

THE REFLECTOR

ISSUE #2 JULY 2016

ENET SUMMER HARBOR CRUISE P. 4 ELECTED 2017 EXCOM

P. 10

STEM WORKSHOP

Co-sponsored by WIE - Boston P. 13



TABLE OF CONTENTS

Online Courses Listing	Page 3
Entrepreneurs' Network	Page 4
Local Conferences Listing and IEEE Boston Section Social Media Links	Page 5
2016 IEEE Internatiuonal Symposium on Phased Array Systems & Technology, Call for Participants	Page 6
2016 IEEE MIT Undergraduate Research Technology Conferencre, Call for Papers	Page 8
Call for Course Speakers/Organizers	Page 9
2017 IEEE Boston Section Executive Committee Elected officers and at-large members F	Page 10
Women in Engineering <u>F</u>	<u>Page 13</u>
2017 IEEE International Symposium on Technologies for Homeland Security, Call for Papers J	<u>Page 14</u>

IEEE Boston Section Online Courses:

Verilog 101:Verilog Foundations CLASS DESCRIPTION: Verilog is IEEE standard 1364. It is a Hardware Description Language that is the corner stone of much of the simulation world. Verilog Foundations is a comprehensive introduction to the IEEE 1364 (Verilog). The Verilog Foundations class has a slightly different approach to learning Verilog than other methods. There is a lecture section for each main topic. This presents a basic foundation for the language. What makes Verilog Foundations exciting is the emphasis on labs/examples. There are nearly 100 labs/examples giving comprehensive "how to" examples of most Verilog language constructs. There are working solutions for each lab and the students can use the lab database for developing their own models later. The class is also self paced. All the work can be done independently by the engineers, at their own computer, and at their own pace.

(Register at http://www.ieeeboston.org) and click on course title

System Verilog 101: Design Constructs CLASS DESCRIPTION: SytemVerilog is an extensive set of language constructs to the IEEE 1364-2001 standard. It's meant to aid in the creation and verification of models. There are two parts to the language extension. The first part covered by this class, is new design constructs. The second part of SystemVerilog is verification constructs, covered by SystemVerilog102. There are over 100 labs/examples giving comprehensive "how to" examples of most SystemVerilog language constructs. There are working solutions for each lab and the students can use the lab database for developing their own models later. The class is also self paced. All the work can be done independently by the engineers, at their own computer, and at their own pace. There are self-grading quizzes for each chapter that allow the student to see if he/she is learning the material. The goals of this course are to make you familiar with the new part of the language. Students taking SystremVerilog101 will have a 90-day access to it. The lab database you will be able to download and is yours to keep. (Register at http://www.ieeeboston.org) and click on course title

System Verilog 102: Verification ConstructsCLASS DESCRIPTION:SytemVerilog is an extensive set of language constructs to the IEEE 1364-2001 standard. It's meant to aid in the creation and verification of models. There are two parts to the language extension. The first part covered by SV101, is new design constructs. SV102, this class, covers verification constructs. SystemVerilog102, like all CBE classes, is lab based. There are over 30 verification labs/examples giving comprehensive "how to" examples of most SystemVerilog verification language constructs. There are working solutions for each lab and the students can use the lab database for developing their own assertions later. The class is also self paced. All the work can be done independently by the engineers, at their own computer, and at their own pace. **(Register at http://www.ieeeboston.org) and click on course title**

Introduction to Embedded Linux Part I CLASS DESCRIPTION: This first of a 2-part series introduces the Linux Operating System and the use of Embedded Linux Distributions. The course focuses on the development and creation of applications in an Embedded Linux context using the Eclipse IDE. The first part of the course focuses on acquiring an understanding of the basic Linux Operating System, highlighting areas of concern for Embedded Linux applications development using Eclipse. The latter part covers the methods for booting Embedded Linux distributions including embedded cross-development and target board considerations.

