A SAMPLE OF PROFESSIONAL ACTIVITIES

- Establishing and designing the web-based electronic assessment system for performing assessment of the undergraduate engineering programs at UB, in addition to providing the system to other UB schools as a standard platform for performing program assessment of objectives and student outcomes. The e-assessment system has been fully developed, implemented and coded at the School of Engineering.
- Participated in drafting the workshop report and presentation on the future of engineering education in Egypt. The Egyptian engineering sector council conference, Cairo, Egypt, October 2009.
- Founding and managing the Weekend Masters program in Computer Science at the Stamford campus of UB.
- Participating in restructuring and developing the new curriculum and requirements for the Masters of Science programs in Computer Science, Computer Engineering, Mechanical Engineering, Technology Management and Bio-Medical Engineering at the University of Bridgeport.
- Establishing the electronic content project at the School of Engineering for storing all course materials for all the classes offered by the School.
- Developing a concentration track (and class sequence) in Robotics and Automation for the Masters of Science programs in Computer Science and Computer Engineering, at the Department of Computer Science and Engineering, University of Bridgeport.
- Initiating the efforts to establish 2 internet-based M.S. programs in Computer Science and Technology Management as distance-learning degrees at the University of Bridgeport.
- Developing Web-based control of robotic manipulators at the University of Bridgeport as a tool for distance learning (regular degree and certificate programs) and continuing education classes to be offered.
 The tele-operated robot global control allows the introduction of laboratory-based classes like control, robotics, and automation into a distance-learning curriculum.
- Creating the interdisciplinary laboratory: "Robotics, Intelligent Sensing, and Control (RISC)," at the Department of Computer Science and Engineering, University of Bridgeport.
- Starting up development activities for a number of projects with commercial potential, with the eventual goal of marketing the product or service. The projects include: controller/simulator/monitor software package and prototyping systems for manipulators, the reverse engineering and inspection center, the graphical objects software package, a tire-changing robotic manipulator, reverse engineering applications in dentistry, a class scheduling tool, and several others.
- Initiating and starting up continuing technical education classes (on and off-site) at the Department of Computer Science and Engineering, University of Bridgeport, for industry professionals. Classes included: "Electronic Printing and Postscript," "Digital System Design Using VHDL," "JAVA Programming," "Object Oriented Programming Using C++ and Visual C++," "Networks Basics," and "Factory Automation and Robotics in Industrial Applications".
- Leading the efforts to define a vision statement, mission, goals, objectives and a strategic plan for Engineering at the University of Bridgeport.
- Leading the efforts to assess the technology and computing needs at the University of Bridgeport and formulating a technology Master plan, currently adopted by the University.
- Established a technical report series for the University of Bridgeport.
- Starting up a joint project with the Polytechnic University (New York), Civil and Environmental Engineering Department, on Robotics and Automation in Support of Construction Engineering Research (Basic and Applied).
- Developing funding programs, research and development cooperation activities, donations, co-op and internships programs with many companies and industries.
- Establishing Student recruiting and joint research and development activities with the cultural missions of the embassies of Turkey, Oman, Qatar, Bahrain, Saudi Arabia, Kuwait, United Arab Emirates, Egypt, Jordan, China and Libya.
- Work on developing international sites for the University of Bridgeport in Dubai (United Arab Emirates), Saudi Arabia, India, Egypt, Jordan, China and Libya for "assisted" distance learning, 2 plus 2 programs and graduate distance learning (Computer Science and Technology Management).

- Developing a Ph.D. Program in Computer Science and Computer Engineering at the Department of Computer Science and Engineering, University of Bridgeport.
- Cooperating with the APIC Group, Egypt, and the Swiss Manufacturing Precision Company, Switzerland, to construct a center for precise inspection and CAD model recovery from range data.
- Organizing a workshop (by invitation) on discrete event and hybrid systems for the IEEE International Conference on Robotics and Automation, Albuquerque, New Mexico, April 1997.
- Organizing a workshop (by invitation) on prototyping design and automation for the IEEE International Conference on Robotics and Automation, San Francisco, California, April 2000.
- Starting up "Misr Net," an Internet on-line service provider company, based in Cairo, Egypt.
- Developing the Utah Robotics Kit and Prototyping Environment, currently being used in Mechanical Engineering, Computer Engineering, and Computer Science classes and projects in Robotics, Automation, Control Theory, Systems Programming, Software Engineering, and Microprocessors.
- Leading the efforts to develop the commercial version of the Utah Robotic Kit (URK).
- Specifying a system for assisting brain surgery by localizing the 3-D position of the surgical instrument, Department of Surgery, University of Utah Hospital.
- Active Participation in the Following K-12 School Programs:

Gear-Up

Upward Bound

Project Lead the Way (PLTW)

ConnCAP

CPEP (Connecticut Pre-Engineering Program)

