
IEEE

Advancing Technology for Humanity

New York Monitor

A PUBLICATION OF THE IEEE NEW YORK SECTION

Published monthly except in July and August

October 2015, Vol. 62, No 8



Five-times-Life-Size Robot at MakerFaire NYC 2015

Photo: Amitava Dutta-Roy

PRINCIPAL OFFICERS OF THE NEW YORK SECTION FOR 2015

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Amitava Dutta-Roy, LF

Section chair: Neil Weisenfeld, SM

Vice chair Chapter Operations: Wilson Milian, SM

Vice chair Section Activities: Vacant

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Events of Interest in order of the dates: for details please see the individual fliers in this posting

- Stress and the City: German Center for Innovation and Research, 2 November, 2015
- Security Conference (Mobile, Cyber Security and Privacy), NJ Coast Section, 4 November, 2015
- IEEE WIE Summit, 6-8 November, 2015
- MIT Undergraduate Research Technology Conference, Cambridge, Mass., 7-8 November, 2015
- The *Bucket Plan* Social Security and Retirement Income Planning, 11 November, 2015
- FOCUS: Smart Grid 2015, German Center for Innovation and Research, 12 November, 2015
- Role of Physiology-based Models in Critical Care Medicine, Tappan Zee subsection, 17 November, 2015
- NERC Protection Standards – Cyber Security, PES & NY Section. 17 November, 2015
- Mix and Match to Mobilize Adult Literacy, MIT-Enterprise Forum, NYC, 18 November, 2015
- Columbia Integrated (University) Systems Lab, Fall Seminar Series, 20 November, 2015

From the keyboard of the Editor



Certainly, the biggest and technologically most interesting show in New York City during the last month was the MakerFaire 2015 (26 and 27 September). The MakerFaire is a *must-see* show for DIYers of all ages, especially children, adolescents and young adults. The non-profit MakerFaire.org holds its shows at many cities around the world but the one at NYC is the biggest, we're told. There, as in last year, the IEEE set up a booth to attract young engineers of the future to join the IEEE. Several members of the IEEE gave their volunteer time to manage the booth. They patiently explained our mission to the folks who stopped by. They told the visitors what really the IEEE is and what can it do for the career advancement of its members and also for general good of our society. Literature on IEEE activities and benefits were freely available, so were some gifts for our visitors to take away as souvenirs. We thank Dr. Charles Rubenstein who coordinated the effort.

I thoroughly enjoyed my visit to the show on both days of the weekend though my legs didn't quite appreciate my brain's delight. A report on MakerFaire NYC and photos taken during the fair are given in a separate section.

Then, 6 October, the IEEE Day beckoned us! The IEEE Foundation had arranged for the our members to visit the museum on the famous aircraft carrier Intrepid, permanently berthed at pier 86 (western end of 46th Street in the Hell's Kitchen area of Manhattan) on this day without paying the usual entrance fee. Thanks, IEEE



Foundation! The nature also cooperated. It was a marvelous day with blue sky and wall-to-wall sunshine. At the entrance of the Intrepid, members of the IEEE staff greeted us with much enthusiasm and courtesy. The IEEE also had a display table at the entry of the Intrepid museum on the hangar deck. A number of informative brochures and some takeaway gifts were made available to the visitors, an example of good planning to make the IEEE more visible to the public. You will find report on this in a separate section

The Monitor also attended a panel discussion on Social Innovation organized by the German Center for Research and Innovation, German House, Manhattan. The topic was *Transatlantic Perspectives on Social Innovation*. We may think that social issues are not our cup of tea. If that is your presumption then you are wrong. Today no social innovation can move without the crutches of technology and there we come in. Social innovation and technological innovation are intertwined. Sometimes one leads and drags the other behind it. At other times, it is other way around. In e-mail, chat, Twitter, Flash mobs and Facebook technologies came first and that led to social innovation. Below read further about the event.

Did you know that the results of the annual election at the IEEE are (unofficially) out? Check below for those results.

Happy reading!

Amitava Dutta-Roy, PhD, Life Fellow

IEEE ANNUAL ELECTION RESULTS (2015)♣

IEEE President-Elect, 2016
Karen Bartleson (Nominated by IEEE Board of Directors)

IEEE Division II Delegate-Elect/Director-Elect, 2016
F.D. “Don” Tan (Nominated by IEEE Division II)

IEEE Division IV Delegate-Elect/Director-Elect, 2016
Jennifer T. Bernhard (Nominated by IEEE Division IV)

IEEE Division VI Delegate-Elect/Director-Elect, 2016
John Y. Hung (Nominated by IEEE Division VI)

IEEE Division VIII Delegate-Elect/Director-Elect, 2016
Dejan S. Milojicic (Nominated by IEEE Division VIII)

IEEE Division X Delegate-Elect/Director-Elect, 2016
Toshio Fukuda (Nominated by IEEE Division X)

IEEE Region 1 Delegate-Elect/Director-Elect, 2016-2017
Babak D. Beheshti (Nominated by IEEE Region 1)

IEEE Region 3 Delegate-Elect/Director-Elect, 2016-2017
Gregg L. Vaughn (Nominated by IEEE Region 3)

IEEE Region 5 Delegate-Elect/Director-Elect, 2016-2017
Robert C. Shapiro (Nominated by IEEE Region 5)

IEEE Region 7 Delegate-Elect/Director-Elect, 2016-2017
Maike Luiken (Nominated by IEEE Region 7)

IEEE Region 9 Delegate-Elect/Director-Elect, 2016-2017
Teofilo J. Ramos (Nominated by Petition)

IEEE Standards Association President-Elect, 2016
Forrest D. “Don” Wright (Nominated by IEEE Standards Association)

