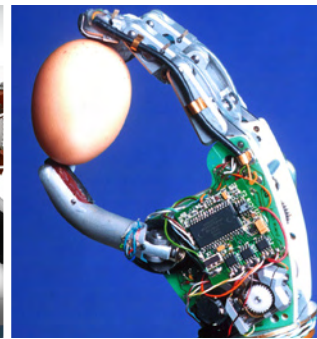
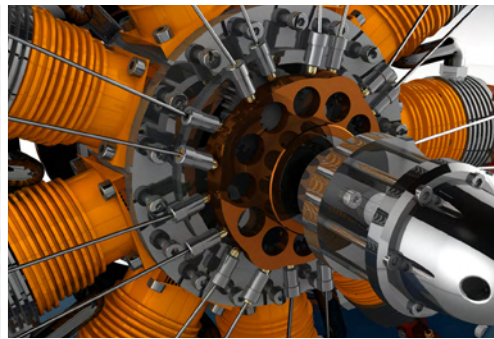
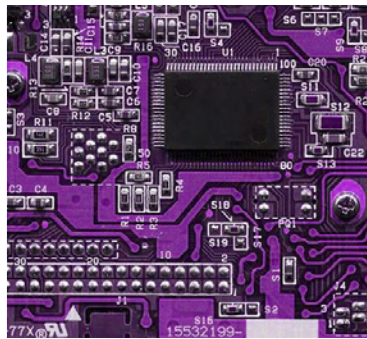




THE PULSE

OF LONG ISLAND



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As you probably know, the 11th annual Long Island Systems, Applications and Technology (LISAT) Conference is being held on Friday May 1, 2015 at Farmingdale State College of the State University of New York. LISAT 2015 will feature presentations that highlight new and interesting work on a variety of electronic systems, technologies, and applications - most of which are Long Island based, as well as a student paper track.

LISAT 2105 will continue to have a full-day Professional Development Track, which will provide attendees up to 0.6 CEUs (6 PDHs) for three (3) two-hour sessions. We hope you all can attend LISAT details and registration may be found online.

MORE INFORMATION: <http://ewh.ieee.org/conf/lisat/>

REGISTRATION: <https://meetings.vtools.ieee.org/m/30523>

On a separate matter, volunteers are crucial to the success of our Section. If you have the time, wish to work with us and are not already involved, please take a look at our section's website on IEEE.LI and browse to the societies' and committees' pages to see the volunteer positions available. I also encourage you to attend the monthly ExCom meetings; the next one is to be held on May 18th at Telephonics in Farmingdale.

The ExCom meetings operate as forums for you to voice your concerns about IEEE, about IEEE Long Island about the state of technology in the US and to make recommendations for action that we might take to improve any of the aforementioned.

There is no better place to discover what is happening in the section and how you can get involved in one of the societies to affect change. Just send me an email before you attend so I can get you name added to the attendance list. If you wish to speak to ExCom on a particular topic, just let me know your topic in advance, I will add same to the agenda and you will have an opportunity to present it to ExCom and receive the feedback from those who are present.

Thank you again for the opportunity to serve, and please reach out to me if I can help you in any way.

John F. Vodopia

Chair, IEEE Long Island Section

chairman@IEEE.LI



THE PULSE

OF LONG ISLAND

The Pulse of Long Island is produced by the **Long Island Section** of the **Institute of Electrical & Electronic Engineers**. It is published monthly except during July & August.

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LETTERS TO THE EDITOR:

Let Your Voice Heard

The Pulse of Long Island is a newsletter for the members of the Long Island IEEE Section. You can let your voice heard by writing to the Editor. How to bring more value to our members? Interesting new technology, or a project? An issue of interest to members of the IEEE Long Island, Long Island engineers and computer professionals, or Long Island technical community at large? Write to the **Pulse**. Let your letter be read, and your voice heard.



HOW TO CONTRIBUTE:

Send your letters or articles via email to pulse@ieee.li.

If selected for publication, the letter or article will be edited before being published.

CONTRIBUTION DEADLINE:

20th of a month for the next month edition.

CONTRIBUTIONS FROM LONG ISLAND TECHNICAL & ENGINEERING COMPANIES:

Publish your technology related **press release** (up to one page) at no cost. Please send the press release as a PDF file attached to email to pulse@ieee.li, addressed to the Editor, with a Subject line "Pulse -PR" followed by your company name, and the responsible contact person's name, email and phone number in the email body.

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The IEEE Long Island Section Website

The IEEE LI Section website is regularly updated to reflect recent section activity and upcoming events. Each Society and Affinity Group has a dedicated page that describes their function and includes contact information.

Visit our site at IEEE.LI

Consultant's Network of Long Island

The Consultant's Network of Long Island maintains a referral service of engineering, computer, managerial & technical professionals. For more information, please visit their website at:

www.consult-li.com

Membership Development

For more information on membership with the Long Island Section of the IEEE, e-mail M. Nazrul Islam at: membership@IEEE.LI

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 <p>TECHNOLOGY AND ENGINEERING MANAGEMENT SOCIETY (TEMS) Chair: Brian Quinn Email: tmc@ieee.li</p>	<p>The Long Island Section of IEEE has 17 Chapters. Each Chapter is a technical subunit of the Long Island Section, associated with an IEEE Society. The Chapters, as well as the Section, are always welcoming volunteers. If you would like to help with any of the Long Island Chapter's steering groups, please do contact the relevant Chapter Chair, Vice Chair, or one of the Section officers.</p>		

MAY 2015

May 1, Friday
LISAT Conference
 SUNY Farmingdale
 Farmingdale, LI
 8:30 AM - 5:00 PM

May 6, Wednesday
*Joint PSES, ASME
 and ISA Meeting*
**Electrical Instruments
 in Hazardous Locations**
 By, Shane Filer
 NYIT
 Old Westbury, LI
 6:00 PM Refreshments
 6:30 PM Lecture

May 13, Wednesday
*Long Island Consultants
 Network Meeting*
Wireless Communications
 By Lyubov Renselaer
 Briarcliffe College
 The Great Room
 Bethpage, LI
 6:30 PM - Refreshments
 7:00 PM - Lecture

May 14, Thursday
IEEE Computer Society Meeting
**Mobile Product Innovations:
 The Bloomberg Experience**
 By Gregg Fenton
 CA Technologies, Islandia, LI
 6:00 PM Refreshments
 6:30 PM Lecture

May 18, Monday
EXCOM Meeting
 Telephonics
 Farmingdale, LI
 5:45 PM - Dinner
 6:15 PM - Meeting

May 20, Wednesday
*Joint IEEE Communications
 and WIE Society Meeting*
Wireless Communications
 By Lyubov Renselaer
 UL, Melville, LI
 6:00 PM - Pizza
 6:30 PM - Presentation





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For more information about these meetings and lectures, please visit:
<http://www.IEEE.LI/calendar>

ieee.org

JUNE 2015

June 3, Wednesday
**Long Island Consultants
 Network Meeting**
 Briarcliffe College
 The Great Room
 Bethpage, LI
 7:00 PM - Meeting

June 5, Friday
Photonics Society
Photonics Workshop
 SUNY Farmingdale
 Farmingdale, LI
 8:30 AM - 4:30 PM

June 29, Monday
EXCOM Meeting
 Telephonics
 Farmingdale, LI
 5:45 PM - Dinner
 6:15 PM - Meeting



Long Island's Electrical and Electronic History

By Jesse Taub, IEEE Long Island Section Historian

Our survey of *Pulse* issues from the early 80's continues, starting with the November 1983 issue. It described a talk sponsored by the Section and the AES Society on "NEXRAD – The Next Generation Weather Radar". The speaker was Stephen Delligatti of Sperry. While weather radar had been with us for several years, the use of software controlled color displays was new at that time. The program was sponsored by the US Departments of Commerce, Transportation, and Defense. We now take weather radar for granted, but it was not that long ago that forecasting snowfalls was a guessing game.