High Performance Project Managment CLASS DESCRIPTION: This12 hour course(broken into short 10 to 20 minute independent modules) provides the project methodology, concepts, and techniques that ensure successful completion (on time, on budget, with the quality required) of projects, large and small. Participants learn the steps to take before, during, and at the end of a project to hone planning and execution to a strategically built process that delivers project success when used. Additionally, the course provides the interpersonal and leadership techniques to ensure everyone involved with the project whether a team member, organization member, or outside of the organization commits to the success of the project—voluntarily—and provides the support and assistance to ensure its success. In addition to learning how to master the technical skills that have evolved over thousands of years of project implementation and practice, the course provides the advanced team building, leadership, and interpersonal skills that ensure the technical skills can be used, they way they are designed to be used, resulting in a process that delivers the on time, on or under budget, with the quality required completed project consistently.

Entrepreneurs' Network - 6:45PM, Thursday, 14 July

BOSTON HARBOR SUNSET CRUISE & NETWORKING EVENING

Cruise location: Rowes Wharf, behind the Boston Harbor Hotel on Atlantic Ave.

IEEE Boston Entrepreneurs' Network will hold its 13th annual Sunset Cruise & Networking Evening on Boston Harbor, on Thursday, July 14, 2016. We board the boat at 6:45 p.m., and cruise from 7:15-9:30, with additional networking on the boat dockside until 10:15pm. The event includes a light dinner catered again this year by the well respected Off the Vine Catering, who received many compliments for the food the last three years. There will also be a cash bar.

Our ENET Sunset Cruise on Boston Harbor will be an enjoyable, casual wrap-up for the ENET 2015-2016 season, our 25th year. We again expect over 150 attendees and guests. To enhance the networking opportunities, we have invited all ENET speakers whose presentations you enjoyed during the past year. We have also invited a number of angel and early stage venture capital investors to join us on the cruise. We will also be joined by members and guests of several other Massachusetts technology-based entrepreneurial groups, who are partnering with ENET for this "EntrepreneurSHIP 2016" including the MDG - Medical Development Group and potentially the EntreTech Forum, WIE (IEEE Women In Engineering), and TiE Boston (The Indus Entrepreneurs).

We will be cruising on the Mass Bay Lines' M/V Freedom, a 100-foot twin hulled catamaran that is the perfect setting for ENET's annual yearend gala. Two decks are climate controlled for year round comfort, with the third deck open aired to enhance our outing. The Freedom is berthed at Rowes Wharf. behind the Boston Harbor Hotel on Atlantic Ave. in Boston. Parking is available for \$7 at International Place garage across the street from Rowes Wharf For additional information and to register: Go to



and there are two "T" stops nearby.

Registration will begin on May 3th, 2016. You can register at the ENET meeting on May 3rd, by mail or at the ENET website. Your seat can be saved only by paid-up registration.

SPACE IS LIMITED. So, you are encouraged to register soon so you won't miss out.

For ENET Members, the price is just \$35 for the Member, and \$35 for his/her spouse or significant other. For non-members of ENET, spouses/significant others, or guests, the price is \$45. If you join ENET now, you can get the above Member Rates for the boat cruise for yourself and spouse/significant other, and ENET Membership through August 31, 2017. Membership cost is \$75 for existing IEEE members (we need your IEEE membership number) and \$85 for all others. Thus, IEEE members SAVE \$40 by joining the ENET for this event and attending the cruise with your spouse or significant other.

the ENET website www.boston-enet.org on or after ert Adelson, Chairman of ENET and Boat Cruise May 3, 2016. You can register or pay online or you coordinator. can print and complete the form, and mail it with ordinator, Robert Adelson, Engel & Schultz, LLP, 951-0048. This will be our 14h annual boat cruise. One Federal Street, 21st Floor, Boston, MA 02110.

For payment confirmation or questions (or to obtain event. We hope you will join us July 14th! forms if not available at the website), contact Rob-

your check made payable to "IEEE Entrepreneurs' His email is: radelson@engelschultz.com or if Network" to ENET Chairman and Boat Cruise co- necessary call 617-951-9980 ext. 205 or fax 617-

Earlier attendees have really enjoyed this great

As always, the views expressed in our editorials are those of the author and not necessarily those of the IEEE Boston

Letters to the editor can be sent to. "sec.boston@ieee.org"

IEEE prohibits discrimination, harassment and For more information visit http://www.ieee.org/web/ aboutus/whatis/policies/p9-26.html

Locally held IEEE Conferences

2016 IEEE High Performance Extreme **Computing Conference** September 13 - 15 2016 (Conference and hotel registration now open!!!) www.ieee-hpec.org