IEEE Standards Association Board of Governors Member-at-Large, 2016-2017
Philip B. Winston (Nominated by IEEE Standards Association)

IEEE Standards Association Board of Governors Member-at-Large, 2016-2017
Paul Nikolich (Nominated by IEEE Standards Association)

IEEE Technical Activities Vice President-Elect, 2016
Marina Ruggieri (Nominated by IEEE Technical Activities)

IEEE-USA President-Elect, 2016
Karen S. Pedersen (Nominated by IEEE-USA)

IEEE-USA Member-at-Large, 2016-2017
Daniel N. Donahoe (Nominated by IEEE-USA)

♣ The above results are deemed to be “unofficial.” The IEEE protocol demands that the results are turned into official class only after the BoD approves the list at their next meeting

IEEE NEW YORK SECTION ANNUAL 2015 ELECTION SLATE

The following slate for the annual election at New York section has been announced by the Section's nominating committee. Members of the Section will

be notified on the date of election by the familiar information services of the IEEE.

Section Officers

Chair – Wilson Milian

Vice Chair Chapter Operations – Charles Rubenstein

Vice Chair Section Activities – Neil Weisenfeld

Treasurer – Simon Odie

Secretary – Sharene Williams

Section Committee Positions

O&P Manual Chair – Bill Coyne

Chapter Organization Chair – Paul Sartori

Historian – Amitava Dutta-Roy

Long Range Planning – Kim Smith

Publications Chair – Vacant

Webmaster – Harold Ruchelman

IEEE in 2030?



Live IEEE.tv Q&A Sessions
IEEE in 2030: Optimizing for Full Impact
Howard E. Michel, Ph. D., IEEE President and CEO
Barry L. Shoop, Ph.D., P.E. 2015 IEEE President-Elect

25-26 October 2015 Live IEEE.tv Q&A Sessions



L to R: Bill Moses, Lawrence Wong, Howard Michel, Barry Shoop, Karen Bartleson, Norberto Lerendegui and Tom Coughlin





The 2015 triumvirate of the IEEE: Howard Michel (president 2015), Barry Shoop (president 2016) and Karen Bartleson (president 2017) who work together to plan the forward march of our IEEE

On 25 and 26 October, 2015 the IEEE.tv hosted a live broadcast of a discussion on where we are heading to? Where will IEEE be in 2030? Howard

Six senior leaders of the IEEE, Michel, the 2015 president, Barry Shoop, the incoming 2016 president, Karen Bartleson, the incoming 2016

president elect, Bill Moses, Norberto Lerenegui and Tom Coughlin and Lawrence Wong participated in the discussion. At the end of the each session the panelists took questions from the listeners. You can (*and should*) watch both sessions by logging (IEEE user name and password need) on to:

First session: <https://ieeetv.ieee.org/ieeetv-specials/ieee-in-2030-live-question-and-answer-session-1>

Second session: <https://ieeetv.ieee.org/ieeetv-specials/ieee-in-2030-live-question-and-answer-session-2>

The IEEE is ours. The members must decide how the IEEE will function in 2030. Take time to think about the issues raised in the broadcast and then write to the 2030 committee at feedback2030@ieee.org



Our opinions expressed *now* will affect the future of the IEEE and of the next generation of electrical and electronics engineers. They will thank you!

MakerFaire NYC 2015 Video clips

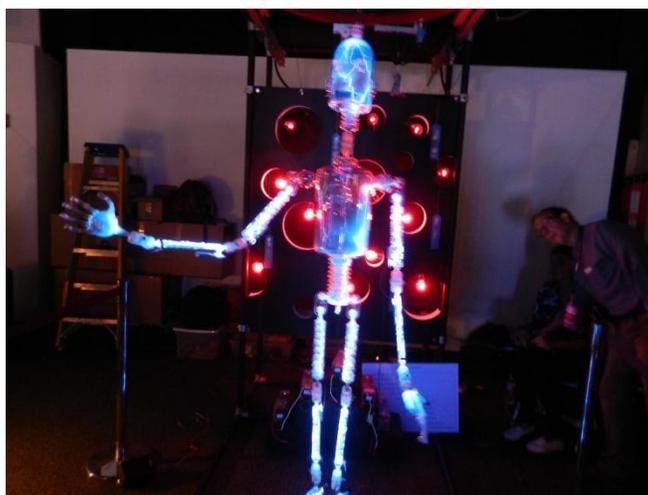
Amitava Dutta-Roy, Editor

The

6th Annual NYC MakerFaire, a do-it-yourselfers' haven held in Corona Park, Flushing Meadow in Queens during the weekend of 26 and 27 October was a huge success. We do not yet have the final number of visitors to the Faire. However, I would imagine that it topped 40,000. The Faire attracted all kinds of visitors: bright children, some not more than 6, adolescents, young adults, experienced do-it-yourselfers (DIY). Curiosity and creativity were the common links between all. Big and medium corporations such as Microsoft, Google, Cognizant, Bosch, Atmel, Arduino, Raspberry Pie and others also appeared there. For, the DIYers promise to offer these companies a large market (remember Lafayette, Radio Shack, and Heathkit of the past?) The atmosphere was that of a two-day picnic with emphasis on learning how to do things and to appreciate what the most passionate minds are capable of creating. The innovations included giant and miniature robots, drones that fight against other drones, flames that dance to the tune of music, robot band, 3-D printing, LED displays, and oriental Zen music electronically played and controlled.