A talk on "Super Computers with Application to Artificial Intelligence and Image Processing" was presented by the Computer Society. The speaker was Professor Kai Wang of Purdue University. The focus of the talk was on the impact of VLSI on adding more computing power. As advanced as this was then, I can only imagine what such a talk would cover today in view of the tremendous advances in chip technology allowing for orders of magnitude increases in the number of transistors that can be placed on a small chip.

The December Section meeting was also sponsored by the Student Activities Committee. The talk was "Perspectives in Electrical Engineering Education" by Dr. Bernard Bulkin of Polytechnic University (now NYU Poly). He stressed the importance of linkages between an engineering school and the local industry. This approach is alive and well on Long Island. All of our local engineering schools have active outreach programs.

The featured speaker at the January 1984 Section meeting was Rod Lowman, our former Historian. His topic was Electrical Engineering in China. I recall attending his interesting lecture. Rod had been part of an IEEE delegation to China hosted by the Chinese Institute of Electronics. China had only recently emerged from the Cultural Revolution and was trying hard to catch up with the rest of the world. Rod indicated that they were five years behind us. A perusal of many current IEEE journals will show that Chinese authors are very well represented. They now seem to be technologically up to date.

The topic for the February meeting was "Microwave Imaging with Large Antenna Arrays". The speaker was Professor Bernard Steinberg of the University of Pennsylvania. This was an early example of imaging at microwave frequencies. Today, there are many examples of microwave and millimeter wave imaging, most notably passenger screening for hidden metal objects at airports.

The February issue also announced the formation of the Long Island Consultant's Network, which was formed by Bill Wilkes. Bill is still an active member of the IEEE LI Section EXCOM.

These examples of Section activities from more than 30 years ago, tell as much about the roots of today's technology. It was also impressive that some of the people cited above are still contributing in 2015.

As always, I thank Rod Lowman, our former historian, for preserving these old *Pulse* issues and James Colotti, our Webmaster, for scanning many of them and publishing on our IEEE.LI website.

CONTINUED FROM THE APRIL EDITION OF PULSE

In the May edition of **Pulse**, we are continuing a four-part series on Evolution of American Engineering Education started in the March edition. The article, co-authored by IEEE Long Island Section's member Marjaneh Issapour, was presented and published on ASEE's CIES 2015 in Palm Beach CA on February 4th of 2015. The original article has been edited for **Pulse**. The author's references shall be listed with the last published part of the article.

Evolution of American Engineering Education

PART III

By Marjaneh Issapour
and Keith Sheppard

INTRODUCTION

Throughout the history of American engineering education, change has been the only constant. The rapid expansion of engineering education started in the land-grant schools established under the provisions of the Morrill Act of 1862 (Marcus 2005). It was then that engineering found a firm place in academia, and a four-year curriculum was adopted as the standard for an engineering degree. However, different forms of formal or informal engineering education did exist prior to the Civil War. Initially, engineering was taught informally as skills handed down from practicing engineers who were mostly European immigrants. Later it was integrated into the curriculum at academies to train engineers to meet the regional economic need. The academies offered a more formal training as part of the high school education. Furthermore; there were several patterns of formal college-level engineering courses in the pre-Civil War era. Most historians have ignored different forms of practical engineering courses offered by the antebellum colleges (Reynolds 1992).

This paper gives an overview of engineering education in America from its inception to the present. Based on the major changes of format and the curriculum content of engineering education, the historical timeline can be divided into four major segments. These segments are: 1) the period prior to Morrill Act of 1862, 2) the post-Civil War and prior to World War II, 3) after World War II and 4) the most recent movements to integrate engineering in K-12.

ENGINEERING EDUCATION AFTER WORLD WAR II

By the 1940s, the war had created new opportunities for academic engineering research and the widespread transformation of American engineering education. Extensive research investments, primarily from the military and the Atomic Energy Commission overshadowed the few industrial investments in engineering research (Seely 1993).

Trade associations had been the principal research supporters in the 1930's, when a few thousand dollars a year constituted a large project. After 1945, however, federal grants worth hundreds of thousands or even millions of dollars a year supported not just researchers but entire graduate programs with marvelous new facilities & state of the art equipment. (Seely 1999).

The focus of research in the post-war era was concerned with cutting edge technologies, such as computers and electronics, nuclear power, jet propulsion, rockets, and special materials. Engineer scientists were much more suitable candidates to conduct such research than practically trained engineers and as such they received priority in funding.

Many leading engineering schools, including Rensselaer Polytechnic Institute, Georgia Institute of Technology, and California Institute of Technology, were closed to women until after World War II. "The few women admitted to Massachusetts Institute of Technology (MIT) struggled against a hostile intellectual and social environment" (Bix 2004).

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Evolution of American Engineering Education

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ENGINEERING EDUCATION WORLD WAR II

By the 1950s, the engineering curriculum included much more science than practical applications as part of the curriculum. Special mathematics and science courses were developed for engineering education. New engineering fields such as engineering science, engineering physics, and material science engineering emerged. Establishment of the National Science Foundation (NSF) and the government's support for research in engineering radically transformed its education. Engineering schools such as MIT, Cornell, and Stanford embraced these changes and became more selective in recruiting the students who were able to succeed in a more science-based and research-oriented curriculum. These universities were also collaborating with electronic and other industries to serve the industries needs better as well as keeping a balance between the practical and theoretical.

Up to the early 1950s, professional engineering societies were not getting involved in setting standards or policies for engineering education. Instead, they chose to grow in parallel with engineering education and followed the lead of educational institutions in terms of changes in curriculum (*McGivern 1960*).

In 1952, the Engineers' Council for Professional Development (currently known as Accreditation Board for Engineering and Technology), became concerned about standardization of the engineering curriculum content. The concern was about not breaching the gap between the fundamental sciences and engineering instruction. In response to this concern, the American Society for Engineering Education (ASEE) commissioned a study. The first draft of the report (called Grinter Report) stressed the need for more science in engineering curricula and then, more controversially, proposed two tiers of engineering instruction. One tier of schools would be specialized to train engineers to meet the needs of the industry; another tier of schools would be dedicated to meeting the needs of scientific research in engineering as well as having graduate programs. The suggestion of the two-tier system was omitted from the final version of the report (*ASEE 1994*).

By the late 1950s and early 1960s, most engineering schools that wanted to grow had to develop graduate programs to support fundamental research programs. These programs had a much greater emphasis on engineering science. Their goal was not to serve industry, but rather, to attract federal research funds. By the 1960s, engineering science had dominated most American engineering curriculums. The structure and format of the curriculum had shifted back from practical knowledge to theoretical knowledge. Land-grant colleges, whose focus was to produce engineers to meet the need of local industry, had transformed into institutions with graduate programs to meet the research needs of the government and military. The industry could not compete with the financial incentives offered by NSF, NIH and other governmental agencies (*Marcus 2005*).

In terms of gender, as late as the 1960s, women still made up less than 1 percent of engineering students. However, in the last half of the 20th century, activists fought to change the perception and to gain the acknowledgment of a woman's ability to become a good engineer. The Society of Women Engineers (SWE), established in 1952, spearheaded some of these activities (*Bix 2004*).

The research-oriented engineering education started being criticized in the late 1970's and into the 1980's. The 1980's trend in engineering education emphasized general, rather than technical at the B.S. level. Some chose to continue their specialized training at a master's degree level, or by taking continuing education courses as it applied to their career (*Grayson 1980*). Many employers at the time began to complain that graduating engineers at the bachelor's degree level were not prepared to start employment. Most were lacking the practical and design aspects of the engineering practices (*Marcus 2005*).

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Evolution of American Engineering Education

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ENGINEERING EDUCATION WORLD WAR II

In the late 1990s, a move to re-introduce more practical aspects of engineering into the education had begun. Some efforts were made to re-emphasize design in engineering schools & develop a better balance between design and engineering science. This move may be referred to as reinventing the wheel and going back towards the post land-grant engineering education. As a result, the accreditation agencies for engineering programs have started to work on changing the content of engineering curriculum. ABET 2000 criteria is an example of such efforts (ABET 2013). **Figure 3** displays the evolution of practical versus theoretical content of engineering education over time.