2017 IEEE International Symposium on **Technolgies for Homeland Security** April 25 - 26, 2017 www.ieee-hst.org (Note new paper submission schedule: Submission deadline is October 17, 2016)

2016 IEEE International Symposium on Phased Array Systems & Technology October, 18 - 21 2016 (Conference and hotel registration now open!!!) www.array2016.org

IEEE Boston Section Social Media Links:

Twitter: https://twitter.com/ieeeboston

Facebook: https://www.facebook.com/IEEEBoston

YouTube: https://www.youtube.com/user/IEEEBostonSection

Google+: https://plus.google.com/107894868975229024384/

LinkedIn: https://www.linkedin.com/groups/IEEE-Boston-Section-3763694/about



2016 IEEE International Symposium on

Phased Array Systems and Technology

Revolutionary Developments in Phased Arrays



Sponsors

Platinum

Raytheon

Gold



Silver







Banquet Sponsor



Other Sponsors





Technical Co-Sponsors













18-21 October 2016

Westin Waltham Hotel, Greater Boston, Massachusetts, USA www.array2016.org

About the Symposium

Phased array systems continue to be a rapidly evolving technology with steady advances motivated by the challenges presented to modern military and commercial applications. This symposium will present the most recent advances in phased array technology and provide a unique opportunity for members of the international community to interact with colleagues in the field of Phased Array Systems and Technology.

Plenary Session Speakers

- William Delaney –
 MIT Lincoln Laboratory
- Troy Olsson DARPA
- Israel Lupa IAI ELTA, Israel
- Gordon Frazer DSTO Australia
- Joseph Haimerl Lockheed Martin
- Tony Fischetti Northrop Grumman Corp.

SESSIONS

Plenary

European Phased Array Systems and Technology*

Array Design I, II, III

T/R Modules

Radar I, II

Beamforming and Calibration I, II, III

Emerging Technologies for

Emerging Technologies for Wideband Arrays*

Communications Arrays Array Measurements Signal Processing and Architectures

Dual Polarization Weather Radar Arrays

Multifunction Arrays

Millimeter Wave and

Terahertz Arrays*

Metamaterial Phased Arrays*

MIMO Arrays

Conformal Arrays

Poster Sessions I & II

*Special Session

Tutorials

- Phased Arrays for MIMO Radar
 Dr. Vito Mecca, MIT Lincoln Laboratory
- Smart Antennas

Dr. Frank Gross, Boeing Technical Fellow, Georgia Southern University

- T/R Modules for Phased Arrays
 Dr. William H. Weedon, Applied Radar
- Phased Array Antenna Measurements
 Dr. Alan J. Fenn, MIT LL
- Advances in SiGe BiCMOS
 Technology with Chip Scale Phased
 Array Applications

 Dr. Gabriel Rebeiz, UCSD
- Phased Arrays for Imaging Applications
 Dr. Carey Rappaport, Northeastern University
- Microwave Array Beamforming: Analog, Digital, and Photonic Dr. Jeffrey Herd, MIT Lincoln Laboratory
- Phased Arrays: Basics,
 Breakthroughs & Future Trends
 Dr. Eli Brookner, Raytheon (Retired)

Conference Committee

Conference Chair:

Jeffrey S. Herd, (MIT LL)

Vice Chair:

William Weedon, Applied Radar

Honorary Chair:

Eli Brookner, Raytheon (retired)

Technical Program Chair:

Alan J. Fenn, MIT LL

Technical Program Vice Chair:

Wajih Elsallal, MITRE

Special Sessions Chair:

Sean Duffy, MIT LL

Plenary Session Chairs:

David Mooradd, MIT LL Eli Brookner, Raytheon (retired)

Tutorials Chairs:

Jonathan Williams, STR Jonathan Doane, MIT LL

Student Program Chairs:

Bradley T. Perry, MIT LL Justin Kasemodel, Raytheon

Secretary:

Duane J. Matthiesen, Technia

International Liaison:

Alfonso Farina, Selex (retired)

Exhibits Chair:

Dan Culkin, NGC

Publicity Chairs:

Glenn Meurer, MITRE Don McPherson, SRC, Inc.

Social Media Chair:

Gregory Charvat, Humatics, Inc.