Our visit started with a press conference offered by Dale Dougherty, the publisher of Maker magazine that caters to the DIYers. Mr Dougherty is the founder of the non-for-profit MakerFaire

movement. His goal is to engage young people to do things, anything: electronics, woodworking, culinary activities, jewelry-making, LED embedded dresses and so many others. At the press conference he elaborated his plans to offer individuals and schools the opportunity to learn how to do things. Dougherty deserves our cooperation. The IEEE has been an active supporter of the good cause. This year was no exception. The IEEE had a booth inside the New York Hall of Science (Queens) in the grounds which the venue of the MakerFaire. Several IEEE volunteer members gave their time explaining to the young visitors what really IEEE is and offered encouragement for them to study engineering. The credit for the coordination of the of the IEEE's presence goes to Dr. Charles Rubenstein.



We took pictures and video clips albeit in our amateurish manner, especially the clips. However, we want to convey to the reader a feeling of how it satisfying the visit to the MakerFaire was for us. So, we decided to post those photos and videos that you can see by clicking on the tabs. They might lure you to the show next year. Take your children or your students with you. I guarantee that you will love it.

You might think that some of the projects could be done better if they were undertaken by for-profit commercial outfits. You could be right. However, those projects demonstrated the curiosity, love for

learning new things and patience behind them. The money business was certainly not most Makers' priority. It was refreshing to see the young DYIers and dedicated tinkerers. The battle of drones reminded me of the fights of kites in which I was pretty good in my adolescent days. Look at the "Music controls flames" project. It is pretty common to see music-controlled lights. But I had never seen real gas flames controlled by music. Whoever was behind this project knew about electronics, music, and valves to control gas. You be the judge. Then, again watch the last video on Zen music. What soothing sounds! It was ideal to sit (or

lie down) on the open terrace of the Hall of Science and soak in the autumn sunshine.

Note: The video clips have been linked to the pdf document that you are now reading. To watch them please click on the appropriate item in the right column. We wanted to avoid using the YouTube. The access time of slides and videos will depend on your own Internet speed and the browser you use. In future, we will try to find a better way for you to get faster access to the clips. The NY Monitor is always a work in progress. Enjoy!

The pictures taken at the MakerFaire are available at: <http://goo.gl/QaE5oS>

To video clips are available at the sites shown in the right column

- | | | |
|----|----------------------------|---|
| 1 | Robo doll 1 | http://goo.gl/bQNI6L |
| 2 | Robo doll 2 | http://goo.gl/VijpGj |
| 3 | Robots playing balls | http://goo.gl/ci8HbJ |
| 4 | Robots crawling | http://goo.gl/u9c4S7 |
| 5 | Robo dog | http://goo.gl/IEJEfy |
| 6 | Dancing birds | http://goo.gl/9gOs2E |
| 7 | Dancing lights on Crystals | http://goo.gl/rHetrT |
| 8 | Dancing lights on cubes | http://goo.gl/kuofKc |
| 9 | Robo band | http://goo.gl/tzmA1h |
| 10 | Guerilla science 1 | http://goo.gl/YazBfg |
| 11 | Guerilla science 2 | http://goo.gl/LdUcLP |
| 12 | Battle of drones | http://goo.gl/y9fhja |
| 13 | Big brother 1 | http://goo.gl/pGBz4W |
| 14 | Big brother 2 | http://goo.gl/7XteO9 |
| 15 | Zen music | http://goo.gl/q2YnB3 |



THE IEEE DAY

6 OCTOBER

JIM JEFFERIES, PRESIDENT, IEEE-USA

IEEE and IEEE-USA

IEEE members around the United States, and, indeed, around the world celebrated 6 October, 2015 as the IEEE Day. The idea of celebrating the IEEE Day matured in 2010 as a day to remember the long heritage of the IEEE, dating back to its origin as the American Institute of Electrical Engineers (AIEE) decided to convene its first technical meeting on an October day of 1884. One hundred and sixteen days later, in 2015, more than 140 events celebrated the day.



The history of the AIEE tells us that the Electrical World magazine, in its issue of 5 April, 1884 printed an open “call for interest.” On 13 May of that year an organizational meeting of the “interested” parties was held in New York and at that august gathering it was decided that it was a good idea to form a professional society for electrical engineers and others who utilized electrical science. This resulted in the formation of the AIEE. The chief of the largest electrical enterprise of the era,



Western Union Telegraph was elected the first president of the AIEE. Notable vice presidents elected were Thomas Edison and Alexander Graham Bell, as well as a representative from my first employer, the Western Electric Company. The first technical meeting of the newly born institute was held in



Philadelphia on Tuesday and Wednesday 7 – 8 October, 1884 respectively. In 2010 it was decided to set the second Tuesday of October as the IEEE Day.

But what was the reason for founding the AIEE? Its founders were concerned about the new,



nascent profession of electrical engineering and wanted it gain recognition and respect. Rapidly developing new and competing technologies were entering the field, and the future to their commercialization was uncertain. There was a need for a “voice” for this important new wonder for the world and a general understanding that there would be challenges to the profession in the

future. The AIEE ultimately merged with the sister organization, the Institute of Radio engineers to form the IEEE we know today.

The concerns of 1884 are still alive today in IEEE and IEEE-USA. So, while IEEE-USA is only 40 years old, it is based on the same ideas that the founders had in mind. Building careers and shaping public policy remains a relevant mission. Every member's career is impacted by public policies and career challenges are constantly evolving. In a broader context, the IEEE-USA has recently collaborated for drafting the recently completed Quadrennial Energy Review by the US Dept. of Energy, and has supported to intellectual property protection initiatives encouraging more government support for entrepreneurship and innovation. The voice of technical professionals still needs to be heard and the IEEE-USA makes our voice loud and clear.