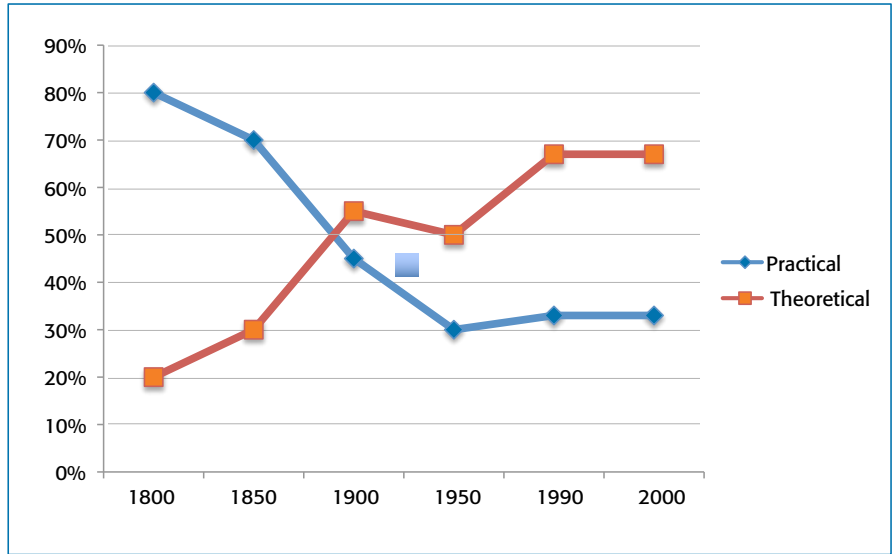
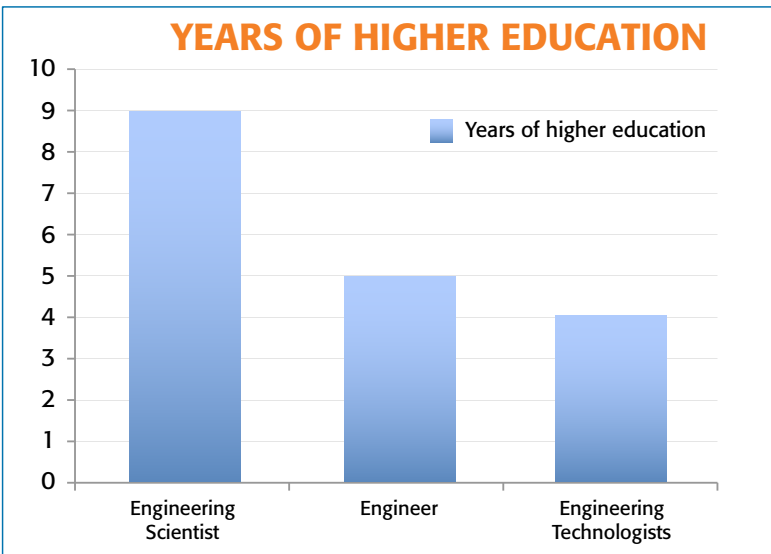


FIGURE 3: The trends of the content of engineering education over time: Practical versus science and theory



It must be noted that the Accreditations Board of Engineering Technology (ABET) regulates the engineering education of all post-secondary accredited engineering and technology programs in US. ABET was founded in 1932 and changed its name to the Engineers' Council for Professional development (ECPD) in 1980. ECPD has been accredited with the first engineering program in 1936 and the first technology (engineering technology) program in 1947. All of the above-mentioned changes and transitions in the engineering curriculums were endorsed by ABET since its inception.

FIGURE 4: Years of post-secondary education for Engineers

Currently, there are three basic types of practicing engineers in the US meeting the needs of industry, as well as research institutions. The three charts (Figures 4 - 6) displayed, are comparisons between these three types in terms of years of schooling as well as theoretical and practical knowledge of the field. For example, engineering scientists who have the longest number of years of schooling also possess most theoretical knowledge. Their curriculum includes a higher level of mathematics and science as opposed to hands-on and practical knowledge. (Century College 2013).

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Evolution of American Engineering Education

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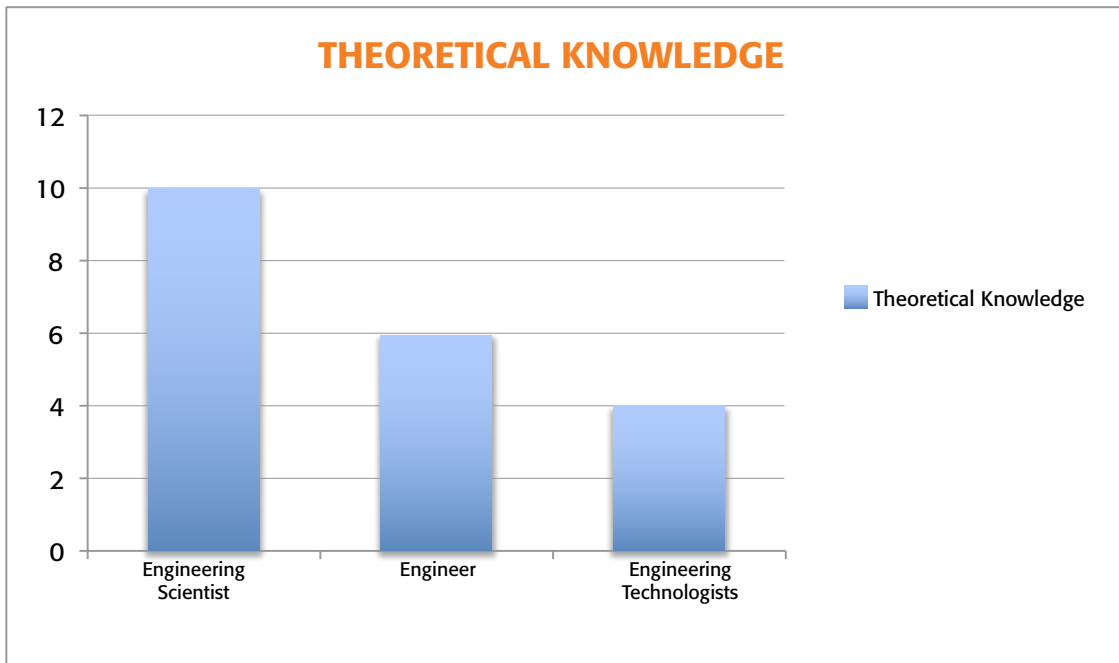