Publications Chairs:

Raoul Ouedraogo, MIT LL Will Moulder, MIT LL

Poster Sessions Chairs:

Greg Arlow, Lockheed Martin Mark McClure, STR

Local Arrangements/Finance:

Robert Alongi, IEEE Boston

Website:

Kathleen Ballos, Ballos Associates

Advisors:

Ellen Ferraro, Raytheon Robert J. Mailloux, Arcon Hans Steyskal, Arcon Chris McCarroll, Raytheon

v.19

Attention: RF, Microwave, & High-Speed Digital Designers







2016

Registration is OPEN for

EDI CON USA 2016

September 20-22, Hynes Convention Center, Boston, MA

Industry-Driven Technical Conference with:

Technical Sessions
Panels
Workshops
Short Courses
Plenary & Keynote Talks

Exhibition features:

90+ Exhibitors Demonstrations Poster Sessions Hands On Training Networking Come to EDI CON USA to find solutions, products, and techniques that you can put to immediate use in communication, defense, consumer electronics, aerospace, and medical designs.

Hot Topics: 5G, SOI, EMC/EMI, Test & Measurement, Modeling & Simulation, Signal Integrity, Power Integrity, EDA, Space-Qualified ICs, Ultra Low Power, MIMO, Radar, GaN, IoT

Register Online Today! (Early Bird discount ends July 31, 2016) http://www.ediconusa.com/registration.asp

www.ediconusa.com

IEEE MIT Call for Submissions

Submission Deadline: September 3rd, 2016



Meet Innovation Technology

Sponsored by MIT IEEE Student Branch and IEEE Boston Section

MIT IEEE Student Branch believes a technical conference is needed for all the undergraduate students globally. They inaugurated the IEEE MIT Undergraduate Research Technology Conference last year, and will organize it again for this year. MIT will be the venue where the undergraduate students can meet to present, discuss, and develop solutions to advance technology for humanity. Participants can attend a rich program with renowned speakers, technical sessions, student design competition, exhibits, networking and social activities. It is a great opportunity for students to interact with the industry experts.

The conference theme is "Meet Innovation Technology (MIT)", and the four focus technical tracks are:

- 1. Big Data, Cloud Computing, Cybersecurity
- 2. Life Sciences, Biomedical Engineering and Technology
- 3. Robotics and Automation Technology
- 4. Communications for All Things
- 5. Wearable Technology
- 6. Innovative Technologies X-Track

Authors may submit content in the form of a technical paper, poster, or lightning talk.

All submissions must be written in English. Paper submissions must not be longer than 4 pages. Minimum font is 10 point, single-spaced, and submissions may include figures, illustrations, and graphs. Abstract submission for poster and lightning talk will be limited to 500 words.

All submissions will be peers reviewed. Notification of acceptance or rejection will be sent via email.

Submission will be online, and deadline is September 3rd, 2016. Notification of acceptance by September 24, 2016.

Please join the mailing list (<u>MIT-Conference@ieee.org</u>) for more information on the submission, technical program, registration, and accommodation.

Conference Proceeding of all the accepted papers that have been presented at the conference may be published, and included in the IEEE Xplore. Electronic media and online containing all accepted submissions will be distributed to the registered attendees.

For any inquiries, please email either the conference co-chair: - Alice Zhan (<u>tzhan@mit.edu</u>) or Helen Zhou (<u>hlzhou@mit.edu</u>).

http://ieee.scripts.mit.edu/conference





Call for Course Speakers/Organizers

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. The IEEE Boston Section, its dedicated volunteers, and over 8,500 members are committed to fulfilling this core purpose to the local technology community through chapter meetings, conferences, continuing education short courses, and professional and educational activities.

Twice each year a committee of local IEEE volunteers meet to consider course topics for its continuing education program. This committee is comprised of practicing engineers in various technical disciplines. In an effort to expand these course topics for our members and the local technical community at large, the committee is publicizing this CALL FOR COURSE SPEAKERS AND ORGANIZERS.

The Boston Section is one of the largest and most technically divers sections of the IEEE. We have over 20 active chapters and affinity groups.

If you have an expertise that you feel might be of interest to our members, please submit that to our online course proposal form on the section's website (www.ieeeboston.org) and click on the course proposal link (direct course proposal form link is http://ieeeboston.org/course-proposals/. Alternatively, you may contact the IEEE Boston Section office at sec.boston@ieee.org or 781 245 5405.