The career landscape also continues to change as members face careers with multiple employers or self employment. Work time and space

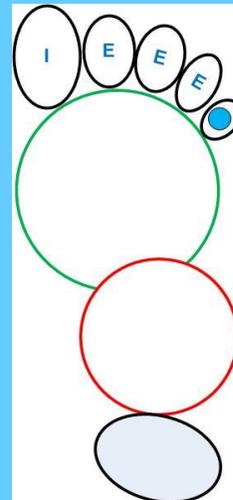
commitments are dynamic and technology develops moves rapidly in a global competitive environment. The relevance of any professional society is challenged by the reality; the members have choices in the manner they wish to meet their personal technical and career support needs. The IEEE day provides an annual opportunity to introspect if the IEEE is a good forum for meeting those needs. It prompts us to think of the constant improvement needed to support our members and make their commitment to IEEE worthwhile. The future of IEEE Day is only limited by the creative choices of the planners for embarking on a strategy that engages the interest of members locally and globally.

As to my personal event on IEEE Day 2015, I had the opportunity to meet with students and Pikes Peak section members at the University of Colorado at Colorado Springs and share thoughts on careers, public policy, and value of membership with them. It was a good day! ▲



6 October: IEEE Day

We celebrated it on board the
Aircraft carrier Intrepid



amitava dutta-roy, editor

TO celebrate IEEE day with top examples of science and technology the IEEE Foundation had invited IEEE members to visit the museum on the famous aircraft carrier Intrepid, permanently berthed at pier 86 (on 12th Avenue at the western end of 46th Street in the Hell's Kitchen area of Manhattan) without paying the usual entrance fee. Thanks, IEEE Foundation! And were we, who live in New York City not lucky? I just had to take the F train, and then a bus ride to reach the pier 86. Did Mother Nature know about the IEEE Day? For, it was a

marvelous day, picture-like with blue sky and wall-to-wall sunshine. At the entrance of the aircraft carrier the IEEE staff greeted us with much enthusiasm and courtesy. The IEEE also had a display table on the hangar deck of the Intrepid museum. A number of informative brochures about the IEEE and some takeaway gifts were made available to the visitors, an example of good gesture to make *us* more visible to the public.

The museum's official site states that "launched in 1943, the aircraft carrier *Intrepid* fought in World War II, surviving five kamikaze attacks and one torpedo strike. The ship later served in the Cold War and the Vietnam War. *Intrepid* also served as a NASA recovery vessel in the nineteen sixties.

More than 50,000 men served on board *Intrepid* during the ship's time in service, and more than [270 men made the ultimate sacrifice](#).

"*Intrepid* was decommissioned in 1974. Today, *Intrepid* is berthed on the Hudson River as the centerpiece of the Intrepid Sea, Air & Space Museum."

Intrepid museum, besides offering a glimpse of inside the submarine Growler, the space shuttle *Enterprise*, the parked supersonic Concorde of British Airways and a model of Hubble space telescope on one-fifteenth scale, offer educational visits, especially for the young ones. In fact, not too long ago the museum celebrated the 25th anniversary of launching of the Hubble with a discussion by a selected panel of experts from the universities, NASA, and industry. As a member of the IEEE attended the event (after paying only \$10, half the usual entry fee) and I learned much about the planning, design, and launching of the Hubble and (for the first time) how the data are collected and then analyzed by researchers themselves. The scientists also told us how proposals of scientific experiments on board the Hubble are submitted and evaluated. It was fascinating to listen at first-hand from the people involved, in real life, with the Hubble.

We have collected a series of pictures of the IEEE Day celebration aboard the Intrepid. For this we thank Amanda Davis (IEEE Institute), Karen Galuchie (IEEE Foundation), Hugo Rada Trujillo (IEEE Contact Center), and Dr Amruthur Narasimhan (IEEE NJ Coast Section).

Your editor Dr. Amitava Dutta-Roy (your humble editor) snpped the rest of the photos! It has not been possible to get the names of every person featured in the photographs and we apologize for this.

The Growler, a WWII sub is also berthed alongside the Intrepid and a ticket to the museum also includes a dive into the interior of the sub. It gives you goose bumps to crawl through the narrow hatches and planks. We could see the narrow berths on which the crew slept, the tiny space in which they ate and the officers' quarters. It is remarkable how a small group of brave men (those days only men were enlisted to serve in a sub) sacrificed many earthly pleasures to defend us. I met a man who worked in another sub for a long time. He was proud to show us around and answer our questions.



The Intrepid museum houses the Enterprise space shuttle (yes, the real stuff!). Though we could not enter the shuttle its size was impressive enough.

The photos taken inside the Growler may be seen by clicking the site: <http://goo.gl/ajRGmH>

Photos of some IEEE visitors and staff are available at <http://goo.gl/LFcorU>

Photos of the Intrepid and the space shuttle Enterprise are at: <http://goo.gl/oLIFsa>

The IEEE Institute has also published a story on the IEEE Day and it is available at:

<http://theinstitute.ieee.org/ieee-roundup/opinions/ieee-roundup/members-celebrate-ieee-day-with-free-admission-to-the-intrepid-museum>

For detailed description of Intrepid please visit <http://www.intrepidmuseum.org/> and then navigate through the clearly marked tabs. ▲

Social Innovations and Technology



Prof. Josef Hochgerner, Dr. Kriss Deiglmeier, Dr. Joann Halpern, Dr P Rosenbaum, Ms. Eleni Janis and Prof Jürgen Howaldt

Photo courtesy: Nathalie Schueller

Social innovations involve changes in all aspects of human existence lived differently in different regions, countries and cultures, and their governments, politics, public health policies, education, and utilities, are practically are intertwined with advance of technology. E-mails, Skype, Twitter and Facebook are the vivid proofs. Video clips on brutalities by authorities, bullies and gangs, gaffes of politicians and on all sorts of uncivilized behavior go viral within a few minutes and help to bring the perpetrators either to justice or to oblivion. Many countries and cities have gotten rid of their dictators by virtue of gatherings and demonstrations by “flash mobs” called at short

notices. The phenomenon of flash mobs would not exist if there were no Twitter. Though there are academic papers and reports on this phenomenon one hardly has opportunity to discuss the pros and cons. The German Center for Innovation and Research (GCRI) did an excellent job on 6 October by inviting some distinguished experts on social innovation to discuss its advance on both sides of the Atlantic. They came from Germany, Austria as well as from this country. Each speaker elaborated her/his point of view and experience.