FIGURE 5: Theoretical Knowledge of different practicing Engineers

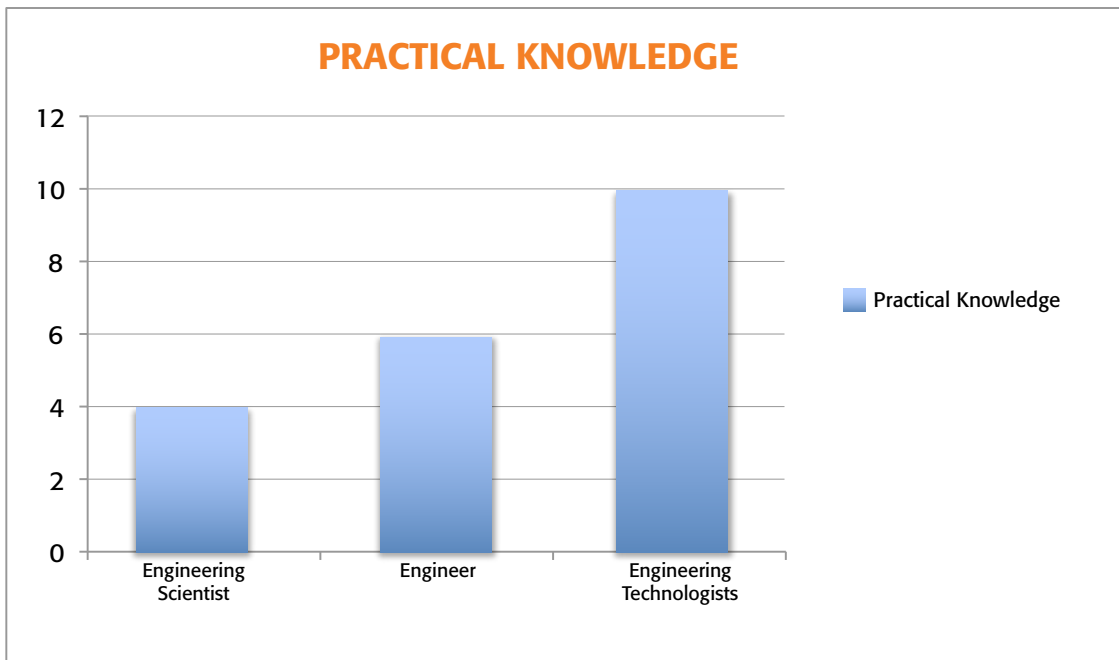


FIGURE 6: Practical Knowledge of different practicing Engineers

TO BE CONCLUDED IN THE NEXT EDITION OF PULSE

LONG ISLAND REGIONAL *FIRST* Robotics Competition

By John G. Schmidt



FIRST® Robotics Competition

School and Business Partnership of Long Island (SBPLI) introduced the *FIRST* Robotics Competition to Long Island in 1999. *FIRST* stands for "For Inspiration and Recognition of Science and Technology". John G. Schmidt, Junior Past Chair of the IEEE Long Island Section, and several other members of the IEEE Long Island Section volunteered at the *FIRST* Robotics Competition this year. The Section received a certificate for the outstanding support of the *FIRST* Robotics Competition from SBPLI. (Ed.)

On March 27th and 28th, the *FIRST* Robotics Competition was held at Hofstra University. The *FIRST* Robotics Competition (FRC) is a program where high school teams design and build a robot in six weeks. The teams are supplied with a kit of parts, to which they supplement existing and purchased parts. The robots must comply with weight and size limits, meet safety standards, and have strict restraints on the total cost of the parts (\$4000 USD) and the cost of any one part (\$400 USD). No elements (software, transmission drives, etc.) may be fabricated before the Kick-off, or reused from previous years, except COTS parts such as a motor or motor controller.



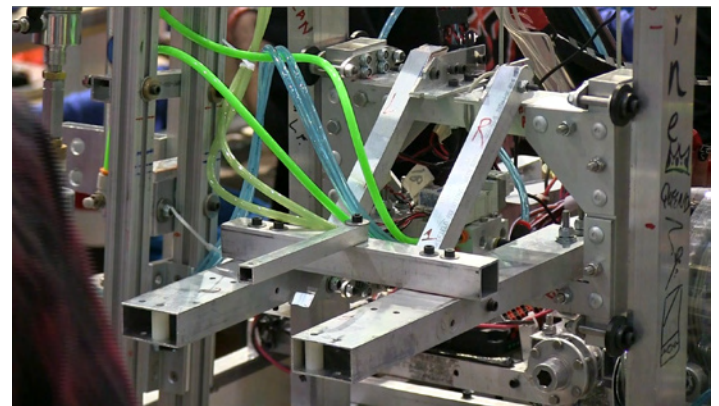
The Competition starts in January with a kick-off event at Stony Brook University where the challenge for the year is announced, and the part kits are distributed. The teams watched a series of videos in a packed auditorium until the reveal of the challenge was played. You could immediately feel the energy and excitement as the teams huddled together and started planning their design right there in their seats!

Using the now unlocked rule book, the teams started to meet at school and iron out their design. Teams approached the design phase in different ways. Some teams reached a design decision quickly using a collaborative approach; the others had multiple

design sub-teams that merged their designs into a final design. One team detailed to me the extensive analysis they performed, listing each feature by its benefit and the complexity cost, and used that data to arrive at the final design decision. One team even built prototypes of features to evaluate their effectiveness.

Once the basics of the design were determined, the teams got down to work building the robot. Most of the teams divided into sub-teams for the build, with separate electrical and mechanical teams, which built and merged their output in the final weeks. Other teams split into coding, wiring and metal-work teams.

As one might expect, the designs had considerable variations. The propulsion systems ranged from simple tank drives (two wheels on each side driven by a common motor) to a four wheel drive system where each wheel was able to turn independently and drive, allowing the robot to move in any direction. Several of the designs had a fifth wheel in the center, solenoid or piston lowered and orientated to the side of the other wheels, allowing the robot to move sideways.

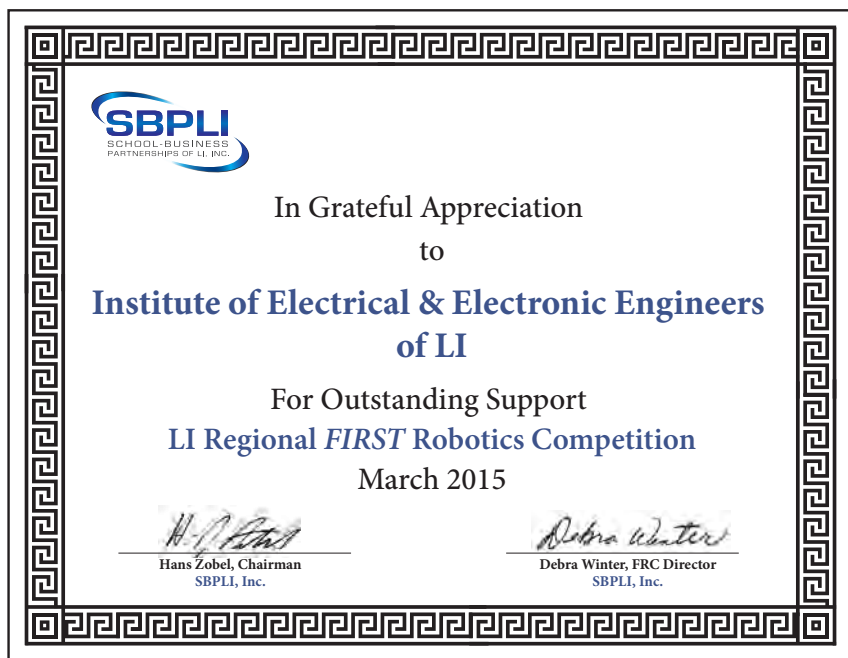


Photos courtesy of Festo Corp

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LONG ISLAND REGIONAL *FIRST* Robotics Competition

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Each match is 2 minutes and 30 seconds long, starting with a 15 second autonomous period, where the robot operates without any human control using pre-programmed instructions.

The *FIRST* Robotics Long Island Regional competition is sponsored and run by the School and Business Partnership of Long Island (SBPLI). Each year SBPLI needs to raise the necessary funds to operate the competition that costs about \$150,000. In the past, the Long Island Regional was greatly helped by the New York State Senator Owen Johnson, who included funds for FRC in his annual budget. With the passing of Senator Johnson, funding for the event has become much more difficult, and SBPLI has been forced to cut back. For example, the teams that win the Regional Competition are eligible to go the National Competition. The cost for each team to do so is about \$20,000

All of the robots had electronics powered by a single sealed lead acid battery, including the wireless router that facilitates communication between the robot and the operator station. Many of the moving parts were controlled by pneumatics, using air tanks, a compressor and pneumatic control modules. Some robots made extensive use of pistons, some of gear and chain drives, and others used cables and pulleys.