CPEP Day

Inroads

NACME

Science Fair – Yale University

Bridgeport School District Science Fair

LEGO League, First LEGO

- Presented weekend robotics seminars for Pre-Engineering Bridgeport Public High School students (ConnCAP Program).
- Consortium Member, European Union, Tempus Program, "Development of an Educational Web-Based Trans-National Laboratory Network".
- Organized the first Connecticut Engineering Deans Meeting at the University of Bridgeport: "Engineering Deans and Business Leaders", December 2004. Members of the School of Engineering Industry Advisory Board, the Engineering Deans of the other Universities in Connecticut, the Governor representatives and various Connecticut industries met at the University of Bridgeport to discuss and formalize plans for collaboration between the involved company representatives, Universities and the school districts that the Universities work with (in the areas of science, engineering, technology, math and computing education,)
- Developing articulation agreements with more than twenty universities in India, China, Taiwan, Egypt, England, Jordan, United Arab Emirates, Pakistan and Libya for joint programming, 2+2 programs, 4+1 programs, faculty exchange and other joint ventures.
- Reviewer for many Journals and Conferences on AI, Computer Vision, Robotics, Control and Automation.
- Reviewer for IEEE and ACM Multimedia Journals and Conferences.
- Reviewer for IEEE Press Books.
- Reviewer for the Encyclopedia of Life Support Systems (EOLSS).
- Surveyed the Discrete Event Dynamic Systems (DEDS) area for the IEEE Robotics and Automation Society Technical Committee on DEDS.
- Working with the Consulting Office for Integrated Systems (COINS) and the International Traders Group, Ltd. in defining a system for rapid prototyping for manufacturing and automation applications.
- Tau Beta Beta Utah Chapter (Utah Alpha) Advisor.
- Coordinating with the Science and Technology Satellite News agency in New York to broadcast a program on the Utah Robot Kit (URK) development.
- Reviewer for the quarterly Journal Digest of Middle East Studies (DOMES).
- Participant as an advisor in the undergraduate research opportunities program (UROP) at the University of Utah.

Participant in the Faculty mentoring program at the University of Utah to help incoming freshmen.

PROFESSIONAL MEMBERSHIPS

- Senior Member of the Institute of Electrical and Electronics Engineers (IEEE), 1988-1991 (Student Member), 1991-1997 (Member), 1997-present (Senior Member).
- Senior Member of the Society of Manufacturing Engineers (SME), 1996-present.
- Senior Member of the American Society of Quality Control (ASQC), 1995-1997 (Member), 1997-present (Senior Member).
- Founding Member, Society for Industrial Computing.
- Member of the Association for Computing Machinery (ACM), 1988-present.
- Member of the IEEE Computer Society, 1988-present.
- Member of the IEEE Robotics and Automation Society, 1988-present.
- Member of the IEEE Computer Society Technical Committee on Pattern Analysis and Machine Intelligence (PAMI).
- Member, the IEEE Control Systems Society (CSS) Computer-Aided Control Systems Design (CACSD) Technical Committee (TC) for investigating emerging languages, algorithms, tools, standards and processes to support industrial control systems engineering.
- Member of the Arab Science and Technology Foundation (ASTF), 2005-present.
- Member of the Association of Egyptian American Scholars, 2005-present.
- Member of the International Society for Optical Engineering (SPIE), 1988-present.

LICENSES AND CERTIFICATIONS

- Licensed Professional Electrical Engineer, State of Utah. License Number 190683, since February 1994. Passed the Engineer-in-training Examination in April 1993, the Professional Electrical Engineering Examination in October 1993 and the Utah Engineering Law Examination in February 1994.
- Certified Professional Manager, Institute of Certified Professional Managers, James Madison University. Passed the personal, interpersonal, and administrative skills examinations in May 1996. Certification Number 06391.
- Certified Reliability Engineer, American Society of Quality Control. Passed the C.R.E. Examination in October 1996. Certification Number 4320.
- Certified Manufacturing Engineer, Society of Manufacturing Engineers. Passed the CMfgE Examination in January 1997. Certification Number 4100224.
- Licensed Engineer, Egyptian Engineers Association.
- Certificate of License, Alexandria Engineering Organization.

A Sample of University Committee Memberships:

- Committee member, Charles E. Reed Scholarship Award selection committee, University of Bridgeport, 1996, 1997 and 1998.
- Committee member, University of Bridgeport NEASC Self-Study Committee on University Planning and Evaluation, 1997-1998, and 2001-present.
- Committee member, Internship Program Director Search Committee, University of Bridgeport, 1997.
- Committee member, School of Engineering Committee on the Industry Advisory Board development, 1996-1998.
- Committee member, School of Engineering Distinguished Teacher Award Committee, 1998.
- Committee member, UB NEASC outcomes assessment committee, 1999-2000.
- Member, University of Bridgeport Graduate Academic Standards Committee, 1999-2000.
- Committee Member, Computer Science and Engineering Faculty Hiring Committee, 1996-1999.
- Committee Member, Mechanical Engineering Faculty Hiring Committee, 1999.
- Committee Member, School of Engineering Merit Pay Committee, 1998-1999.
- Member, University of Bridgeport Core Curriculum Commission, 1998-2000.

- Member, School of Professional and Continuing Education Dean Search Committee, 5 10/2001.
- Member, School of Arts and Sciences Dean Search Committee 2 − 12/2002.
- Member, University Senate (Senator), 1999-present.
- Member, University Senate Standing Committee on Development, 2002-present.
- Member, Provost Council, 2000-present.
- Member, Undergraduate Education Council, 2002-present.
- Member, University Planning Council, 2001-present.
- Member, President Advisory Council, 2000-present.
- Member, University Planning Review Board, 2002-present.
- Chair, University Technology Task Force, 2002-present.
- Member, UB Development Committee, 2004 2005.
- Search Committee Member, UB Director of Career Services, 2005.
- Search Committee Member, UB, Associate Dean, School of Business, 2005
- Committee Member, UB, Internationalization Committee, 2006 present
- Search Committee Chair, UB, Dean, School of Business, 2006.
- Member, University Faculty Research Council, 2007 present.
- Chair, University Graduate Council, 2007 present.
- Member, University Intellectual Property Board, 2008 present.
- Member, University of Bridgeport/CT Innovations Business Incubator Board, 2008 present.
- Member, President's Cabinet, 2008 present.
- Member, University Senate Executive Committee, 2009 present.