At the end of the session the floor was opened to questions from attendees. Indeed, there were

questions aplenty. I asked Ms Eleni Janis, the moderator and the VP of NYC Economic Development Corporation as to why, in spite of many incentives and incubators offered by our city that she spoke about, we still have a subway system the tracks of which are some of the dirtiest in the world. I, of course, did not expect to get an answer from her right away. Ms. Janis told us the ultimate responsibility of maintaining the tracks rests with Metropolitan Transit Authority (MTA). Doesn't the neglect of a big chunk of space, a happy playground of millions of rodents, pose an eventual health hazard to the human inhabitants? Wouldn't visibly clean subways attract more tourists and bolster the coffers of the city? Why do we have to pass the responsibility of a most needed social and technological innovation between different organizations? It does not make sense. My



Photo: Nathalie Schueller

suggestion would be to create an award for the best idea to clean up the New York subway tracks and then, if needed, provide incubator space for the winner. How much an award would cost? I had just come to the GCRI after celebrating the IEEE Day on Intrepid. I thought a country that had sent Hubble, Chandra and Cassini telescopes into space, placed men on the moon and designed reusable shuttles, could certainly develop technology to maintain a city's subways reasonably clean. I remembered the old adage: "if there is a will there is a way." You can watch and listen to the entire discussion by going to <http://www.germaninnovation.org/news-and-events/videos>.



As members of the IEEE you are invited to two more events at GCRI: The first is on Stress and the City on 2 November. It may be interesting to discover the hidden causes of stress and you can

manage it. The second is on Smart Grid on 12 November. See the fliers in this posting of the Monitor.



EVENTS OF OUR INTEREST



German Center for Research
and Innovation - New York



Germany
Land of Ideas

The Heidelberg University Association and the German Center for Research and Innovation cordially invite you to a panel discussion on **Stress and the City**

Monday, 2 November, 2015, from 6:30pm. to 8:30pm.

with

Prof. Dr. Andreas Meyer-Lindenberg Director, Central Institute of Mental Health, Mannheim, Germany
Professor and Chairman of Psychiatry and Psychotherapy, Heidelberg University
and

Prof. Dr. Andrew Rundle Associate Professor of Epidemiology, Mailman School of Public Health,
Columbia University

moderated by

Irmintraud Jost Executive Director, Heidelberg University Association

at the

German House, 871 United Nations Plaza (First Ave. at 49th Street), New York, NY

RSVP by October 29 by clicking on <http://goo.gl/m7DT5n> .

This event is free, but registration is required. Seating is limited

Reception to follow

Currently, over 50 percent of the world's population lives in cities. By 2050 over two-thirds of people will reside in urban environments. Although city living has many advantages, residing in cities is often associated with a high cost of living, and high crime rates, and large population density. Research has also shown that people who grow up in cities process negative emotions such as stress differently from those who move to the city as adults. These and other factors often result in severe or prolonged stress. Could the stress of city life be

increasing the risk of mental health disorders? Does city living make the brain more susceptible to mental health conditions? Do people living in cities and rural areas differ in the way that their brains process stressful situations? If scientists are able to detect which aspects of city life are most stressful, these findings may help to improve the way urban areas are designed. Please join our speakers as they discuss these and other significant questions affecting stress and the city.

IEEE NJ Coast Section
2nd Conference on Mobile Security/Cyber Security and Privacy
November 4, 2015 (Wednesday)
Venue: The Edison Hotel & Conference Center,
3050 Woodbridge Avenue, Edison, NJ 08837 USA

Keynote Speakers



Dr. Ed Amoroso
AT&T



Donna Dodson
NIST

Invited Speakers



Prof. Steven Bellovin
Columbia Univ.



Eric S Green
Mobile Active
Defense

PARTICIPANT REGISTRATION

Mobile security, cyber security, and privacy have become more critical in our business, government, travel, healthcare, and every-day lives. With society's exploding dependence on mobile devices and wireless technologies, effective security solutions have become increasingly important in everyday life. Whether you are a security expert or a novice, practical solutions are crucial in your industry as well as personal life. Join us at this upcoming high-impact one-day conference to hear more about these important topics from business, academia, federal government, and research. Take some time with us to catch up on the latest trends, review the issues, collaborate with colleagues in industry and research, and take away practical ideas to enhance security of your world.

Who Should Attend: This conference is geared to IEEE members, non-members, students, and guests who would like to review the state of the art in mobile security, cyber security, and privacy and become aware of issues and directions of research, academic, and practical solutions.

What Will You Learn at This Conference: If you have considered learning more about security, this is an ideal event to attend. Awareness of mobile security, cyber security, and privacy improves your job, consulting, and life skills. You can get Professional Development Units PDU (Continuing Education Units (CEU)).

POSTER DISPLAYS: The student posters presentations will be on display all day.