The competition is more than the design and performance. The basic principles of *FIRST* include Gracious Professionalism and Coopertition. Each team is expected compete fiercely and yet help their opponents to do the best that they can also. Teams lend each other tools and parts, help each other troubleshoot problems. For example, the teams from Brazil and Israel could not bring batteries on the flights to the US, so other teams lent those to them. As another example, one team's robot was performing very poorly on the field, and another team helped them debug and rewrite the control application between matches. During the event, calls for a needed part are announced over the loudspeakers; it is a matter of pride and bragging rights to be the team that gets the needed part to their competition first.

Six teams are on the field for each match, forming two alliances of three teams. There are scoring opportunities for individual efforts, and opportunities to gain additional points by cooperating with other teams.

(airfare, hotels, meals, robot transportation, etc.). During the previous years, SBPLI was able to assist the teams with this expense but they are no longer able to. Another looming problem is the event venue. Hofstra is very generous, only charging for custodial and security services. However, the competition has outgrown the arena. There is only space for 50 teams in the arena that is filled every year. About four new teams are formed on Long Island each year, so unless a bigger venue is found at a similar cost, local teams are going to be turned away.

The IEEE Long Island Section sponsors the SBPLI each year, and many of our members volunteer at the events as Inspectors and Judges. I encourage our members to look for the announcement for volunteers next year and come help us out! Meeting with the future engineers and hearing them excitedly talk about what they have achieved is an uplifting experience.

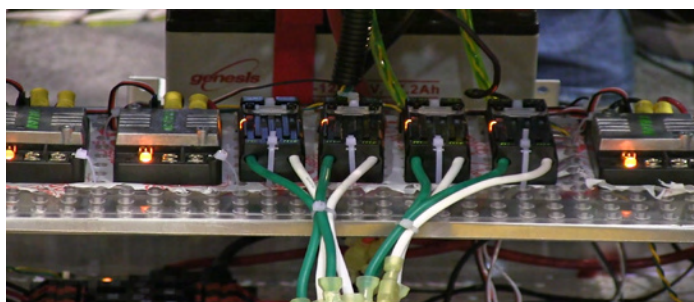


Photo courtesy of Festo Corp

IEEE NEW MEMBER WELCOME

THE LONG ISLAND SECTION WOULD LIKE TO WELCOME THE FOLLOWING NEW MEMBERS FOR 2015!

- Michael Leonardo Asitimbay
- John Baston
- Joseph Carrano
- Collin Champagne
- Jeffrey Robert Christiansen
- Hayley Cohen
- Gary L Deluca
- Robert Desimone
- Juliette Anne Guild
- Thaier Hayajneh
- Zahraa N Krayem
- Justin Matos
- Kyle Joseph McHugh



- Kevin J McShane
- Betsy Mendieta Brito
- Luis Ortiz
- Paul Scalice
- Barry Schneider
- Jordan Elliott Shulman
- Douglas John Sidoti
- Stephan Stanzione
- Yang Wang



would like to thank for its support:



April 11, 2015

Dear Pulse Editor,

I generally avoid getting involved in politics, however, I recently became aware of bipartisan legislation that our members should be aware of. The "Educating Tomorrow's Engineer Act of 2015, HR823, emphasizes the importance of Engineering in STEM education. If enacted, HR 823, would:

- 1) Ensure that states have the ability to integrate engineering design skills and practices into their existing science standards.
- 2) Allow states to award grants to support professional development and instructional materials for STEM education.
- 3) Give states critically needed flexibility to support engineering curricula by expanding a number of existing Elementary & Secondary Education Act grant programs to include engineering education.
- 4) Expand current math and science research to include engineering education.

The Educating Tomorrow's Engineers Act aims to increase student achievement and interest in engineering and to align K-12 curricula with the skills needed in the 21st century workforce. To this end, HR823 removes barriers at the federal level that prevent schools from expanding math and science curricula to include engineering design skills.

It is important to note that this legislation does not create any new duplicative STEM programs. It simply gives states that wish to expand engineering education the tools they need to do so.

Regards,

Louis D'Onofrio

Louis D'Onofrio

IEEE LI Section 2nd Vice-Chair

NOMINATIONS SOLICITED FOR 2014 IEEE REGION 1 AWARDS

by JESSE TAUB, AWARDS CHAIRMAN

IEEE REGION 1 AWARDS

The purpose of the **Region 1 Awards Program** is to publicly recognize professional and technical excellence and major accomplishments and contributions made by **Region 1** IEEE members. There are six categories for the **Region 1 Awards**.

Region 1 of the IEEE gives awards to its members in a variety of technical, managerial and professional categories which are described below. Nominations forms and other instructions can be found on the IEEE website: www.ieee.org; type "**Region 1 Awards**" in the search box.

1A. NEW TECHNICAL CONCEPTS IN ELECTRICAL ENGINEERING

For significant patents, for discoveries of new devices or applications, and for significant reductions in components or processes.

1B. ELECTRICAL ENGINEERING PROFESSIONALISM

For personal, high level leadership in research and design performance in support of all phases of the Electrical Engineering Profession.

1C. PROMOTION OF SELF- DEVELOPMENT FOR PRACTICING ELECTRICAL ENGINEERS

By arranging courses, seminars, and tutorials to enhance the educational level and the competence of practicing electrical engineers.

1D. ENHANCEMENT OF IEEE IN INDUSTRY AND COMMUNITY SERVICE

For outstanding service to the IEEE at the Chapter, Section, Region, and national level, and for major contributions to the industry and to the community.

1E. ELECTRICAL ENGINEERING MANAGEMENT

For managerial excellence in organization, leadership, design, and development.

1F. ELECTRICAL ENGINEERING SUPPORT FOR STUDENT ACTIVITIES

For improving communications between the IEEE and a Student Branch or Student Group; or support and service to a Student Branch or Student Group; for service and leadership to the student community.

1G. THE WILLIAM TERRY DISTINGUISHED LIFETIME SERVICE AWARD

This award is intended to recognize those whose personal efforts have provided leadership, creativity, guidance, hard work, and inspiration in a wide range of IEEE activities over a long period of time.

Please send your nominations to Jesse Taub, the Section's Awards Chair at jjtaub@aol.com. They will be reviewed by the Section's Awards Committee. Nominations must be received on or before **May 15, 2015**. If you have any questions, please call **631-420-1564**.

IEEE computer society

Share Your Experience

PRESENTERS AND SPEAKERS NEEDED

**Working on an interesting project? Or have an interesting topic to talk about?
A startup ready to spread a word, or in need of beta testers with computer knowledge?**

Computer Society Chapter invites you to present your project or your experience. For one of the upcoming meetings we'd like to mash technical and social, and have several presenters presenting interesting computer-related topics in a shorter timeframe, fostering conversation. This is an opportunity to meet each other, learn about our work and possibly identify opportunities for collaboration.

Contact IEEE Computer Society Chapter at computer@ieee.li with your suggested topic.



CO-OP PROGRAM:

Hofstra University School of Engineering and Applied Science (SEAS)

Beginning with the 2014-15 academic year, SEAS is proud to offer a co-operative educational experience, which offers qualified students the opportunity to work in companies utilizing the skills of engineers and computer scientists. The SEAS model envisions students being hired by a company after the Fall semester of their junior year and then working for an six to eight month period with suitable salary paid, and then returning to Hofstra SEAS to complete their degree requirements.

The co-op experience is a very attractive option for students, and has the added benefit of cementing ties between SEAS and technology companies. For more information contact **Philip Coniglio**, Founding Director of the SEAS Co-Op Program, at **516-463-5548** or philip.m.coniglio@Hofstra.edu.

 HOFSTRA UNIVERSITY®



ASME/ISA/IEEE-PSES LI Sections Technical Meeting & Seminar

ELECTRICAL INSTRUMENTS IN HAZARDOUS LOCATIONS

DATE:

Wednesday, May 6, 2015

PRESENTED BY:

Shane Filer, Neal Systems Inc.

LOCATION:

New York Institute of Technology
David Salten Hall, Room SC2
Old Westbury, NY 11568

TIME:

6:00 PM -Sign-In and Refreshments
6:30 PM - 8:30 PM- Presentation

COST:

Attendance is free of charge for all attendees, and includes light refreshments. There is, however, a cost if you wish to obtain PDH credits.

