 FIS Distinguished Professorship Award, UNF  
2010 Outstanding Service Plaque, 6<sup>th</sup> Code Camp Conference  
2009 Outstanding Service Plaque, IEEE Computer Society  
2005 Outstanding Service Plaque, IEEE Computer Society  
2003 Senior Member Plaque, IEEE Computer Society  
2001 Inaugural CSE Doctoral Award, University of Louisville

#### SYNERGISTIC ACTIVITIES

2011–present Program Evaluator, ABET  
2015–2017 Member, JAXUSA Economic Development Committee  
2014–present Member, JAX Chamber IT Council  
2013 Founder, UNF’s Interdisciplinary Program for Big Data Analytics (iPBA)  
2011–present Fellow, STEM Service-Learning, Florida Campus Compact (FL|CC)  
2007–2009 Research Mentor, Nephrology Fellowship Program, Uni. Of. Florida  
2004–2009 Chair, IEEE Computer Society, Jacksonville section

#### SCHOLARSHIP

##### Patents

1. R. Carlson, C. Clarkson, S. Elfayoumy, R. Mohan, U. Mohan and S. Mukundan, “System, Method, and Computer Program Product for Concept Based Searching and Analysis,” US Patent and Trademark Office, US Patent 7,788,251, 2010
2. S. Elfayoumy and R. Mohan, “A Method and Computer Program Product for Converting Ontologies into Concept Semantic Networks,” US Patent and Trademark Office, US Patent 7,676,485, 2010
3. R. Carlson, C. Clarkson, S. Elfayoumy, R. Mohan, U. Mohan and S. Mukundan, “System, Method, and Computer Program Product for Concept Based Searching and Analysis,” World Intellectual Property Organization, WO 2007/047252

### Book Chapters

4. E. Caliz, K. Umapathy, A. Sánchez-Ruíz, S. Elfayoumy, “Analyzing Web Service Choreography Specifications Using Colored Petri Nets,” Springer, Service-Oriented Perspectives in Design Science Research, Lecture Notes in Computer Science, V. 6629, 2011. ISBN: 3-6422-0633-6
5. S. Elfayoumy, C. Driesener, F. Lüttges, W. Dou, S. Lohrmann, D. Gutiérrez, N. Patel, A. McKeown, C. Olivieri, D. Walerysiak, E. Hertzberg, and E. Gegez, “Country Profiles From The Six Continents,” chapter 16, E-Marketing, 3<sup>rd</sup> Edition, Prentice Hall, 2002. ISBN: 0-1304-9757-6