Recent Editorial Duties and Appointments:

- Editorial Board Member, JEA Journal of Electrical Engineering (JEAJEE), since August 2010.
- Editorial Board Member, Journal of Advanced Research ElSevier, since February 2010.
- Associate Editor-in-Chief International Journal of Engineering Computer Science Journals, since November 2009.
- Associate Editor Journal of Online Engineering Education since October 2009
- Editorial Board Member The Journal of Global Development and Peace since 2008
- Editorial Board Member "Journal of Robotics", since 2008
- Editorial Review Board Scientific Journals International since July 2007
- Associate Editor, International Journal of Advanced Robotic Systems, since January 2007.
- Editorial Board Member International Journal of Online Engineering, since June 2006.
- Editorial Board Member Advances in Computer Science and Engineering, since December 2006.
- Member, Editorial Board, Journal of Computing, since 2002.
- Associate Editor of the International Journal of Science and Technology since 2000.
- Research Editor of the Journal Industrial Robot, published by MCB University Press, since January 1999.
- International Editorial Council Member of the Encyclopedia of Life Support Systems (EOLSS), since 1996.
- Guest Editor, Special issue of the International Journal of Online Engineering, Summer 2009.
- Guest Editor, Special Edition of the "Journal of New Mathematics and Natural Computing", November 2007.
- Editor, Special Issue of the International Journal of Robotics Automation on Web-based Automation, January 2002.
- Editor, Special Issue of the Information Science Journal on Intelligent Learning and Control of Robots in Unstructured Environments, Spring 2001.
- Editor, Special Issue of the IEEE Robotics and Automation Magazine on New trends in Prototyping for Robotics and Automation, Fall 2000.
- Editor, Special Issue of the International Journal of Science and Technology on CAD/CAM and CIM, Winter 1997.
- Editor, Special Issue of the International Journal of Science and Technology on Automation and Robotics, Fall 1996.

- Editor, Special Issue of the IEEE Robotics and Automation Magazine on Applications of Discrete Event and Hybrid Control Systems in Robotics and Automation, Fall 1996.
- Editor, Special Issue of the Journal of Robotics and Autonomous Systems on Discrete Event Dynamic Systems in Robotics and Automation, June 1994.

Recent Conferences, Symposia, Workshops, Panels and Sessions Duties:

- Member, International Program Committee (IPC). IASTED International Conference on Control and Applications (CA 2011), Vancouver, Canada, June 2011.
- General Chair, IASTED International Conference on Robotics and Applications (RA 2010), Cambridge, Massachusetts, November 2010.
- Member, International Program Committee (IPC), International Association of Science and Technology for Development (IASTED) conferences. IASTED International Conference on Robotics and Control (AsiaRC 2010), Bangkok, Thailand, November 2010.
- Member, International Program Committee (IPC), International Association of Science and Technology for Development (IASTED) conferences. IASTED International Conference on Robotics and Applications (RA 2010), Cambridge, Massachusetts, November 2010.
- Member, International Program Committee, IEEE Conference on Systems, Man and Cybernetics (SMC 2010), Istanbul, Turkey, October 2010.
- Organizer / Host, National Society of Black Engineers (NSBE) regional conference, Bridgeport, Connecticut, August 2010.
- Member, International Advisory Committee, 5th International Conference on Interactive Mobile and Computer Aided Learning (IMCL 2010), Sousse, Tunisia, July 2010.
- Member, International Program Committee (IPC), International Association of Science and Technology for Development (IASTED) conferences. IASTED International Conference on Control and Applications (CA 2010), Banff, Canada, July, 2010.
- North American Liaison, Seventh International Conference on Remote Engineering and Virtual Instrumentation (REV 2010), Stockholm, Sweden, June 2010.
- International Program Committee Member, International Association of Science and Technology for Development (IASTED) conference, *International Conference on ACIT Control, Diagnostics and Automation, (ACIT-CDA 2009)*, Novosibirsk, Russia, June 2010.
- General Chair, International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 2009), December 2009.
- International Program Committee Member, International Association of Science and Technology for Development (IASTED) conference, *International Conference on Robotics and Applications*, (RA 2009), Cambridge, Cambridge, Massachusetts, November, 2009.
- International Program Committee Member, International Association of Science and Technology for Development (IASTED) conference, *International Conference on Robotics, Telematics and Applications*, (RTA 2009), Beijing, China, October, 2009.
- International Program Committee Member, International Association of Science and Technology for Development (IASTED) conference, *International Conference on Identification, Control and Applications*, (ICA2009), Honolulu, Hawaii, August, 2009.
- International Program Committee Member, International Association of Science and Technology for Development (IASTED) conference, *International Conference on Control and Applications*, (CA2009), Cambridge, United Kingdom, July 2009.
- Chair, International Conference on Remote Engineering and Virtual Instrumentation, (REV2009), University of Bridgeport, CT, June, 2009.
- Program Committee Member, *International Conference on Advanced Robotics* (ICAR2009), Munich, Germany, June 2009.
- Chair, *American Society for Engineering Education*, (ASEE2009), Northeast Section Conference, University of Bridgeport, CT, April 2009.
- Technical Program Committee Member, *Robocomm* 2009, International Conference on Robot Communication and Coordination, Odense, Denmark, March 2009.