REGISTRATION:

Please register by contacting Jerry Nardiello jerry.nardiello@ngc.com. Please provide your name, daytime phone number, company and society affiliation, and whether you are applying for PDH credits.

PDH CREDITS:

ASME has approved this seminar for two Professional Development Hour (PDH) credits. ASME will issue a two-credit certificate to attendees who pay a processing fee of \$35. Please let us know when you register that you wish to receive the PDH credits and bring a check, made out to ASME Long Island Section, to the seminar.

PROGRAM DESCRIPTION:

- Four main hazardous area electrical protection methods:
 - Explosion Proof, Intrinsic Safety, Purging, & Non-Incendive
- Guidelines for use of each of the 4 major protection methods.
- Typical applications found in Hazardous Locations.
- Factors driving decisions and solutions.
- Optimizing solutions for a given applications.
- Strengths and weaknesses to be considered when designing, installing, or maintaining each system type.
- Discussion, questions and answers.

DIRECTIONS:

For a map and directions see:

http://www.nyit.edu/locations/old_westbury

<http://www.nyit.edu/images/uploads/about/Map-Old-Westbury.pdf>

SPEAKER BIO:

Shane Filer has been involved in industrial instrumentation and automation for the past 20 years. He has written many published technical papers and spoken at numerous conferences related to process measurements in the power, pharmaceutical, and semiconductor industries. He has held various roles of engineering, marketing, product management, sales, and management related to addressing the needs of process engineers in a variety of industries. Previous companies include Leeds and Northrup (L&N) and Honeywell, and his current company is Neal Systems Inc. a Manufacturers Representative (NSI, where his current position is Sales Manager). NSI is provider of industrial instrumentation and automation products. He has been working with customers for the past 15 years regarding correctly applying methods of hazardous area electrical protection for Division 1 and Division 2 areas. Most American customers are fairly familiar with the methods of applying explosion proof (XP) solutions to hazardous area electrical needs. Shane teaches companies how to understanding and apply intrinsic safety methods, which are preferred in Europe for their overall safer solutions in some lower-voltage applications. Shane holds an electrical engineering degree from Grove City College in Western Pennsylvania. He is married with three awesome kids.





LICN
IEEE Consultants Network
of Long Island

**THE IEEE CONSULTANTS NETWORK OF LONG ISLAND (LICN)
IS PRESENTING A LECTURE TITLED:
*WIRELESS COMMUNICATIONS***

0.2 CEU Credits



DATE:

Wednesday, May 13, 2015

PRESENTED BY:

Lyubov Renselaer

LOCATION:

Briarcliffe College
The Great Room,
1055 Stewart Avenue, Bethpage, NY

TIME:

6:30 PM - Pizza
7:00 PM - Presentation

COST:

This seminar is **free** and all are invited.

WHO SHOULD ATTEND?

Engineers who are interested in wireless communications.

ABSTRACT:

This lecture presents the theory and practice of a new advanced modern technology suitable for high data rate wireless communication. It compares the standard telecommunications system wireless versus the new. Covered topics are antennas, their propagation fields and Networking Management. New satellite communication networks are described as an indispensable part of most major telecommunication systems. Discussions are made regarding a number of features that are not readily available with older network systems. Also discussed is The Organization of Standards which establishes and regulates the standards between countries using different bands of frequencies of Radio Channels. The development of wireless communications utilizing multiple-input, multiple-output (MIMO) technology is discussed along with security management, user authentication, service protection & transmission confidentiality.

IEEE Continuing Education Programs are peer-reviewed by content experts. This peer review guarantees both quality of the technical content of learning materials, as well as adherence to IEEE's strict criteria for educational excellence. All programs that pass this strict process are entitled to award IEEE Continuing Education Units (CEUs), recognized as the standard of excellence for continuing education programs in IEEE's fields of interest.

SPEAKER BIO:

Lyubov Renselaer holds a Masters degree of Electrical and Computer Engineering from the New York Institute of Technology (NYIT) and Bachelors and Masters degrees in Automatic Telemechanic and Communications from USUTN, Sverdlovsk, Russia. Lyubov has more than fifteen years of Telecommunications Engineering Experience with specific expertise in digital communications exchange and networking communications.

REGISTRATION:

The presentation is open to the general public. Pre-registration is not required, there is no admission fee and there is no fee for CEU credit. For further information contact **John Dunn** at **516-378-0979**.

DIRECTIONS:

For a map and directions see:

<http://www.licn.org/info/Directions2Briarcliffe.htm>

IEEE computer society

Long Island Chapter

PRESENTS THE LECTURE:

MOBILE PRODUCT INNOVATIONS: THE BLOOMBERG EXPERIENCE



SPEAKER:

Gregg Fenton, Head of Bloomberg's Mobile Products & Connected Devices

WHEN:

May 14, 2015 @ 06:00 pm

WHERE:

CA Technologies Inc., One CA Plaza,
Islandia, NY 11749
Conference Room #CC9

ENTRANCE:

South Entrance off of the LIE Rt. 495

ABSTRACT:

An over-the-top (OTT) refers to a service received over the Internet that is not provided directly by one's Internet service provider. It bypasses traditional distribution, and in doing so disrupts traditional business models. Bloomberg's mobile division managed to create successful, award-winning mobile applications used by business professionals, leveraging Bloomberg's Internet-based services and OTT.

We will have an opportunity to discuss the Bloomberg Mobile applications and Over The Top products. We will hear how user interactions and research are used to make development decisions, and how Bloomberg refined the development process to develop Bloomberg's mobile product portfolio quickly, and how the Bloomberg's team used the learnings to innovate and take advantage of new opportunities, including Apple Watch products.

SPEAKER BIO:

Gregg Fenton has over twenty years of experience in mobile products and services industry. Gregg lead large successful initiatives, shaping how users use mobile in their daily lives. For the past four years Gregg has been the Head of Mobile Products and Connected Devices at Bloomberg, transforming the commercial and professional businesses with award-winning products used by business and financial executives as necessary tools and source of the business news and financial information.

EVERYONE'S WELCOME

Seating is limited; to ensure your seat, please register. The door opens at 6:00PM for refreshment & networking.



TO REGISTER, GO TO:
meetings.vtools.ieee.org/m/34280
<< or scan this code

For more information please contact: computer@ieee.li

Davor Dokonal, Chair, Computer Society • Metodi Filipov, Vice Chair, Computer Society



THE LONG ISLAND CHAPTER OF IEEE ENGINEERING IN COMMUNICATIONS SOCIETY and
THE WOMEN IN ENGINEERING SOCIETY ARE GIVING A PRESENTATION TITLED:
WIRELESS COMMUNICATIONS EVOLUTION TO 5G

**DATE:**

Wednesday, May 20, 2015

PRESENTED BY:**Lyubov Knyazeva-Renselaer****LOCATION:****UL LLC**

1285 Walt Whitman Road, Melville, NY 11747

TIME:

6:00 PM - Pizza

6:30 PM - Presentation

e-mail: lrensela@ieee.org**<http://www.linkedin.com/in/lyubovrenselaer/>****ABSTRACT:**

WHAT DRIVES 5G? Bigger, faster, higher. The development of mobile cellular networks requires higher frequency band, higher quality of service, faster speed. Smartphones are undoubtedly the focus of service architectures for future mobile access. The dramatic growth of mobile data services driven by wireless Internet and Smart Devices has triggered an investigation of 5G for the next generation of terrestrial mobile telecommunications.

The mobile traffic requirements have shown different futures that introduce significant impact on future mobile system architectures, technology developments and evolution. Future traffic development brings new requirements and challenges to future mobile broadband systems: (higher traffic volume, spectrum energy and cost efficiency). There are some new possible revolutionary technologies that are needed to support high-performance computing for signal processing, full duplex, non-orthogonal waveforms, massive MIMO and more. New research will benefit 5G in the long run, & new revolutionary technologies might be used in some specific scenarios. The presentation is co-sponsored by Engineering in Medicine & Biology Society.