### Journal and Conference Papers (Peer Referred)

6. P. de Jong, S. Elfayoumy and O. Schnusenberg, “From Returns to Tweets and Back: An Investigation of The Stocks in The Dow Jones Industrial Average,” *Journal of Behavioral Finance*, Vol. 18, No. 1, pp. 54-64, 2017
7. Z. Prodanoff, S. Elfayoumy, E. Jones, and H. Chi, “Survey of Security Challenges in NFC & RFID for E-Health Applications,” *International Journal of e-Health and Medical Communications*, Vol. 7, No. 2, pp. 1-13, 2016
8. S. Elfayoumy and S. Warden, “Adaptive Cache Replacement: A Novel Approach,” *Int’l J. of Advanced Computer Science and Applications*, Vol. 5, No. 7, pp. 149-154, 2014
9. S. Elfayoumy and J. Thoppil, “Improving Unstructured Text Summarization Using An Ensemble Approach,” *Journal on Computing*, Vol. 4, No. 1, pp. 33-39, 2014
10. S. Elfayoumy and J. Thoppil, “A Survey of Unstructured Text Summarization Techniques,” *International Journal of Advanced Computer Science and Applications*, Vol. 5, No. 4, pp. 105-111, 2014
11. S. Elfayoumy and N. Patel, “Parallel Data Loader and OLAP Operations,” proceedings of the 11th Int’l Conference on Information and Knowledge Engineering, pp.84-88, 2012
12. S. Elfayoumy and J. Patel, “Database Performance Monitoring and Tuning Using Intelligent Agent Assistants,” proceedings of the 11th International Conference on Information and Knowledge Engineering, pp.79-83, 2012
13. S. Elfayoumy and P. Bathen, “PQL: Protein Query Language,” proceedings of the 11<sup>th</sup> IEEE International Conference on Machine Learning and Applications, Bioinformatics and Health Informatics Workshop, pp. 127-132, 2012
14. S. Elfayoumy, “Using Intelligent Agents For Performance Tuning Of Big Data Parallel Applications,” proceedings of the 18<sup>th</sup> International Conference on Parallel and Distributed Processing Techniques and Applications, pp.794- 800, 2012
15. S. Elfayoumy and P. Bathen, “Protein Query Language: A Novel Approach,” proceedings of the 13<sup>th</sup> International Conf. on Bioinformatics and Computational Biology, 109-113, 2012
16. S. Ley and S. Elfayoumy, “Cross Dock Scheduling Using Genetic Algorithms,” proceedings of the 7<sup>th</sup> International Symposium on Computational Intelligence in Robotics and Automation, pp.416-420, 2007
17. Y. Yang and S. Elfayoumy, “Anti-Spam Filtering Using Neural Networks and Bayesian Classifiers,” proceedings of the 7<sup>th</sup> IEEE International Symposium on Computational Intelligence in Robotics and Automation, pp.272-278, 2007
18. S. Ahuja, S. Elfayoumy, and Y. Zhu, “EJB and CORBA: A Performance Evaluation,” proceedings of the 8th World Multi-conference on Systemics, Cybernetics and Informatics, pp.429-434, 2004
19. S. Ahuja, J. Mishra, and S. Elfayoumy, “An Empirical Assessment of Distributed Object Architectures,” proceedings of the Adv. Simulation Technologies Conf., pp.77-82, 2004
20. S. Elfayoumy, S. Jefson, and S. Ahuja, “A Distributed Multi-Agent Architecture Representing A Virtual Marketplace,” proceedings of the 19<sup>th</sup> International Conference on Computers and Their Applications, pp.321-324, 2004