- Honoraria can be considered for course lecturers
- Applications oriented, practical focused courses are best (all courses should help attendees expand their knowledge based and help them do their job better after completing a course
- Courses should be no more than 2 full days, or 18 hours for a multi-evening course
- Your course will be publicized to over 10,000 local engineers
- You will be providing a valuable service to your profession
- Previous lecturers include: Dr. Eli Brookner, Dr. Steven Best, Colin Brench, to name a few.

Advertise with us!!!

Advertising with the IEEE Boston Section affords you access to a highly educated, highly skilled and valuable consumer. Whether you are looking to reach students with a bright future and active minds, or whether you are reaching households with priorities that may include a family, planning for vacations, retirement, or like-values, the IEEE Boston Section is fortunate to enjoy a consistent relationship.

The IEEE Boston Section provides education, career enhancement, and training programs throughout the year. Our members, and consumers, are looking for valuable connections with companies that provide outstanding products. For qualified advertisers, the IEEE Boston Section advertising options are very flexible. Through our affiliate, we will even help you design, develop, and host your ads for maximum efficiency. A few important features of the IEEE Boston Section

IEEE Boston Section is the largest, most active, and technically diverse section in the U.S. Comprised of Engineers, scientists and professionals in the electrical and computer sciences and engineering industry

IEEE Boston Section Rate Card

http://ieeeboston.org/wp-content/uploads/2016/02/IEEE-Boston-Media-Kit-2016.pdf

IEEE Boston Media Kit

http://ieeeboston.org/wp-content/uploads/2016/02/2016-IEEE-Boston-Section-Advertising-Media-Kit.pdf

Contact Kevin Flavin or 978-733-0003 for more information on rates for Print and Online Advertising

2017 IEEE Boston Section Executive Committee **Elected Offciers**

Chair: Lennart Long



Lennart E. Long is a Transportation Electromagnetic Compatibility (EMC) Engineer with over 30 years of experience with railroad, subway, has a Bachelor's and Masters Degree in Electrical Engineering from Northeastern University and gradu-

ate studies at the University of New Hampshire and Johns Hopkins University. He has taught security technology at UMASS Lowell (teaching security risk BREDA, Siemens, Kawasaki, Mitsubishi, Westingmanagement, overview of homeland security, and cyber security), Boston University, Suffolk University, the University of New Hampshire, Northeastern University, the Federal Law Enforcement and Training Center in Georgia, John Jay College in New York Ien, SYSTRA, Turner Consulting, LTK, PATCO, City and for the City of New York.

He has lectured on and participated in security projects for the Internal Revenue Service, Houses of Worship, and Gdansk University of Technology in Poland. He and his consulting team has worked successfully for the British Home Office, Federal Protective Services, Social Security Administration, Instrumentation Society of America, President Clinton's Security Policy Board evaluating risk assess-Security Equipment, the U.S. Senate staff, White tronics Engineers. House Communications Agency, the Secretary of State's security detail, the President's situation room,

Bureau of Investigation, U. S. Marshals Service, Customs Service, Federal Transportation Administration (security risk management and security policy), and the Research and Special Programs Administration.

trolley and bus EMC studies. He His recent clients include the Niagara Frontier Transportation Agency, Buffalo Transit Agency, PATH, SEPTA, MBTA, Port Of New York and New Jersey, NYCTA, LIRR, MNR, NYCTA Hybrid Bus - (Oerlicon), DesignLine Bus of North Carolina, Baltimore MTA, Boston MBTA, BART, Houston, Portland, ALSTOM, house, Helsinki, Toronto, MARTA, Brown Boveri, Seattle Light Rail, LACMTA Heavy/Light Rail, New Jersey Transit, Dallas, WMATA, Kinki Sharyo, UTS, General Electric, Earth-Tech, Parsons, STV, Booz-Al-SEPTA, U. S. Army, U.S. Navy, Hanscom Air Force Base, Cambridge Research Labs, ROME Air Force Base, General Service Administration, Social Security Administration, Internal Revenue Service, Federal Law Enforcement Training Center, Morgantown Personal Transit System, National Transportation Safety Board, Washington Metropolitan Area Transit Administration, Metropolitan Atlanta Regional Transportation Administration, Bay Area Transportation Administration, the Security Technology Division of ment methodologies, Inter-agency Committee for the NDIA, and the Institute for Electrical and Elec-