Attendee Registration	Before Aug 4	Before Sept 4	Before Oct 4	On or after Oct 4
IEEE member	\$35	\$45	\$55	\$65
IEEE student member / Life Member	\$15	\$25	\$35	\$45
IEEE Life Member	\$20	\$30	\$40	\$50
Non-Member	\$100	\$125	\$150	\$175

Please register at https://meetings.vtools.ieee.org/meeting_view/list_meeting/25959

For More Information please visit the IEEE New Jersey Coast Section website <http://sites.ieee.org/nicoast/>

INDIVIDUAL ATTENDEE REGISTRATION: Click on the following link for individual attendee registration: <https://meetings.vtools.ieee.org/m/35039>

STUDENT POSTER INFORMATION: follow the link <http://sites.ieee.org/nicoast-mscs/calls-for-papers/>

INDUSTRY PATRON REGISTRATION: As an industry representative you can participate in one or more of the following:

- (i) Product presentation (speak at the conference)
- (ii) Product demonstration (at your table) and/or
- (iii) Sponsor at one of three levels and highlight your company (during lunch, breakfast or break periods)

Click on the following link for Industry Patron registration: <https://meetings.vtools.ieee.org/m/35184>

For more information on speakers, agenda, industry patrons, etc. follow the link: <http://sites.ieee.org/nicoast-mscs/> OR

CONTACT EMAIL: For questions send email to Conference Chair at anarasimhan@ieee.org

SAVE THE DATE

WOMEN IN ENGINEERING

IEEE WIE SUMMIT-ON
INSPIRING AND EMPOWERING WOMEN IN TECHNOLOGY



NOVEMBER 6 - 8 2015
PHILADELPHIA PA



Call for papers open - See website for more information
SITES.IEEE.ORG/WIE-SUMMIT-USA-EAST



[IEEE WIE Summit USA East 2015](#) in Philadelphia, PA on 6-8 November 2015 focuses on developing and improving leadership skills for individuals at all stages of their careers. Attendees will have the opportunity to hear inspirational and empowering talks presented by successful leaders from IEEE USA North-East region. Emerging technologies will also be demonstrated, engaging attendees to facilitate discussion and potential advancement of STEM outreach class ideas.

Conference Highlights:

- Friday: opening reception starting at 5pm
- Saturday: conference tracks
- Saturday evening: social event
- Sunday morning: session ending at noon

Join over 200 other professional women and men focused on inspiring, engaging and advancing women in technology. Network, learn and share during the 2015 IEEE WIE Summit USA East at the Sheraton Philadelphia University on 6-8 November 2015.

Through a network of more than 525 affinity groups and 16,000 members around the world, IEEE Women in Engineering (WIE) directly transforms the lives of hundreds of thousands of young girls and women via pre-university outreach, technical seminars, humanitarian projects, networking events, and educational programs focused on encouraging self-realization through the core ideas of the IEEE WIE mission.

Call for Participation

- Topics: Innovation, Leadership, Empowerment
- Deadline 9 September
- Paper and non-paper submissions accepted
- Papers will be published in IEEE Xplore

Career Fair

- November 7, 1-5pm
- Conference partnerships also available

Venue

- Sheraton Philadelphia University
- 3549 Chestnut Street
- Special conference rate: USD \$149/night



Meet Innovative Technology
<http://ieeescrpts.mit.edu/conference>

Date:
November 7-8, 2015

Location:
Stata Center and Building 34
77 Massachusetts Avenue
Cambridge, MA 02139

General Chair:
Miri Choi
(mirichoi@mit.edu)

Co-Chair & Treasurer:
Soon Wan
(gimsoon@ieee.org)

Registration Chair:
William Huang
(huangjd@mit.edu)

Sponsorship & Exhibition Chair:
Bob Alongi
(r.alongi@ieee.org)

On behalf of the MIT IEEE Student Branch and IEEE Boston Section, we would like to invite you to the inaugural IEEE MIT Undergraduate Research Technology Conference.

The 2015 URTC conference brings together undergraduates around the world to present, discuss, and develop solutions to advance technology for humanity. As an IEEE official conference, undergraduates may publish papers of their school projects, research, innovations, or case studies. Participants attend a rich program with keynote speeches and technical flash talks featuring renowned speakers, a student design competition, and networking events. The conference will be hosted on the MIT campus.

- Conference Highlights:**
- ❖ Keynote Speeches by Barry Shoop, IEEE President and CEO, Tadayoshi Kohno, professor at the University of Washington, Midred Dresselhaus, 2015 recipient of the IEEE Medal of Honor, Elliot F. Kaye, Chairman of US Product Consumer Safety Commission, and more.
 - ❖ Four Focus Technical Tracks
 - Energy, Renewable, and Sustainability
 - Humanity and Social Development
 - Communication and Connectivity
 - Computer and Information Technology
 - ❖ Competitive Brainstorming Competition
 - ❖ MIT Tours
 - ❖ Meet Industry experts through networking sessions

Registration Deadline: **November 6, 2015**
 Includes conference proceeding, meals, t-shirt, conference bag with giveaways, and admission to all conference programs.

To register: <https://meetings.vtools.ieee.org/m/36353>

- Housing and Accommodations:
1. MIT Student Host (Free for non-MIT Students)
 2. Hyatt Regency Cambridge





Please join the
IEEE New York Section/Consultants' Network; PACE:

“THE BUCKET PLAN®”
How Engineers & Consultants Can Coordinate Social Security with Retirement Income Planning
Wednesday, November 11, 2015 | 5:30 PM – 7:30 PM | 14 Penn Plaza 9th Floor, New York,



Joseph Felicetti
Retirement Specialist

Joe Felicetti is a registered investment advisor with over 20 years of experience with retirement accounts. He is currently a member of The Ed Slott Elite Advisor program and EVP at Seelaus. This advanced program trains advisors year round on retirement distribution strategies.