21. S. Ahuja, R. Clark, and R. Eggen, and S. Elfayoumy, "Performance Assessment of Open Source Java Based CORBA ORBs: Middleware for Internet Applications," proceedings of the 5<sup>th</sup> International Conference on Internet Computing, pp.410-415, 2004
22. S. Elfayoumy, R. Shrivastava, and S. Ahuja, "A Web-Based Xml Editor," proceedings of the 5<sup>th</sup> International Conference on Internet Computing, pp.31-34, 2004
23. S. Warden, A. Sanchez, and S. Elfayoumy, "Toward a General Framework for Building Scientific Data Sharing Web Services," proceedings of the 2004 International Symposium on Web Services and Applications, pp.757-760, 2004
24. S. Elfayoumy, Y. Yang, and S. Ahuja, "Anti-Spam Filtering Using Neural Networks," proceedings of the 2004 International Conference on Machine Learning, Models, Technologies and Applications, pp.984-989, 2004
25. S. Piersall and S. Elfayoumy, "A Dynamic Load-Balancing Architecture for Processing A Stream of Images," Journal of the COCSE Symposium, 2003
26. S. Piersall and S. Elfayoumy, "Dynamic Load-Balancing of Image Processing Applications on Heterogeneous Networks of Workstations," proceedings of the IASTED Int'l Conference on Parallel and Distributed Computing Systems, pp.588-593, 2002
27. S. Piersall and S. Elfayoumy, "DYLAPSI: A Dynamic Load-Balancing Architecture for Image Processing Applications," proceedings of the ISCA 15<sup>th</sup> International Conference on Parallel and Distributed Computing Systems, pp.288-293, 2002
28. S. Elfayoumy and J. Graham, "An Agent-based Architecture for Performance Tuning: Parallel Discrete-event Simulation Case Study," proceedings of the ISCA 14<sup>th</sup> International Conference on Parallel and Distributed Computing Systems, pp.401-406, 2001
29. S. Elfayoumy, "An Agent-based Approach for High Performance Computing," proceedings of the 5<sup>th</sup> Conf. on Systemics, Cybernetics and Informatics, pp.348-353, 2001
30. S. Elfayoumy and J. Graham, "A Novel Software Architecture for Tuning Parallel and Distributed Applications Performance," proceedings of the ISCA 13<sup>th</sup> International Conference on Parallel and Distributed Computing Systems, pp.219-224, 2000
31. S. Elfayoumy and J. Graham, "High Performance Computing: An Agent-based Approach," proceedings of the 9<sup>th</sup> International Conference on Intelligent Systems, pp.61-65, 2000
32. S. Elfayoumy and J. Graham, "An Agent-based Architecture for Tuning Parallel and Distributed Applications Performance," proceedings of the 2<sup>nd</sup> International Workshop on Cluster-Based Computing, the 2000 ACM/SIGARCH International Conference on Supercomputing, pp.42-46, 2000
33. A. Elmaghraby, S. Elfayoumy, I. Karachiwala, J. Graham, A. Emam, and A. Sleem, "Web-based Performance Visualization of Distributed Discrete Event Simulation," proceedings of the Winter Simulation Conference, pp.1618-1623, 1999
34. J. Graham, A. Aly, S. Elfayoumy, K. Kamel, and A. Elmaghraby, "Evaluation of MPI-DSM Parallel Application for Networks of Heterogeneous Workstations," proceedings of ISCA 13<sup>th</sup> International Conference on Parallel and Distributed Computing Systems, pp.560-565, 1999
35. J. Graham, I. Karachiwala, A. Elmaghraby, and S. Elfayoumy, "Artificial Intelligence Approach for Visualization of Distributed Simulations," proceedings of the 8<sup>th</sup> International Conference on Intelligent Systems, pp.161-164, 1999

Journal Abstracts (Peer Refereed)

36. E. Ibrahim, S. Birchell, and S. Elfayoumy, "Automatic Heart Volume Measurement from CMR Images Using Ant Colony Optimization with Iterative Salient Isolated Thresholding," Journal of Cardiovascular Magnetic Resonance, Vol. 14, 2012
37. E. Ibrahim, S. Birchell, S. Elfayoumy, "Artificial intelligent technique for measuring heart volume from MRI images using iterative salient isolated threshold optimization ant algorithm (ISITOOA)," proceedings of the International Society for Magnetic Resonance in Medicine Annual Meeting, 2012