He is the recipient of the, Research and Special Prothe Bureau of Engraving and Printing, Department grams Bronze Medal and well as a U.S. Department of the Treasury, White House, State Department of Transportation Bronze Medal as well as a special (in Brussels, Helsinki, Paris, Frankfurt, and other citation from the British Home Office and an award posts and embassies around the world), Army Intel- from the Secretary of State. On May 17, 2014 he ligence, Federal Aviation Administration, US Coast will be presented with the Robert S. Walleigh Distin-Guard, Central Intelligence Agency, National Se- guished Contributions to Engineering Professionalcurity Agency, Federal Railroad Administration, St. ism Award, the highest and most prestigious award Lawrence Seaway Administration, Pipeline Adminis- issued by IEEE-USA. He has several patents and tration, Marine Administration, Office of Intelligence publications. He has given a keynote address at a and Security, Federal Transit Administration, Federal NATO sponsored Conference at Gdansk University Section Executive Committee as Treasurer and on the Outreach, Planning and Action Plan Committee and chairs the Professional Development and Education Committee and is designing and developing a system for hosting and presenting online courses for the Boston Section.

Vice Chair: Greg Walson



Mr. Walson is a Senior Member of the IEEE. He has previously held several positions on the Boston Section Executive Committee and currently serves as Secretary and PACE Chair.

He recently joined the MIT Department of Facilities as a Senior Electrical Engineer, working for the Utilities Group. Prior to this he worked for eight years as an Electrical Engineer specializing in power utility substation design and engineering for Vanderweil Engineers. He has also worked as an electrical designer and lighting manufacturer's representative. He has lectured at MIT on lighting control systems.

He holds a BSEE from Northeastern University, and a BA in Theater from Goshen College. He is also a licensed Professional Engineer in Massachusetts and New Hampshire.

Secretary: Gilmore Cooke

Gil Cooke received the Bachelor of Engineering



degree in electrical engineering from McGill University Montreal in 1962. He has spent most of his engineering career working on large engineering and construction projects while residing in California, the midwest and Massachusetts. He is a Registered Professional Engineer in

Massachusetts and California.

He served as chairman of the Detroit Chapter in 1977-78; director-at-large in 1977, and has been active with the Boston chapter's technical programs during the 80's. He's been appointed to the following: Boston Section Chair History & Milestones Committee; Boston Section Director at Large, 2004-

2006; Boston Section Treasurer, 2015-2016.

Treasurer: Ramon de la Cruz

Ramon started volunteering with the IEEE during college at Iowa State University.



college at Iowa State University. He joined as the Student Chapter Publicity Chair, where he was editor of the IEEE monthly newsletter. The following year, he was elected IEEE Student Chapter Chair for two consecutive terms. With record

number of activities and student participation, the student chapter co-sponsored joint technical and professional meetings with the IEEE Central Iowa Professional Chapter and the University of Northern Iowa IEEE Student Chapter.

Ramon joined Teradyne, Inc. Integra Test Division in 1999 at the start of the product introduction and ramp of the J750 Automatic Test Equipment (ATE). During his earlier years with Teradyne, Ramon codeveloped test processes that enabled high volume manufacturing to support the unprecedented ramp of the J750 ATE Test Platform. The J750 market acceptance for testing the next generations of highly integrated, low cost microcontrollers expanded with the introduction of several new products like the Converter Test Option, Mixed Signal Option, RFID Test Option and Analog Parametric Measurement Unit Option.

In 2003, Ramon moved to the Teradyne New Product Introduction Group of the Semiconductor Test Division during the development and introduction of the UltraFlex Automatic Test Equipment (ATE) Platform. In this role, he has overseen the test process transfer from the pilot line to high volume manufacturing of the 1 GHz digital option and various new analog and digital ATE instrument products. Currently at Teradyne NPI Group, he participates in operations strategy workgroups to define processes and methods supporting next generation system and instrumentation development for current and future ATE Platforms.