- Technical Committee Member, *IEEE International Conference on Computer, Control and Communication (IEEE-IC4, 2009)*, National University of Sciences and Technology (NUST) and The Genesis of Pakistan Marine Engineering College (PNET), Karachi, Pakistan, February, 2009.
- Technical Committee member, *Remote Engineering and Virtual Instrumentation 2008 (REV2008) International Symposium*, University of Applied Sciences, Dusseldorf, Germany, 2008.
- Member, International Program Committee (IPC), International Association of Science and Technology for Development (IASTED) conference. IASTED International Conference on Control and Applications (CA 2008), Quebec, Canada, 2008.
- General Chair, International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 2008), December 2008.
- Technical Committee Member, 2008 IEEE International Conference on Systems, Man and Cybernetics (SMC2008), Singapore, October 2008.
- International Program Committee Member, *eLearning and eResearch Conference*, 5th Congress of Scientific Research Outlook in the Arab World: Scientific Innovation and Sustained Development, Arab Science and Technology Foundation (ASTF), Fez, Morocco, October 2008.
- Technical Program Committee Member, 10th IBIMA Conference, *Innovation and Knowledge Management*, Kuala Lumpur, Malaysia, June 2008.
- International Advisory Board Member, *Third International Conference on "Interactive Mobile and Computer Aided Learning (IMCL 2008)*, Princess Sumaya University for Technology, Amman, Jordan, April 2008.
- Member, Conference Organizing Committee, ASEE Zone 1 Meeting, West Point, NY, March 2008.
- Chair, Session on Robotics and Automation, ASEE Zone 1 Meeting, West Point, NY, March 2008.
- Member, Student Paper Competition Committee, ASEE Zone 1 Meeting, West Point, NY, March 2008.
- Judge, Student Poster Committee, ASEE Zone 1 Meeting, West Point, NY, March 2008.
- Technical Committee Member, *International Business Information Management Association*, (*IBIMA*), 9th Annual Conference, Marrakech, Morocco, January 2008.
- General Chair, Third International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 2007), December 2007.
- Technical Committee Member, *The First International Conference on Computer, Control & Communication*, Karachi, Pakistan, November, 2007
- International Advisory Committee Member, *The First International Conference on Computer, Control & Communication*, Karachi, Pakistan, November, 2007
- International Program Committee Member, *IEEE International conference on Systems, Man and Cybernetics* (SME 2007), Montreal, Canada, October 2007.
- International Program Committee Member, *Intelligent Data Acquisition and Advanced Computing Systems* (IDAACS 2007), Dortmund, Germany, September 2007.
- International Program Committee Member, *International Conference on Robotics and Applications*, (RA 2007), Wuerzburg, Germany, August 2007.
- International Program Committee Member, European Control Conference (ECC), Kos, Greece, July 2007.
- International Program Committee Member, *International REV (Remote Engineering and Virtual Instrumentation) Conference*, North American Liaison, Portugal, June 2007.
- Technical Committee Member, ASEE Regional Conference, URI, 2007.
- Member, Conference Organizing Committee, *ASEE New England Annual Conference*, University of Rhone Island, 2007.
- Judge, Student Poster Committee, ASEE New England Annual Conference, University of Rhone Island, 2007.
- Chair, Session on Robotics and Automation, *ASEE New England Annual Conference*, University of Rhone Island, 2007.
- Member, Student Paper Competition Committee, ASEE New England Annual Conference, University of Rhone Island, 2007.
- Session Chair, *International Conference on Interactive Computer-Aided Blended Learning*, Florianopolis, Brazil, May, 2007.

- Moderator, panel discussion, *International Conference on Interactive Computer-Aided Blended Learning*, "Social Web and E-Learning", Florianopolis, Brazil, May, 2007.
- Technical Committee Member, *International Conference on Interactive Computer-Aided Blended Learning*, Florianopolis, Brazil, May, 2007.
- International Program Committee Member, International Conference on Control and Applications, (CA 2007), Montreal, Canada, May 2007.
- International Program Committee Member, International Conference on Interactive Mobile and Computer Aided Learning, Amman, Jordan, April 2007.
- North American Liaison, *International Conference on Remote Engineering and Virtual Instrumentation*, (REV2007), Porto, Portugal.
- International Advisory Board Member, *International Conference on "Interactive Mobile and Computer Aided Learning (IMCL 2007)*, Princess Sumaya University for Technology, Amman, Jordan, 2007.
- General Chair, Second International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 2006), December 2006 (http://www.cisse2006.org).
- International Program Committee Member, *IEEE International Conference on Systems, Man and Cybernetics* (SMC 2006), Taiwan, October 2006.
- International Program Committee Member, *IASTED International Conference on Robotics and Applications* (RA 2006), Honolulu, Hawaii, August 2006.
- Technical Program Committee Member, *Remote Engineering and Virtual Instrumentation (2006 REV) International Symposium*, Slovenia, June 2006.
- Moderator, Panel on Bologna Process: "Changes in Education Remote Engineering", Slovenia, June 2006.
- Technical Committee Member, ASEE Regional Conference, WPI, 2006.
- Session Chair, *The American Society for Engineering Education (ASEE) New England Section Conference*, Worcester Polytechnic Institute, chaired the session on "Automation", March 2006.
- Judge for Student Poster presentations, *The American Society for Engineering Education (ASEE) New England Section Conference*, Worcester Polytechnic Institute, March 2006.
- General Chair, International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 2005), December 2005.
- Technical Program Committee Member, The International Association of Science and Technology for Development (IASTED) Robotics and Applications RA2005, Cambridge, MA, November 2005.
- International Program Committee Member, *IEEE International Conference on Systems, Man and Cybernetics* (SMC 2005), Hawaii, 2005.
- Panel participant, *University of Bridgeport International College, panel on "Israel and Palestine Looking Ahead 25 Years*", October 2005.
- Session Chair, *IEEE International Symposium on Industrial Electronics, session on "Autonomous Mobile Robots"*, Croatia, June 2005.
- Session Chair, The International Association of Science and Technology for Development (IASTED)
 International Conference on Controls and Applications, Robotics Session, CA 2005, Cancun, Mexico, May 2005.
- Technical Committee Member, ASEE Regional Conference, Fairfield, CT, 2005.
- Session Chair, *ASEE 2006 Regional Conference*, "Industrial Automation and Manufacturing" Session, Fairfield, CT, March 2005.
- Presented workshop on "Electronic Assessment", Assessment Conference Fall Forum, *The New England Educational Assessment Network (NEEAN) and New England Association of Schools and Colleges (NEASC)*, Fall Forum, Bentley College, November 2004.
- Technical program committee, *IEEE International Conference on Robotics and Automation (ICRA 2004)*, New Orleans, LA, May 2004.
- Member, Technical Committee, Second International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS 2003), Foros, Crimea, Ukraine, July 2003.
- Technical program committee, 2003 World Multiconference on Systemics, Cybernetics and Informatics (SCI), Orlando, Florida, July 2003.