38. D. Mahmoud, R. Siam, S. Elfayoumy, M. Said, A. Hasanin, P. Demian, and B. House, "A Single Amino Acid Variation is Responsible for the Acquisition of an Exclusive Eighth Glycosylation Site in all Victoria-Like Influenza Type B Viruses Isolated From Egypt," *Journal of Molecular and Genetic Medicine*, 2011
39. D. Mahmoud, C. Demattos, C. DeMattos, S. Elfayoumy, R. Siam, "Molecular Characterization and Evolution of Influenza B Viruses in Egypt from 1999 to 2008," proceedings of the International Conference on Emerging Infectious Diseases, 2010
40. M. Salahuddin, H. Sakhamuri, S. Maddirala, S. Elfayoumy, P. Wludyka, K. Britt, C. Masnita-Iusan, C. Heilig, N. Nahman, "Comparison of Time to Bacteremia in HIV Infected Hemodialysis Patients from the 1996 and 2004 USRDS Datasets," *Journal of Investigative Medicine*, Vol. 58, No. 2, 2010
41. N. Nahman, H. Sakhamuri, S. Maddirala, S. Elfayoumy, P. Wludyka, K. Britt, C. Masnita-Iusan, "HIV Infected Hemodialysis Patients and the Risk of Bacteremia: Logistic Regression Analysis of the 1996 and 2004 USRDS Datasets," *Journal of American Society of Nephrology*, Vol. 20:197A, 2009
42. H. Sakhamuri, S. Maddirala, S. Elfayoumy, M. Htike, P. Wludyka, K. Britt, C. Masnita-Iusan, C. Heilig, N. S. Nahman Jr., "Bacteremia Rates in HIV Infected Hemodialysis Patients: A Comparative Analysis of 1996 and 2004 USRDS Datasets," *Journal of Investigative Medicine*, Vol. 57, No. 1, 2009
43. S. Maddirala, S. Elfayoumy, M. Htike, P. Wludyka, K. Britt, R. Mars, V. Urquidi, L. Lambiase, and N. Nahman Jr., "Predictors of Bacteremia in Hemodialysis Patients with HIV: Analysis of the USRDS 2004 Database," *Journal of American Society of Nephrology*, Vol. 19:288A, 2008
44. R. Sullivan, S. Elfayoumy, M. Htike, P. Wludyka, K. Britt, S. Maddirala, R. Mars, V. Urquidi, L. Lambiase, H. Sakhamuri, and N. Nahman Jr., "Risk Factors for Bacteremia in Dialysis Patients: Data Extraction from the 2004 USRDS Dataset," *Journal of American Society of Nephrology*, Vol. 19:287A, 2008
45. S. Maddirala, S. Elfayoumy, P. Wludyka, K. Britt, D. Bullock, S. Reddy, B. Cuhaci, R. Mars, G. Cu, V. Urquidi, L. Lambiase, and N. Nahman Jr., "Bacteremia in Patients with HIV and Hepatitis C: Analysis of the DMMS Study," *J. of Investigative Medicine*, Vol. 56, No. 1, 2008
46. R. Sullivan, S. Reddy, S. Elfayoumy, P. Wludyka, K. Britt, S. Maddirala, B. Cuhaci, R. Mars, G. Cu, V. Urquidi, L. Lambiase, and N.S. Nahman Jr., "Hepatitis C and Cirrhosis as Risk Factors for Bacteremia in Hemodialysis Patients," *Journal of Investigative Medicine*, Vol. 56, No. 1, 2008
47. S. Reddy, S. Elfayoumy, P. Wludyka, K. Britt, S. Maddirala, B. Cuhaci, R. Mars, G. Cu, H. Vu, V. Urquidi, L. Lambiase, and N.S. Nahman Jr., "Vascular Catheters and Hepatitis C in the Development of Bacteremia in ESRD Patients: Logistic Regression Analysis from the DMMS Study," *Journal of American Society of Nephrology*, Vol. 18:462A, 2007

#### SOFTWARE PRODUCTS

- S. Elfayoumy and O. Yilmaz, "Bedside Mobile Nephrology Information System," Software developed for Shands Health Sciences Center as part of the Division of Nephrology and Hypertension funded grant, 2007
- S. Elfayoumy and J. Thoppil, "HIPAA Viewer," Software developed for Mayo Clinic as part of the Mayo Clinic-Siemens funded grant, 2006

#### FUNDED GRANTS

- Senior Personnel, "A Big Data Innovation Hub for the South Region," NSF, award number: 1550305, amount: **\$1,056,682**, start date: October 1, 2015, end date: September 30, 2018.  
FUNDED

- Co-PI, “Infection and Hemodialysis Vascular Catheters Using United States Renal Data System,” University of Florida, amount: **\$4,300**, 2007. FUNDED
- PI, “Nephrology Information System (NIS),” Shands Health Sciences Center-Division of Nephrology and Hypertension, University of Florida, amount: \$36,000, 2005.FUNDED
- Co-PI, “Mayo-Siemens Research Grant,” Mayo Clinic, amount: **\$60,000**, 2005. FUNDED
- PI, “Using SAS Enterprise Miner™ to Teach Data Mining,” University of North Florida, amount: **\$5,000**, 2004. FUNDED
- PI, “Using Dynamic Agent Architectures to Improve the Performance of Parallel Applications,” University of North Florida, amount: **\$5,000**, 2002. FUNDED