SPEAKER BIO:

Lyubov holds M's EENG from NYIT, Certificate of course completion WCET, Certificate of Cisco Networking Device, also Java and C, C++ languages Certificates. Lyubov is the member of IEEE Communication Society (comsoc.ieee.org), IEEE Computer Society (computer.org) and IEEE Women in Engineering (IEEE.LI/wie).

Lyubov has 20 years of Telecommunications Engineering experience in Digital Telecommunications Exchange, both in the industry and at a Medical Hospital, and at Space Engineering Associates.

The coordinator of this event:**Glenn M. Luchen**, Staff Engineer, Life@HealthPlease register at IEEE.LI calendar: www.IEEE.LI

Directions: LIE (495), exit 49S towards 110, merge into s service rd, take the first left on Walt Witman Rd, 12 85 Walt Whitman Rd, UL is on the left side; please enter at back of building.

The Photonics Society IEEE Long Island Section
and Renewable Energy and Sustainability Center,
Farmingdale State College Present:

PHOTONICS WORKSHOP



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Celebrating International Year of Light 2015

INTERNATIONAL
YEAR OF LIGHT
2015



Art Culture
Education
Nature
Science
Sustainability
Technology



WHEN: Friday, June 5, 2015

TIME: 8:30 am - 4:30 pm

ADMISSION: FREE

WHERE: Farmingdale State College,
Campus Center, Ballroom A
2350 Broad Hollow Road,
Farmingdale, NY 11735





IEEE LISAT 2015

11TH ANNUAL IEEE LONG ISLAND SYSTEMS, APPLICATIONS AND TECHNOLOGY CONFERENCE



FRIDAY, MAY 1, 2015

Farmingdale State College



7:30 AM (sign-in) 8 AM start

State University of New York
ROUTE 110, FARMINGDALE, NY

THREE ALL-DAY PARALLEL TECHNICAL TRACKS

See LISAT website for updates regarding content: www.ieee.li/lisat

SYSTEMS

APPLICATIONS

TECHNOLOGY

TYPICAL TECHNICAL TRACKS WILL INCLUDE A BROAD SPECTRUM OF TOPICS

PAST PRESENTATIONS INCLUDED: Ad Hoc Networking, Wireless Sensor Networks, Ensuring Security in the Internet of Things, Eye Gaze Direction Classification, Synchronization of OFDM-Based systems, HW assisted Text Steganography, Infrared Photodetectors, Low power sensor network for Agriculture, Filtering Surveillance Targets, Wireless Spectrum Sharing, Measuring benefits of Music Therapy, Gerontechnology, Telehealth Technology, Using Quantum State Entanglement for Security Key, Quantum-based Encryption, Anatomical Feature-Guided MRI, Wireless Beam Forming for Dead Spots, In-circuit quality measurement of Capacitors

CEU/PDH TRACK (6-HOUR)

0.2 CEU (2 PDH) credits available for each of 3 topics in this track. Pick & choose the topics of your interest.

EXHIBITS HALL

See exhibits from local technology companies, universities, robotics-competition winners, & professional societies.

TIME	ACTIVITY
7:30 - 8:00	SIGN IN (ALSO VIP BREAKFAST)
8:00 - 9:00	OPENING CEREMONY
8:45 - 9:15	BREAK - RH EXHIBITS AREA
9:15 - 10:45	SESSIONS 1: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
10:45 - 11:00	AM BREAK - RH EXHIBITS AREA
11:00 - 12:15	SESSIONS 2: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
12:15 - 1:15	LUNCH - RH EXHIBITS AREA
1:15 - 2:45	SESSIONS 3: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
2:45 - 3:00	BREAK - RH EXHIBITS AREA
3:00 - 4:30	SESSIONS 4: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
4:30 PM	END OF CONFERENCE

PRODUCT APPLICATIONS TRACK

PRESENTATIONS ON TOPICS OF INTEREST TO APPLICATION ENGINEERS SUCH AS:

- Power supply conversion technology
- Wireless Technologies including: WiFi, Zigbee, Bluetooth
- Interconnect technology, Custom magnetic design, Circuit protection
- IoT (Internet of Things), 3D Printing

REGISTRATION AND OTHER INFO AT LISAT WEBSITE:

www.ieee.li/lisat



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 May 3 – 4, 2015

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 May 5 – 7, 2015

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37TH ANNUAL INTERNATIONAL CONFERENCE OF THE
IEEE Engineering in Medicine and Biology Society
MiCo - Milano Conference Center - Milan, Italy, August 25-29 2015



37th Annual International Conference of the IEEE Engineering in Medicine & Biology Society Biomedical Engineering: a Bridge to improve the Quality of Health Care and the Quality of Life

MiCo, Milano Conference Center, Milano, Italy
August 25-29th, 2015

The 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS) will take place in **Milano**, Italy, in the period August 25th-29th, 2015. It will be a remarkable event as it is the first time that Italy will host a conference of the world's largest member-based scientific Society in Biomedical Engineering (BME): at the same time, it will be a unique opportunity to come in touch with the actual BME activities all over the world.

The Theme of the Conference is: **"Biomedical Engineering: a bridge to improve the Quality of Health Care and the Quality of Life"**, thus remarking the central role of BME in the improvement and innovation of health care (with a direct impact on the quality of life) but also focusing on how to reach and maintain a "wellness" status through proper and advanced technologies, devices and protocols.

The Conference will take place in **MiCo - Milano Congressi**, recently rebuilt (2011) and located in downtown Milano, among the largest conference facilities in Europe and worldwide, catering for up to 18,000 people in 70 or so fully appointed conference rooms.

THEMES

- Biomedical Signal Processing
- Biomedical Imaging and Image Processing
- Bioinstrumentation, Biosensors and Bio-Micro/ Nano Technologies
- Bioinformatics and Computational Biology, Systems Biology and Modeling Methodologies
- Cardiovascular and Respiratory Systems Engineering
- Neural and Rehabilitation Engineering
- Cellular and Tissue Engineering and Biomaterials Biomechanics and Robotics
- Therapeutic and Diagnostic Systems, Devices and Technologies & Clinical Engineering
- Healthcare Information Systems & Telemedicine
- Biomedical Engineering Education and Society
- Technologies for Active Ageing and Wellbeing

SUBMISSION DEADLINES

CALL FOR PAPERS (4 Pages)

- January 15th, 2015** – Paper Submission Start
- March 31st, 2015** – Paper Submission Deadline
- May 15th, 2015** – Author Notification
- June 1st, 2015** – Author Final Submission

CALL FOR PAPERS (1 Page)

- March 31st, 2015** – Paper Submission Start
- May 26th, 2015** – Paper Submission Deadline
- June 15th, 2015** – Author Notification
- June 30th, 2015** – Author Final Submission

PROPOSALS FOR SPECIAL SESSIONS

Workshops, Tutorials, Invited Sessions, Mini-Symposia and Special Sessions

February 15th 2015 – Proposals Deadline

embc.embs.org/2015/



37TH ANNUAL INTERNATIONAL CONFERENCE OF THE
IEEE Engineering in Medicine and Biology Society
MiCo - Milano Conference Center - Milan, Italy, August 25-29 2015

BIOMEDICAL ENGINEERING:
A BRIDGE TO IMPROVE THE QUALITY OF HEALTH CARE AND THE QUALITY OF LIFE

9th IEEE-EMBS INTERNATIONAL SUMMER SCHOOL ON BIOMEDICAL SIGNAL PROCESSING

BIOMEDICAL SIGNAL PROCESSING IN NEUROENGINEERING: ENABLING TECHNOLOGIES FOR REHABILITATION

Almo Collegio Borromeo, Pavia, University of Pavia, Italy

August 30th - September 6th, 2015 (just after the IEEE-EMBS Conference in Milan!)

www.summerschoolbio2015.deib.polimi.it



IEEE



APPLICATION:

Prospective applicants must send a curriculum vitae with a summary of professional activities and list of publications, besides a title and a short summary of poster presentation, by email, within April 24th, 2015, according to the instructions available on the website of the School (The School – Application). The admission to the School will be decided upon a selection made by the Steering Committee. Notification of the acceptance will be made by May 12th, 2015.