- Program committee, *The 7th International Conference on Automation Technology (Automation 2003)*, Taipei, Taiwan, May 2003.
- Technical program committee, 2002 World Multiconference on Systemics, Cybernetics and Informatics (SCI), Orlando, Florida, July 2002.
- Invited session organizer, for the 2002 World Multiconference on Systemics, Cybernetics and Informatics, Orlando, Florida, July 2002.
- Co-Chair, 9th International Symposium on Robotics and Applications, ISORA 2002, Orlando, Florida, June 2002.
- Invited session chair, the 2002 IEEE International Conference on Robotics and Automation session on Inspection, Washington, D.C., May 2002.
- Technical program committee, IEEE International Conference on Robotics and Automation (ICRA 2002), Washington, D.C., May 2002.
- International Technical Committee, *International Congress on Autonomous Intelligent Systems (ICAIS)*, Melbourne, Australia, March 2002.
- General Chair and Chair of the International Organizing Committee, *International Conference on Industrial Electronics, Technology and Automation (IETA 2001)*, Cairo, Egypt, December 2001.
- Plenary Session Chair, the *International Conference on Industrial Electronics, Technology and Automation (IETA 2001)*, Cairo, Egypt, December 2001.
- Session Chair, *Frontiers in Education Conference (FIE 2001)*, Session on Web Classroom Technology, Reno, Nevada, October 2001.
- Technical program committee, AMSE International Conference on Science, Technology and Entrepreneurship, Dearborn, Michigan, October 2001.
- Organizing committee member, AMSE International Conference on Science, Technology and Entrepreneurship, Dearborn, Michigan, October 2001.
- International Program Committee, World Manufacturing Congress (WMC 2001), Rochester, New York, September 2001.
- International Program Committee, WSES (World Scientific Engineering Society) International Conference on: Robotics, Distance Learning and Intelligent Communication Systems 2001, Malta, September 2001.
- Member, Technical Committee, First International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS 2001), Foros, Crimea, Ukraine, July 2001.
- Technical program committee, 2001 World Multiconference on Systemics, Cybernetics and Informatics (SCI), Orlando, Florida, July 2001.
- Technical program committee, European Workshop on Service and Humanoid Robots (SERVICEROB-2001), Santorini, Greece, June 2001.
- Technical program committee, *IEEE International Conference on Robotics and Automation (ICRA 2001)*, Seoul, Korea, April 2001.
- Technical program committee, *International Conference on Intelligent Automated Manufacturing (IAM 2001)*, American University in Dubai, Dubai, United Arab Emirates, March 2001.
- Technical program committee, *International Conference on Engineering of Natural and Artificial Intelligent Systems (ENAIS 2001)*, American University in Dubai, Dubai, United Arab Emirates, March 2001.
- Invited session/workshop organizer, for the *International Congress on Information Science Innovations* (ISI 2001), American University in Dubai, Dubai, United Arab Emirates, March 2001.
- Invited paper submission for the 2nd International Conference on Earth Observation and Environmental Information (EOEI 2000), Cairo, Egypt, November 2000.
- Invited session organizer (Robotics, Automation and Prototyping) for the *AMSE International Conference* on Science, Technology and Entrepreneurship, Washington, D.C., October 2000.
- Invited paper submission for the 2002 IEEE International Symposium on Intelligent Control (ISIC 2002), Vancouver, British Columbia, Canada, October, 2000.
- Invited Panel member on graduate education and opportunities for graduate students; *AMSE International Conference on Science, Technology and Entrepreneurship*, Washington, D.C., October 2000.
- Technical program committee, AMSE International Conference on Science, Technology and Entrepreneurship, Washington, D.C., October 2000.