#### UNFUNDED GRANT PROPOSALS

- Senior Personnel, “Graduate Education and Traineeship via Data Science for All,” NSF, amount: **\$2,958,307**, start date: January 1, 2019, end date: December 31, 2023
- Co-PI, “UNF Research-Focused Network for High Performance Computing,” NSF, amount: \$494,000, 2014
- PI, a proposal titled “Developing A Software Application For Measuring Heart Volume Using Iterative Salient Isolated Threshold Optimization Ant Algorithm (ISITOOA),” Auld and White Economic Endowment Venture Fund, amount: \$10,000
- PI, a proposal titled, “Community-University Partnership Network (Cup-Net),” UNF Foundation Board, amount: \$14,000
- Co-PI, a proposal entitled "An Adaptive Guide for Archives of Witness Testimony," NEH, amount: \$25,000
- Co-PI, a proposal entitled "Pattern Discovery in Archives of First-Person Reports," Department of Defense, amount: \$375,00
- Co-PI, a proposal entitled "An Adaptive Software Guide for the Analysis of Archives of Witness Testimony," Congressionally Directed Projects, amount: \$350,000
- Co-PI, “Risk Factors for Recurrent Bacteremia in Hemodialysis Patients in the USRDS,” Paul Teschan Research Fund, amount: \$25,625, 2009
- Co-PI, “An Open Source Distributed and Internet Systems Laboratory,” NSF, amount: \$48,000, 2004
- PI, “Knowledge Discovery in JEA’s Data Warehouse,” JEA, amount: \$50,000, 2004
- Co-PI, “A Distributed and Internet Systems Laboratory Emphasizing Security and Performance Evaluation,” NSF, amount: \$23,000, 2003
- Co-PI, “Teaching Systems Courses in an Open Source Laboratory with Emphasis on Performance Evaluation and Security,” submitted to the NSF, amount: \$30,000, 2002
- PI, “Introducing Data Mining to CIS Students and Identifying Its Applications to Local Industry,” University of North Florida Trustees, amount: \$10,000, 2000

#### MASTERS THESES SUPERVISED

1. Shannon Birchell, “Automatic Segmentation of Myocardial Tissue from Cine Magnetic Resonance Images of the Heart,” 2018
2. Larry Snedden, “Perspective-based Incident Report Similarity Ranking,” 2017
3. G. Lambert, “Security Analytics: Using Deep Learning to Detect Cyber Attacks,” 2017
4. Kevin Harper, “Challenging the Efficient Market Hypothesis with Dynamically Trained Artificial Neural Networks,” 2016
5. Ravishankar Sivasubramaniam, “Performance Evaluation of LINQ to HPC and Hadoop for Big Data,” 2013

6. Michael Pickering, "Defining Routing Policies in Peer-to-Peer Overlay Networks," 2011
7. Sean Warden, "Enhanced Cache Replacement Policy Using Multiple Algorithms," 2010
8. Jigisha Patel, "Database Performance Tuning Using Intelligent Agents," 2008
9. Swapna Mekala, "Social Network Analysis Application Using GATE," 2008
10. Devi Annisetty, "Unstructured Data Analysis Using UIMA Framework," 2007
11. Ye Li, "A College Enrollment Assistant System Using Data Mining Techniques," 2007
12. Jenny Thoppil, "A Multi-Algorithm Approach to Summarizing Unstructured Text," 2006
13. Olgu Yilmaz, "A Mobile Interface for the Nephrology Information System of Shands Hospital," 2005
14. Smita Chaganty, "Nephrology Information System," 2005
15. Nishant Patel, "Parallel Data Loader and OLAP Operations," 2005
16. Christopher McManigal, "Towards More Comprehensive Information Retrieval Systems: Entity Extraction Using XSLT," 2005
17. Thao Nguyen, "A Web-based Process Management System," 2005
18. Shayla Ley, "Cross Dock Scheduling Using Genetic Algorithms," 2004
19. Sharada Bobbali, "Ovarian Cancer Prediction Using Data Mining Techniques," 2004
20. Vilma Grinam, "A Data Mining Classifier for Network Intrusion Detection Using Neural Networks," 2003
21. Rahul Shrivastava, "A Web-based XML Editor," 2003
22. Yue Yang, "Anti-Spam Filtering Using Data Mining Techniques," 2003
23. S. Jefson, "A Distributed Multi-agent System Representing A Virtual Marketplace," 2002
24. Scott Piersall, "Dynamic Load-balancing of Image Processing Applications on Heterogeneous Networks of Workstations," 2001