Erica C. James
Investment Advisor

Erica James is a registered investment advisor with over ten years experience in financial services, real estate, and business management. She is also the founder of Women in Business Leadership Council an educational services platform that provides retirement focused financial literacy for women.



PROGRAM HOSTS



Marty Izaak
Vice President
Transportation & Infrastructure
Tolson Solutions LLC



Robert M. Pellegrino
Chair, IEEE NY Section PACE & Tappan Zee Subsection

REGISTER
RSVP to
ejames@granite-springs.com

*All are welcome.
Bring a colleague or friend.
Please note:
You must be pre-registered to attend. Building security requires advance notice for admission.*

**Light refreshments will be served.*

According to a study published by the Social Security administration in 2014, Social Security income accounts for only 38% retirement income¹. This begs the question: Where are you getting the other 62%? Join us for this informative seminar to find out more:

- Learn how to determine the “income gap” between retirement sources (including Social Security income) and retirement income needs.
- Learn about the sequence of returns and its impact on investments during the accumulation phase.
- Learn about the sequence of returns and its impact on investments during the distribution phase.
- Learn how to compartmentalize assets to efficiently ensure liquidity, maximize potential income distributions, and minimize taxes.

QUESTIONS?

Please contact Erica James at (800) 922-0584 or email her at ejames@granite-springs.com.

¹Social Security Administration, Social Security Basic Facts, April 2, 2014 <http://www.ssa.gov/news/press/basicfact.html>

The German Center for Research and Innovation, the Consulate General of the Federal Republic of Germany, and the German American Chambers of Commerce cordially invite you to a panel discussion on

FOCUS: Smart Grid 2015

Thursday, November 12, 2015, from 6:30 p.m. – 8:30 p.m.

with

Dr. Annegret Groebel

Director, International Relations/Postal Regulation
Bundesnetzagentur

and

Bernt Klein

Vice President of Global Sales & Marketing eMeter
Siemens AG

and

Erwin Rezelman

President & CEO
Urban Integrated, Inc.

moderated by

Dr. Kurt Becker

Vice Dean for Research, Innovation, & Entrepreneurship
Professor in the Dept. of Applied Physics & the Dept. of Mechanical and Aerospace Engineering, NYU
Polytechnic School of Engineering

German House, 871 United Nations Plaza (First Ave. at 49th Street), New York, NY

RSVP by November 10 by clicking [here](#). Registration is required to attend. Seating is limited.

Reception to follow.

New Yorkers have experienced firsthand how an electricity disruption can have a domino effect – a series of failures that affect transportation, communications, and security. A smarter grid adds resiliency to electrical power systems and makes them better prepared to address emergencies, such as severe storms, earthquakes, heat waves, and terrorist attacks. In addition, the Smart Grid is one way to address an aging energy infrastructure that needs to be upgraded or replaced. It has the capacity to increase energy efficiency by enhancing awareness among consumers about the connection between electricity use and the environment. Thus, the Smart Grid not only provides a unique opportunity to propel the energy industry into a new era of reliability, availability, and efficiency, but it can also have a positive impact on the economy and the environment.

RSVP TO: <http://form.jotformpro.com/form/52725145515958>



POWER & ENERGY SOCIETY
INDUSTRY APPLICATIONS SOCIETY
NEW YORK SECTION



You are invited to a meeting of the PES & IAS NY Chapter on:

Tuesday November 17th, 2015

NERC Critical Infrastructure Protection Standards Cyber Security

Speaker: William Vesely is currently a Senior Specialist within Con Edison currently addressing compliance to the North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) Standards and Cyber Security endeavors. William primarily focuses on transmission substation control systems. William served in the United States Navy stationed aboard a Nuclear Submarine out of Pearl Harbor HI. He was responsible for maintenance and operation of satellite communications, intelligence photography, and electronic surveillance assets. He was recognized as being directly involved in the improvement and incident free operation of communication security and cryptographic material control. William performed physical security and briefed personnel on intelligence information. In addition to security, William has drafted local procedures, provided training, and performed and coordinated work control efforts. William was qualified in fleet quality assurance work and performed training functions in electrical distribution nuclear operations at Knolls Atomic Power Laboratory, Kesselring. William holds a B.S degree in Nuclear Engineering Technology from Excelsior College, in addition to other technical specialty education.



ALL ARE INVITED – PLEASE POST

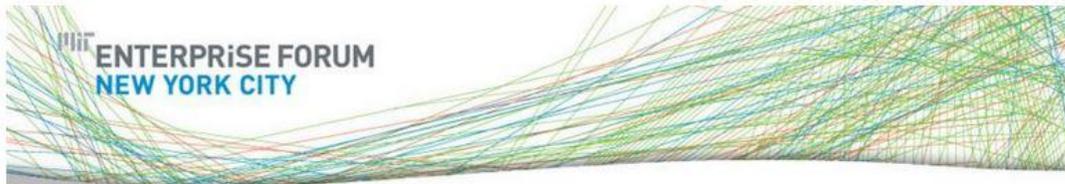
RSVP:

<https://meetings.vtools.ieee.org/m/36896>

Chair Programs: Arnold Wong

When: 5:00 pm — Starts-Refreshments & Program
7:00 pm — Program Ends

Where: Con Edison, Edison Room, 19th Floor, 4 Irving Place, New York, NY 10003, Nearest Subway: 14th St/Union Sq.



MIT-EF NYC Launches MIX and MATCH to Mobilize Adult Literacy

New Yorkers to compete for \$7-Million XPRIZE

NEW YORK – October 29, 2015 – The [MIT Enterprise Forum of New York](#) (MIT-EF NYC), with the generous support of Fiverr, today announced the kickoff of the world’s first “MIX and MATCH” campaign powered by Cynkup.com. This groundbreaking effort connects teams and individuals to build a mobile app for adult literacy — and compete for the **\$7 Million Barbara Bush Foundation Adult Literacy XPRIZE presented by Dollar General Literacy Foundation** . The launch will take place at a gala kickoff event on the evening of November 18th at The Cooper Union in NYC.