Ramon joined the Boston Reliability Chapter in 2007 as a member-at-large and has served as the Joint Section Reliability Chapter Chair (2009-11) and Vice-Chair (2008, 2012-14). He's a member of the Board of Directors of the Northeast Chapter of the Electrostatic Discharge Association (NE-ESDA, 2009-2014). At the ESDA, he serves on the ESDA Regional Tutorial Program Committee and has been hosting the annual NE-ESDA Regional Tutorial since 2010.

Other volunteer opportunities include serving as an industry advisor for the University of Massachusetts Lowell Assistive Technology Development Fair and participating in local high school job fairs.

He holds a B.S. in Electrical Engineering from Iowa State University. His background includes Design for Testability, Process FMEA, Systems and Circuit Analysis, Risk Assessment, and Highly Accelerated Stress Testing.

Ramon enjoys evaluating consumer electronics and designing, modifying and improving state-of-the-art audio equipment. Other interests include digital photography and staying current on the latest science and technology trends.

At Large:

Paul Zorfass



Paul is currently on the IEEE Boston Section Executive Committee. He is chapter chair coordinator. He has previously initiated the first section Job Forum and been active on program committees to recruit speakers for

section conferences and other events. Prior to this he had been Chapter Chair for the Communications Society, Boston and CNET chapters, for six years; and also the Region 1 representative to the North American Board for the Communications Society.

He also volunteers in several other Greater Boston activities. This includes as a member of the Board of Assessors in his local town that values real estate:

Ramon joined the Boston Reliability Chapter in and member of the Cable Advisory Committee. He is 2007 as a member-at-large and has served as the also Treasurer of the board for his own homeowners' Joint Section Reliability Chapter Chair (2009-11) community.

His professional interests and background include software and hardware technology development and market evaluation, especially as it adds value to final product performance. His work activities have included consulting with multinationals such as IBM, Intel, Philips and Microsoft as well as numerous start-ups. This has evolved from engineering and software development for real time and embedded systems for both DoD and wide-ranging industry and commercial use. He has also been an active participant in start-up company founder teams.

With non-industrial clients Paul has focused on technology planning and market assessments for large US agencies such as DARPA, NSA, and World Bank; and non-U.S. governmental agencies from: UK, The Netherlands, European Commission, and South Korea. Client agendas were usually focused on country economic issues. It was always important to encourage and sustain economic development in regard to each country's specific metrics and requirements for advanced electronics technologies.

At Large: Marie C. Tupaj



Marie C. Tupaj holds a bachelor's degree in electrical engineering and a doctorate in biomedical engineering from Tufts University. Following her undergraduate degree, she worked at Sun Microsystems on the design and verification of host-bridge application specific integrated

circuits for mid-range server products. As a doctoral student, Marie worked on a project supported by the Armed Forces Institute of Regenerative Medicine that identified and integrated biochemical, biophysical, and bioelectrical strategies into nerve guides for peripheral nerve repair and limb and digit salvage. As a postdoctoral fellow, Marie worked on a number of

biomedical projects ranging from chemical modification of surfaces to building miniaturized biosensors. Marie's research interests include neuroprosthetic device design and examining electric field effects on cells.

Marie has been an active member of the IEEE Boston section since 2011. Within the Boston section, she has worked on the steering committee of the Women in Engineering (WIE) affinity group. On this committee, Marie has held roles as treasurer and

chair. Specifically, she has organized and led steering committee meetings, planned monthly technical and professional development meetings, and wrote proposals for group funding and award money. She has represented WIE Boston at local and regional conferences including the Region 1 WIE Conference, the Region 1 IEEE student conference, and at a MA regional science fairs as science fair judge. She is also a member of the IEEE Engineering Medicine & Biology Society.

Women in Engineering and American Control Conference - 9:30AM, Friday, 8 July

The Power, Beauty and Excitement of the Cross-Boundaries Nature of Control, a Field that Spans Science, Technology, Engineering & Mathematics (STEM Workshop)

ACC Workshop for Middle and High School Teachers and Students

This outreach event is designed to increase the general awareness of the importance of systems and control technology and its cross-disciplinary nature among high school students and teachers. Control is used in many common devices and systems: cell phones, computer hard drives, automobiles, and aircraft, but is usually hidden from view. The control field spans science, technology, engineering and mathematics (STEM). The success of all STEM disciplines depends on attracting the most gifted young people to science and engineering professions. Early exposure to middle and high school students and their teachers is a key factor. The goal of these outreach efforts is to promote an increased awareness of the importance and cross-disciplinary nature of control and systems technology.