#### UNIVERSITY SERVICE

##### University of North Florida

- Member, UNF's Campus Technology Committee, 2017-present
- Member, UNF's General Education Council, 2010-2017
- Member, UNF's Associate Provost Search Committee, 2013-2014
- Member, UNF's Associate Deans Council, 2013-2015
- Member, UNF's Distance Learning Council, 2013-2014
- Member, UNF's Quantitative Analysis Task Force, 2013-2015
- Member, UNF's Institutional Research Director Search Committee, 2016-2017
- Chair, STEM LLC, 2013-2015
- Member, UNF's Campus Technology Committee, 2013-present
- Member, UNF's University Technology Committee, 2013-present
- Member, UNF's Research Committee, 2012
- Member, United Faculty of Florida's Sabbatical Selection Committee, 2010-2012
- Chair, UNF's Outstanding Faculty Scholarship Selection Committee, 2010-2011
- Advisor, IEEE-Computer Society Students' Branch, 2006-2013
- Member, UNF's Interdisciplinary Council, 2008-2009
- Member, UNF's Middle East Council, 2008-2010
- Member, UNF's Nominations and Elections Committee, 2004-2005

##### College of Computing, Engineering and Construction

- Chair, CCEC's Technical Support Services Committee, 2012-2015
- Member, CCEC's Dean Search Committee, 2008-2009
- Member, CCEC's Outstanding Undergraduate Teaching Selection Committee, 2010-2011
- Member, CCEC's Outstanding Graduate Teaching Selection Committee, 2007-2008, and 2010-2011
- Member, CCEC's Technical Support Services Committee, 2003-2004, and 2004-2005

- Member, CCEC's Outstanding Undergraduate Award Selection Committee, 2003
- Reviewer, first, second, and third CCEC Symposium and Carrier Showcase

#### School of Computing

- Chair, SoC's Instructor/Advisor Search Committee, 2014
- Chair, SoC's Computing Resources Committee, 2003-2005 and 2011-2015
- Chair, SoC Computer Systems Control Coordinator's Search Committee, 2004
- Member, SoC Director's Advisor Committee, 2011-2014
- Member, SoC's Graduate Committee, 2007-2015
- Member, SoC's Third Year P&T Appraisal Committee, 2010-2011
- Member, SoC's Promotion and Tenure Committee, 2008-2010
- Member, SoC's Graduate Director Search, 2007
- Member, SoC's Faculty Search Committee, 2001-2002 and 2002-2003
- Member, SoC's Computing Resources Committee, 2000-2003 and 2009-2010
- Member, SoC's Scholarship Selection Committee, 2001-2002, 2002-2003, 2003-2004, 2004-2005, and 2010-2011
- Member, SoC's Suspension Committee, 2011-2012
- Member, SoC's Symposium Committee, 2011-2015