“A parent’s literacy level is a significant predictor of their child’s future educational success, influencing generations to follow,” said Barbara Bush, founder of the Barbara Bush Foundation for Family Literacy. “I am inspired and hopeful that this Adult Literacy XPRIZE will bring about a radical breakthrough to end the cycle of low-literacy in America and my grandchildren will grow up in a country where education is abundant and accessible to all.”

“This is an incredible opportunity for entrepreneurs, software developers, literacy specialists and education leaders to engage in the world’s first ‘MIX and MATCH’ event to learn and engage in this competition”, said Cristina Dolan, Chair of the MIT-EF NYC and Founder of [Dream it. Code it. Win it.](#) , the award winning student competition for problem solving with code.

“New York is one of the most linguistically diverse cities in the world,” Dolan continued. “But too many New Yorkers struggle to read English and don’t have access to adult literacy programs. **The solution is here.** In our increasingly mobile-centric world, we can design an app to empower adults to learn to read. And the Barbara Bush Foundation Adult Literacy XPRIZE is offering **\$7-million in prizes** for teams who can create the solution.”

First Lady and Tech Luminaries Shed Light on Literacy

The MIX and MATCH event will showcase insights from top literacy thought-leaders – and a special live Skype appearance by former **First Lady Barbara Bush**. Leading entrepreneurs, including Peter Diamandis, Founder of The XPRIZE Foundation and Co-Founder of Singularity University, will detail how XPRIZE competitions inspire solutions for impossible problems.

The panel of accomplished EdTech visionaries and entrepreneurs includes:

- Stephanie Dua, CEO, Homer
- Paul Gollash, CEO Voxy

Jonathan Harber, former CEO Pearson K12 Technology and Founder of SchoolNet

•Michael Preston, Executive Director, CSNYC

•Jake Schwartz, CEO, General Assembly

Location: The Cooper Union, The Great Hall

7 East 7th Street, NYC

Date: Wednesday, November 18th, 2015

Time: 5:30 pm

“The NYC tech ecosystem is growing more than three times faster than the US economy and the New York City Department of Education is the largest in the world. Yet more than 2 million adults in New York City, and 36 million nationwide, read at less than a 3rd-grade level,” said Dolan. “It’s time we all helped. There is no better place to build a team, build an app and test within this diverse community to solve the adult literacy problem and win!”

Throughout the event, attendees will be invited to participate in a unique “virtual match” to become part of the winning team.

For more information on the MIX and MATCH event, and to register, visit <http://mitefnyc.org/eventbrite-events/?event=19102161078>

Media or Sponsor Contact: Colette Thompson

Email: Colette@mitefnyc.org

Phone: 718-222-3339

About MIT Enterprise Forum of New York City

[MIT Enterprise Forum](#) informs, connects, and coaches technology entrepreneurs—enabling them to rapidly transform their ideas into world-changing companies. We are a global network of local organizations, with over 25 global chapters, inspired by [MIT](#), and open to the world. We are managed by [MIT Technology Review](#), an independent global media company wholly owned by [MIT](#). (www.mitefnyc.org)

About the Adult Literacy XPRIZE

The \$7M Barbara Bush Foundation Adult Literacy XPRIZE presented by Dollar General Literacy Foundation challenges teams from all over the world to create mobile learning applications able to move low-literate adults to basic literacy in just one year. The solutions will overcome key barriers by improving access, increasing retention, and scaling to meet demand – anytime, anywhere – empowering the nearly 1 in 10 low-literate adults living in the U.S. with the skills they need to improve their lives. Learn more at

<http://adulteracy.xprize.org/>

Columbia Integrated Systems Laboratory Fall 2015 Seminar Series



Prof. Rajit Manohar, Cornell

“Engineering Neuromorphic Systems”

Sept. 28th, 11am-12pm, CEPSR 414, Host: Prof. Aurel A. Lazar



Prof. James Buckwalter, UCSB

**“Fracking for 5G: Reconfigurable RF and High-Efficiency Millimeter-wave
Circuit Techniques for Better Spectrum Usage”**

Oct. 2nd, 2-3pm, Mudd 627, Host: Prof. Harish Krishnaswamy



Dr. Eric Nestler, ADI

**“Low Power Passive Switched Capacitor Analog Signal Processing Circuit
and Systems ”**

Oct. 9th, 2-3pm, Mudd 627, Host: Prof. Peter Kinget



Prof. Naehyuk Chang, KAIST

“Design Automation of Things, the Future of EDA”

Oct. 21st, 2-3pm, Mudd 627, Host: Prof. Mingoo Seok



Prof. Ramesh Karri, NYU

Topic TBD, related to trusted hardware design

Nov. 20th, 2-3pm, Mudd 627, Host: Prof. Mingoo Seok

Organized by Prof. Mingoo Seok (ms4415@columbia.edu)

Co-organized by Jiangyi Li (jl3920@columbia.edu)

More details at <http://www.cisl.columbia.edu/seminars.html>

Details are available from <http://www.cisl.columbia.edu/seminars.html>

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The IEEE NY Monitor is published online monthly excepting in July and August. The target readers are IEEE members (more than 4,000) who reside in New York City and vicinity. It is also downloaded by many of the 30,000+ members of the IEEE Region 1 that covers 22 Sections of the IEEE in the entire northeastern United States.

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THIS IS THE END OF THIS MONTH'S NY MONITOR

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