- Organizing committee member, AMSE International Conference on Science, Technology and Entrepreneurship, Washington, D.C., October 2000.
- Invited session organizer, for the 2000 World Multiconference on Systemics, Cybernetics and Informatics, Orlando, Florida, July 2000.
- Session Chair, the 8th International Symposium on Robotics and Automation (ISORA 2000), session on Techniques and Applications in Service Robotics, Maui, Hawaii, May 2000.
- Invited Symposium Chair and Organizer, "New Trends in Prototyping Design and Automation," *IEEE International Conference on Robotics and Automation*, San Francisco, California, April 2000.
- Technical program committee, *IEEE International Conference on Robotics and Automation (ICRA 2000)*, San Francisco, California, April 2000.
- Program Committee, 23rd International Conference of the IEEE Industrial Electronics Society (IECON 2000).
- Technical program committee, AMSE International Conference on Science, Technology and Entrepreneurship, Washington, D.C., October 1999.
- Session Chair, the 1999 AMSE International Conference on Science, Technology and Entrepreneurship, Washington, D.C., Session on Mechanical Engineering, October, 1999.
- International Program Committee, *International Symposium on Manufacturing Systems (ISMS 99)*, Sunderland and Newcastle-upon Tyne, U.K., September 1999.
- International Program Committee, *International Symposium on Manufacturing Technology (ISMT 99)*, Sunderland and Newcastle-upon Tyne, U.K., September 1999.
- Invited paper submission for the 1999 European Control Conference (ECC), Karlsruhe, Germany, September 1999.
- Technical program committee, Fifth Information Systems Analysis and Synthesis Conference (ISAS 99), Orlando, Florida, July 1999.
- Session Chair, the *Third International Conference on Industrial Automation session on Robotics*, Montreal, Canada, June 1999.
- Session Chair, the 1999 *IEEE International Conference on Robotics and Automation session on Calibration and Tolerances*, Detroit, Michigan, May 1999.
- Session Chair, the 1999 IEEE International Conference on Robotics and Automation session on Flexible Manipulators II, Detroit, Michigan, May 1999.
- Session Chair, the 1999 *IEEE* 2nd *International Conference on Recent Advances in Mechatronics (ICRAM 99)*, Istanbul, Turkey. Session on Analysis of Mechatronic Systems, May, 1999.
- Technical program committee, *IEEE International Conference on Robotics and Automation (ICRA 1999)*, Detroit, Michigan, May 1999.
- Invited paper submission for the 1999 IEEE International Conference on Robotics and Automation (ICRA 99), Detroit, Michigan, May 1999.
- Invited General Chair, 7th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 98), October 1998.
- Invited session organizer, for the 1998 World Multiconference on Systemics, Cybernetics and Informatics, Orlando, Florida, July 1998.
- Technical program committee, *International Symposium on Manufacturing with Applications (ISOMA 98)*, Anchorage, Alaska, May 1998.
- Invited session organizer for the *International Symposium on Manufacturing with Applications (ISOMA 98)*, Anchorage, Alaska, May 1998.
- Invited session organizer for the Seventh International Symposium on Robotics and Applications (ISORA 98), Anchorage, Alaska, May 1998.
- Invited session developer for the 1998 World Automation Congress (WAC 98), Alaska, May 1998.
- Invited Workshop organizer the 1998 World Automation Congress (WAC 98), Alaska, May 1998.
- Session Chair, the 1998 World Automation Congress. Session on Sensing and Recognition, Anchorage, Alaska, May 1998.
- International Program Committee, World Manufacturing Congress (WMC 97), Auckland, New Zealand, November 1997.
- Invited Plenary talk on "Robotics and Automation," 6th International Computer Systems Symposium, Ixtapa, Mexico, October 1997.

- Invited session organizer for the 6th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 97), Tucson, Arizona, October 1997.
- Track Chair Discrete-Event/Hybrid Systems and Control Track at the 6th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 97), UCLA, CA, October, 1997.
- Chair, Session on Mobile Robots, *IFAC Fifth Symposium on Robot Control (SYROCO '97)*, Nantes, France, September 1997.
- Invited session organizer, for the 1997 World Multiconference on Systemics, Cybernetics and Informatics, Caracas, Venezuela, July 1997.
- Invited Workshop Chair and Organizer, "Discrete Event and Hybrid Systems," *IEEE International Conference on Robotics and Automation*, Albuquerque, New Mexico, April 1997.
- Technical Committee, the 1997 Measurement Science Conference, Pasadena, California, January 1997.
- Session Chair, the 1997 Measurement Science Conference, session on Measuring Sense Data for Robotics and Automation, Pasadena, California, January 1997.
- Invited Panel member on Collaborative Power Engineering for the 1997 IEEE PICA Conference, Columbus, Ohio, 1997.
- Track Chair Discrete-Event/Hybrid Systems and Control Track at the 5th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 96), Kauai, Hawaii, November 1996.
- Program Committee, 22nd International Conference of the IEEE Industrial Electronics Society (IECON 96).
- Invited Panel member on "Innovative Tools and Techniques for Intelligent Control." 10th IEEE International Symposium on Intelligent Control (ISIC 95), Monterey, California, August 1995.
- Session Chair, the 1995 IEEE International Conference on Robotics and Automation session on Inspection, May 1995.
- Technical program committee, 1995 IEEE 10th International Symposium on Intelligent Control (ISIC 95).
- Session Chair, the 1994 IEEE International Conference on Robotics and Automation session on Discrete Event Dynamic Systems, May 1994.
- Chair, Session on Object Recognition, 1994 IEEE 2nd CAD-Based Vision Workshop, Pittsburgh, February 1994.
- Technical program committee, 1994 IEEE 9th International Symposium on Intelligent Control (ISIC 94).