The workshop activities include presentations by control systems experts from our technical community, informal discussions, and the opportunity for teachers and students to meet passionate researchers and educators from academia and industry. The talks are designed to be educational, inspirational and entertaining showing the excitement of controls.

Lunch will be provided. Participants will receive certificates of participation.

Meeting Location: Boston Marriott Copley Place Boston, Massachusetts – Vermont Meeting Room
Co-Organizers: Bozenna Pasik-Duncan (University of Kansas) and Linda Bushnell (University of Washington) and Sebastian Dormido, UNED, Madrid, Spain.

Co-Chairs: Bozenna Pasik-Duncan, University of Kansas and Linda Bushnell (University of Washington) and Sebastian Dormido, UNED, Madrid, Spain.

For more information and registration:

http://www.math.ku.edu/ksacg/workshops/ACC_2016/acc2016workshop.html

Please take this short survey, https://www.surveymonkey.com/r/B8R2DYL

Call for Papers, Posters, and Tutorials 2017 IEEE International Symposium on Technologies for Homeland Security for Humanity 25-26 April Westin Hotel, Waltham, MA http://ieee-hst.org/

Call for Papers, Posters & Tutorials

The 16th annual IEEE Symposium on Technologies for Homeland Security (HST '17), will be held 25-26 April 2017, in the Greater Boston, Massachusetts area. This symposium brings together innovators from leading academic, industry, business, Homeland Security Centers of Excellence, and government programs to provide a forum to discuss ideas, concepts, and experimental results.

Produced by IEEE with technical support from DHS S&T, IEEE, IEEE Boston Section, and IEEE-USA and organizational support from MIT Lincoln Laboratory, Raytheon, Battelle, and MITRE, this year's event will once again showcase selected technical paper and posters highlighting emerging technologies in the areas of:

Cyber Security Biometrics & Forensics Land and Maritime Border Security Disaster and Attack Preparedness, Mitigation, Recovery, and Response

We are currently seeking technical paper, poster and tutorial session submissions in each of the areas noted above. Papers examining the feasibility of transition to practice will also be considered. Submissions should focus on technologies with applications available for implementation within about five years. All areas will cover the following common topics:

Strategy and threat characterization, CONOPs, risk analysis,

- Modeling, simulation, experimentation, and exercises & training, and
- Testbeds, standards, performance and evaluations.

Contact Information

For more detailed information on the Call for Papers, Posters & Tutorials, as well as Sponsorship and Exhibit Opportunities, visit the website http://ieee-hst.org/ or email: information@ieee-hst.org. Submissions should be made at the following website: https://cmt3.research.microsoft.com/HST2017/

Important Dates

Paper Abstract Deadline: October 17, 2016 Paper, Poster and Tutorial Acceptance Notification December 1, 2016 Final Paper Submission Deadline: March 1, 2017

All deadlines are by midnight Eastern Time.

Organizing Committee

General Chair:

Deputy Chair: Technical Chair: **Tutorials Chair:** Business Program Chair: Local Arrangement Chair: Marketing Chair: **Publications Chair:** Sponsorship/Exhibits Chair: Special Advisor to the Chair: Registration Chair:

James Flavin, MIT Lincoln Laboratory Fausto Molinet, Matrix Internationale Gerald Larocque MIT Lincoln Laboratory Anthony Serino, Raytheon Andrea Marsh, Battelle Bob Alongi, IEEE Boston Jessica Patel, Raytheon Adam Norige, MIT Lincoln Laboratory Fausto Molinet, Matrix Internationale Lennart Long, EMC Consultant Karen Safina, IEEE Boston

Technical Program Committee Chairs

Disaster and Attack Preparedness, Mitigation, Recovery, and Response

Lance Fiondella, UMass, Dartmouth Kenneth Crowther, MITRE

Biometrics & Forensics

Eric Schwoebel, MIT Lincoln Laboratory James L. Wayman, San Jose State University

Land and Maritime Border Security Karen

Panetta, Tufts University Rich Moro, Raytheon John Aldridge, MIT Lincoln Laboratory

Cyber Security

Claire Applegarth, Mark Peters, MITRE