#### PROFESSIONAL SERVICE

- Chair, IEEE Computer Society, Jacksonville Section, 2004-2010
- Secretary, IEEE, Jacksonville Section, 2006-2010
- Co-organizer, the 649<sup>th</sup> SQL Saturday, Jacksonville, FL, 2008-2018
- Co-organizer, the 8<sup>th</sup> Annual Jacksonville Code Camp, Jacksonville, FL, 2009-2012
- Member, Program Committee, the 24<sup>th</sup> International Conference on Computers and Their Applications (CATA 2009), New Orleans, LA, 2009
- Member, Program Committee, the 17<sup>th</sup> International Conference on Software Engineering and Data Engineering, Los Angeles, CA, 2008
- Member of the International Program Committee of the 16<sup>th</sup> International Conference on Software Engineering and Data Engineering, Las Vegas, NV, 2007
- Member, Program and Organizing Committee, 2004 International Conference on Parallel and Distributed Processing Techniques and Applications, 2004
- Member, Program and Organizing Committee, International Conference on Information and Knowledge Engineering, 2004
- Member, Program and Organizing Committee, International Conference on Machine Learning: Models, Technologies and Applications, 2004
- Session chair, "Biologically Inspired Robotics," the 7<sup>th</sup> IEEE International Symposium on Computational Intelligence in Robotics and Automation, Jacksonville, FL, 2007
- Session chair, "Genetic Algorithms," the 7<sup>th</sup> IEEE International Symposium on Computational Intelligence in Robotics and Automation, Jacksonville, FL, 2007
- Session chair, "Multimedia Systems, DSP, and Image Processing Techniques," Parallel and Distributed Computing Systems Conference, Louisville, KY, 2002
- Session chair, "Java Applications," Winter Simulation Conference, Orlando, FL, 2000
- Reviewer, ISCA 24<sup>th</sup> Int'l Conf. on Computers and Their Applications, CATA 2009
- Reviewer, Elsevier's Journal of Network and Computer Applications
- Reviewer, Elsevier's Journal of Systems and Software
- Reviewer, Springer's Journal of Supercomputing
- Reviewer, the Computer Journal, Oxford University Press
- Reviewer, for the 8<sup>th</sup> World Multi-conference on Systemics, Cybernetics, and Informatics
- Reviewer, International Conference on Parallel and Distributed Computing Systems (PDCS), by the International Society for Computers and Their Applications (ISCA)

- Reviewer, International Conference on Parallel and Distributed Computing Systems (PDCS), by the International Association of Science and Technology for Development
- Organizer, many technical sessions for the IEEE Computer Society
- Participant, the Teacher In Service Training Program (TISP). The program was designed to explore ways of promoting Science and Engineering amongst high school students through reaching out to science teachers.
- Session chair, “Multimedia Systems, DSP, and Image Processing Techniques”, Parallel and Distributed Computing Systems Conference, Louisville, KY, 2002
- Session chair, “Java Applications”, Winter Simulation Conference, Orlando, FL, 2000

#### INTERNATIONAL PROFESSIONAL SERVICE

- Member, Technical Program Committee and Reviewer, International Conference on Data Analytics, Rome, Italy, 2014
- Member, Technical Program Committee and Reviewer, International Conference on Data Analytics, Porto, Portugal, 2013
- Reviewer, International Conference and workshop on Current Trends in Information Technology (CTIT’13), Dubai, UAE, 2013
- Member, Technical Program Committee and Reviewer, International Conference on Data Analytics, Barcelona, Spain, 2012
- Consultant, United Nations Development Program (UNDP), Egypt, 2010
- Member, Board of Experts for Innovation, Information Technology Institute (ITI), 2010
- Member, Advisory Board of The Center of Excellence in Cloud Computing, Information Technology Institute, Egypt, 2010
- Reviewer, International Conference and workshop on Current Trends in Information Technology (CTIT’11), Dubai, UAE, 2011
- Reviewer, IEEE Conference on Automation Science and Engineering, Bangalore, India, 2009
- Reviewer, International Conference and workshop on Current Trends in Information Technology (CTIT’09), Dubai, UAE, 2009
- Member, Program Committee, International Conference and workshop on Current Trends in Information Technology (CTIT’11), Dubai, UAE, 2011