IEEE Committee Duties:

- Chairperson and Founder of the Prototyping Technical Committee of the IEEE Robotics and Automation Society, 2000-2002.
- Chairperson and Founder of the Discrete Event Dynamic Systems (DEDS) Technical Committee of the IEEE Robotics and Automation Society, 1992-1999.
- Invited committee Member, the IEEE Control Systems Society (CSS) Computer-Aided Control Systems Design (CACSD) Technical Committee (TC) for investigating emerging languages, algorithms, tools, standards and processes to support industrial control systems engineering.
- Nominee, Administrative Committee (AdCom) of the IEEE Robotics and Automation Society, to serve three year terms starting January 1996, 97, 98, and 2001.

HONORARY AWARDS, AWARDS, SCHOLARSHIPS AND MERITS

- Member, Connecticut Academy of Science and Engineering (CASE), February 2011.
- Distinguished Professor of Engineering and Computer Science. Unanimously named by the University of Bridgeport Board of Trustees, February 2010.
- Fellow, African Academy of Sciences, elected in December 2009
- Member, The Connecticut Academy of Science and Engineering, elected in February 2011.
- American Society for Engineering Education (ASEE) 2008 Professional Regional Award.
- Named Director, Connecticut Center for Advanced Technologies (CCAT) Center for Robotic Simulation (2008)

- First Place, American Society for American Education (ASEE) Zone 1 meeting, Student Research Poster supervision, West Point, NY, March 2008.
- \$2.4 million in scholarships University of Bridgeport and the Connecticut Pre-Engineering Program (CPEP), December 2007.
- ASEE Award, Campus Representative, (2007).
- ASEE Section Winner for Professional Recruitment (2007).
- Honorary membership Arab Healthy Water Association (AHWA) (2007).
- Nominated for the Connecticut Medal of Science (2007).
- Nominated for Membership in the World Academy of Sciences (TWAS) (2007).
- Member, Phi Kappa Phi, National Honor Society, since March 2006
- "A Tool for Data Structure Visualization and User-defined Algorithm Animation", by Chen, Tibrewal and Sobh, in the Journal of STEM Education, was noted as the number one referenced article in the history of the Journal.
- "Online Automation and Control: An Experiment in Distance Engineering Education", Sarosh Patel and Tarek Sobh, presented at the American Society for Engineering Education (ASEE) New England Section Conference, March 2006, Worcester Polytechnic Institute, was voted as the "Best Paper in Session".
- University of Bridgeport Service Award, 2006
- Nominated for the Connecticut Medal of Science (2005).
- Honorary Membership, Delta Mu Delta (The National Honor Society for Business Administration, Connecticut Theta Delta Chapter), for exceptional performance and achievements in leading and managing the School of Engineering as a business unit at the University of Bridgeport from 1999-2002.
- AMSE Honorary Life Membership awarded October 1999.
- World Automation Congress (WAC 98) Best Paper Award, for the paper entitled: "Automated Tolerance Specification Across Sensing, Design and Manufacturing," Alaska, May 1998.
- Chosen by Schlumberger Oil Company for an international summer internship in 1987 (one of two selected from among 1500 junior engineering students in Alexandria University.)
- International Student Exchange Fellowship for Computer Research in Denmark, 1991.
- University of Pennsylvania Research Fellowship, 1989-1991.
- University of Pennsylvania Teaching Fellowship 1988.
- Alexandria University Scholarship, for academic achievements, 5 times, 1983-1988
- Degree of Honor, Alexandria University, 1988.
- Member, Tau Beta Pi (The National Engineering Honor Society.)
- Member, Phi Beta Delta (The International Honor Society, Alpha Omicron Chapter.)
- Member, Sigma Xi (The National Scientific Research Society.)
- Member, Upsilon Pi Epsilon (The National Honor Society for the Computing Sciences, Connecticut Delta Chapter.)
- Certificates of Merit and Victoria College Cups from Victoria College, for academic and extracurricular achievements 1979-1983.

SAMPLE OF SOME SUPERVISED STUDENTS HONORARY AWARDS, SCHOLARSHIPS & MERITS

Supervised over 35 award winning undergraduate and graduate students in various competitions, fellowships and scholarship venues. Some of the supervised student merits include:

- National Phi Kappa Phi Award
- National Upsilon Pi Epsilon Award
- Sigma Xi Research Award
- Charles Reed Award
- University of Bridgeport Dean's Award
- University of Bridgeport Computer Science Academic Achievement Award
- Top University of Utah Research Fellowship

- American Society of Engineering (ASEE) Annual Northeast Conference student paper contest
- American Society of Engineering Education (ASEE) Annual Northeast Conference Student Poster Contest
- Connecticut Innovations Award
- University of Bridgeport Academic Achievement Award in Computer Engineering
- University of Bridgeport Academic Achievement Award in Electrical Engineering

FUNDED, CURRENT AND PENDING RESEARCH CONTRACTS; FUND-RAISING AND DEVELOPMENT ACTIVITIES

- "Computer Aided Reverse Engineering," University of Utah Research Committee, November 1992, through October 1993; \$4,924; Funded.
- "CISE Research Instrumentation," NSF, January 1, 1993, through December 31, 1993; \$57,606 plus \$28,803 in University of Utah matching funds, Funded.
- "Real-Time Control Systems," University of Utah Research Equipment Support Funds, July 1, 1993, through June 30, 1994; \$14,225; Funded.
- "Sensing for Inspection and Reverse Engineering," *Augmentation Awards for Science and Engineering Research Training*, Defense Advanced Research Projects Agency (DARPA) / Office of Naval Research (ONR), July 1, 1993, through June 30, 1996; \$244,470; Funded.
- "Reverse Engineering of Mechanical Parts," The α_1 Graphics Group, Department of Computer Science, University of Utah, June 15, 1993, through September, 15 1993; Student Research Fellowship; Funded.
- "Sensing Strategies for Advanced Manufacturing," Advanced Research Projects Agency (ARPA), September 1, 1993, through August 31, 1996; \$886,718; Funded.
- "CISE Research Instrumentation," NSF, January 1, 1994, through December 31, 1994; \$37,310 plus \$18,656 in University of Utah matching funds, Funded.
- "Utilizing URK (Utah Robot Kit) through Multi-Media Technology," Office of Naval Research, July 1, 1994, through March 31, 1995; \$40,000; Funded.
- "Utah Center for Human Genome Research," NIH, September 1994, through August 1999; \$37,603,924; Funded. (Senior Investigator)
- "Establishing the Robotics, Intelligent Sensing and Control (RISC) Laboratory at the University of Bridgeport," Future Engineering Systems, January 1996, through May 1997; \$16,500, Funded.
- "Tolerance Analysis for Sensing, Design, and Manufacturing," Future Engineering Systems, May 1996, through September 1999; \$76,234, Funded.
- "Budget and Equipment to build the Robotics, Intelligent Sensing and Control (RISC) Laboratory" Internal Proposal for matching funds, University of Bridgeport, \$16,500, 1997, Funded.
- Data Solutions, Inc., \$124,000 grant to work on software compliance and certification in hospital environments, 2000, Funded.
- Visiting Deans Program, Texas A&M University, College Station, Texas, May 2001, Funded.
- "NSF Engineering Assessment Workshop," NSF, held on UB's campus in September 2001, \$4,500, Funded.
- "Rapid Prototyping in Support of Manufacturing and Automation," United Nations Development Program (UNDP), Transfer of Knowledge through Expatriate Nationals (TOTKEN) Fund, \$3,500, December 2001, Funded
- Kiran Gopu Scholarship, Kiran Gopu family, Scholarship Endowment seed for the School of Engineering, \$20,000, 2002, Funded.
- "Exploring Academic and Industrial Training and Exchange Possibilities in Germany," Deutscher Akademischer Austausch Dienst (DAAD) Fund, \$7,500, March 2002, Funded.
- "NSF Engineering Design Workshop," NSF, held on UB's campus in April 2002, Funded.
- "Development of a high reliability, multi-algorithm facial recognition system based on web services," IQ Inc., June 2002, through December 2003, \$80,000 plus 750,000 shares, Funded.
- "Low Bandwidth, Animated, Streaming Audio Based Distance Learning," Connecticut Distance Learning Consortium (CTDLC), March 1, 2003, through February 29, 2004; \$11,200, Funded.

- School of Engineering Academic Scholarships, GE Development Fund Grant, \$15,000, 2003-2006, Funded.
- NASA CT Space Consortium Grant, "Five Year EPSCoR and CT Space Grant", National Space Grant College and Fellowship Program consortium, (Univ. of Bridgeport, Univ. of Hartford and consortium of four other universities), NASA, Current, \$2,369,085.
- NSF workshop, "Mathematical Models in Engineering Education", Purdue University, February 2005, \$5,000, Funded.
- Pitney Bowes Literacy and Education Scholarship Fund, scholarship for the School of Engineering, \$8,000, Funded, 2005 – 2007.
- GE Foundation, \$8,000, Educational Funds, 2005, Funded.
- Robotic Musicians Display, cost re-imbursement, Discovery Museum, 2005 2006, Funded.
- ConnCAP Summer 2006 Grant, Department of Education, \$5,000, Funded.
- Bodine Inc, \$10,000, CAD Workshop, 2006, Funded.
- Sikorsky Aircraft UTC, grant, \$5,000, Funded, 2006.
- Co-established student-staffed IT Support Services, at the University of Bridgeport, Annual funded cost \$36,000 \$40,000, February 2006 December 2007, Funded.
- Carstenson Hall (UB) renovation, Private Donor, September 2006, \$20,000, Funded.
- Initiated fund-raising campaigns in the Schools of Engineering and Business at the University of Bridgeport, 2006 2007.
- \$2.4 million in Scholarships for Connecticut Pre-Engineering Program, November 2007, Funded.
- NACME Scholars Grant, \$4000 \$10,000 per NACME scholar, 2005 2009, Current.
- Establishing the Paul T. Bauer Scholarship Fund, Current.
- Connecticut Center for Advanced Technology Grant for project entitled: "Center for Simulation, Modeling and Analysis for Robotic Applications", 1/1/08-12/31/08, \$40,000, Funded.
- "Hybrid Projectile Design," U.S. Army Armament, Research, Development & Engineering Center (ARDEC), \$57,688, Funded. [8/1/2008 5/31/2009]
- Development of a travel grant, U.S. Army Armanent, Research, Development & Engineering Center (ARDEC), \$5,000, Funded. [1/2010]
- Hybrid Projectile Vision System, Imperial Machine and Tool Company, \$30,000; April 2010 July 2010 Current.
- "Advanced Technology in Support of Hybrid Projectiles", FY 2010 Defense Appropriation Request, \$2.4 million, Current. [1/1/2010 1/7/2011]
- "Graduate Visiting Scholar Research Program Online Robotics", U.S.A. Austria Marshall Plan program, Graduate Scholar Support for 1 year, \$25,000, Current, [3/1/2010 2/28/2011].
- Department of Energy (DOE), "Connecticut Energy Workforce Development", 2010, \$275,000, Pending.
- Qatar Foundation, "Multilingual Parsing and Sematic Analysis", 2010, \$53,500, Pending.