FEE:

The registration fee is \$1,180 and includes full accommodation for one week at the Borromeo College, meals, coffee breaks, social events and lecture materials.

The IEEE Engineering in Medicine and Biology Society invites you to join us at the Almo Collegio Borromeo (Pavia, Italy) for an exciting and stimulating week of learning, teaching and brain storming on advanced biomedical signal processing methods for quantification of biosignal parameters and their integration.

The IEEE EMBS has initiated a series of Summer Schools with the aim to provide the participants the state-of-the-art knowledge on emerging areas in biomedical engineering. As a part of these ongoing efforts, the 2015 edition of the IEEE-EMBS International Summer School will focus on tutorial presentations of the applications of the advanced signal processing methods and modeling for the information enhancement and classification in Central Nervous System studies and applications, with particular emphasis to Rehabilitation. Fusion of modeling and signal processing aspects will be considered, as well as fusion among different modalities for innovative approaches in Neurosciences, Brain-Computer Interface, Robotics and Prosthetic Devices.

Prominent experts in the area of biomedical signal processing, biomedical data treatment, medicine, signal processing, applied physiology will introduce novel techniques and algorithms as well as their clinical or physiological applications. Evening Poster Sessions are foreseen in which students themselves may informally exchange information about the main research activity in which they are involved. The best student poster will be also awarded.

Engineers, medical researchers, biologists, computer scientists, physicists and applied mathematicians are encouraged to join and to learn about the recent developments in these biomedical signal processing tools. A few exciting social events will be also organized in which attendees will enjoy the beautiful environment as well as the historical and artistic traditions of the area.

The Summer School will be held at the Almo Collegio Borromeo, recognized by the Ministry of Education, Universities and Research as a “highly qualified Cultural Institute”. It is one of the two historic colleges in Pavia that stand out as prestigious institutions of the Lombardy-Veneto area. Collegio Borromeo was founded in 1561 by the estate of St. Charles Borromeo.



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**OCTOBER 19 & 20, 2015,
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We are pleased to announce the return of the CEWIT Conference to Long Island after a very successful 2014 event that welcomed over 500 attendees from 14 countries in 15 unique industries to the two-day program featuring 3 renowned keynotes, 55 academic and industry experts in 8 breakout sessions, an additional 13 distinguished intellectual property lawyers and venture capital professionals in 3 panels, 4 parallel big data and data science tutorials, and over 65 high quality poster presentations.

CEWIT2015 will continue its reputation of hosting the premier international conference on the development and application of emerging technologies in infrastructure, healthcare, and energy, bringing together academic research and industry innovations at a single forum.

Originally known as the International Conference on Cutting-Edge Wireless and Information Technologies, this conference is organized by the New York State Center of Excellence in Wireless and Information Technology (CEWIT) located at Stony Brook University in New York. Mark Your Calendars!

FOR **CEWIT 2015** CONFERENCE INFORMATION, CALL FOR PAPERS AND TO REGISTER, VISIT:

www.cewit.org/conference2015

TELEPHONICS SUCCESSFULLY COMPLETES U.S. ARMY-SPONSORED DEGRADED VISUAL ENVIRONMENT TESTING

Telephonics Corporation has successfully completed a round of testing at the U.S. Army Research, Development and Engineering Command (RDECOM) Rotorcraft Degraded Visual Environment (DVE) project event at the Yuma Proving Ground in Arizona. At this event, an EH-60L helicopter was flown to create simulated DVE/brownout conditions, including sand and dust. Evaluators gathered & exchanged information on the effectiveness of various sensor solutions to penetrate through these dangerous environments.

During testing, the Telephonics 35 GHz Test Demonstrator Radar successfully achieved positive results in these degraded conditions. Thirty-five GHz is an optimal frequency for DVE environments, providing the requisite resolution needed for clear imaging. These very promising results support the designed intent of the system, which is to enable aviators to effectively navigate through sand, dust and other brownout conditions at longer ranges, leading to increased safety and mission success.



A U.S. Army helicopter creates DVE or brownout conditions at the Yuma Proving Grounds in Arizona. (©2015 Telephonics)

In addition to the Yuma Proving Ground event, the system has also undergone extensive successful testing at Telephonics' Long Island, N.Y. facility, detecting both manmade and natural obstacles as well as terrain features in dense fog, snow and whiteout conditions.

"Testing at the Yuma Proving Ground created ideal DVE conditions to thoroughly test this system, enabling the U.S. Army to accurately assess our sensor solution. These environments accurately simulate what our armed forces experience during flight, yielding important information to help solve this long-standing problem." said Joseph J. Battaglia, President and Chief Executive Officer of Telephonics. "Telephonics is extremely pleased that its Test Demonstrator Radar successfully achieved these objectives during the U.S. Army-sponsored event, proving our ability to offer a millimeter-wave solution that helps to solve the often dangerous situations arising from DVE."





IEEE

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Fred Katz (631) 724-7702 Electronics Consultant

Memberships: IEEE Senior Life Member, IEEE LI Consultants Network, LI Metal Workers, Mensa Society, NYS Professional Inventors, Suffolk County Inventors

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SECOND CALL FOR PAPERS OGDEN, UTAH ON JULY 30-AUGUST 1, 2015

The intention of the SusTech conference is to explore the comprehensive nature of sustainability and to emphasize the role of technology in achieving a sustainable lifestyle for humanity. The topic listings below are meant to indicate the breadth of the area and are definitely not to be considered exhaustive.

- **Agriculture** (e.g., control and production of fertilizers, soil, water conservation, irrigation, fisheries)
- **Alternative Energy** (e.g. solar, wind, tidal, fuel cells, energy harvesting, nuclear, thermal)
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- **Smart Grid** (e.g. communications, control, power electronics, industrial and home applications, energy storage, demand control response)
- **Sustainable Electronics** (e.g. sustainable manufacturing, components, global materials supply, hardware life cycle, nanotechnology & health/environment, reuse and repair of consumer electronics, materials harvesting from electronic waste, Open repair manuals and on-line repair and electronics sustainability resources, best practices)
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Tutorials, Workshops, and Papers are solicited for both oral and poster presentation from industry, government and academia (including students), covering relevant research, technologies, methodologies, tools and case studies. Posters sessions this year will be limited to undergraduate students.

In addition, we are seeking proposals for tutorials and workshops on Certifications & Standards (e.g. verification, standards, regulations, compliance).

SusTech will feature contributed papers and distinguished invited speakers in each track. Full papers will be published in the Conference Proceedings. Conference content that meet IEEE quality review standards will be submitted for inclusion into **IEEE Xplore** as well as other Abstracting and Indexing (A&I) databases. Topics with policy implications are welcome, in both technologies for sustainability and sustainable technologies.

Undergraduate Student Poster Contest. Prizes to be awarded. Submit an abstract of the poster in IEEE format. Abstracts in PDF should be submitted via the website or to donahoe@ieee.org. A full paper is not required for the conference, only the poster. Rules on the website. Submit poster abstracts by May 15 . Notification of acceptance June 1.

Full details including information for authors are found on the conference website at: sites.ieee.org/sustech/conference/.

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CONFERENCE SCHEDULE:

Abstract deadline:	March 9	General Chair: Dan Donahoe (donahoe@ieee.org)
Final paper deadline:	May 15	SusTech Program Chair: Ed Perkins (e.perkins@ieee.org)
Acceptance notification:	April 15	

SUSTECH 2015 is financially co-sponsored by the IEEE Oregon & Utah Sections, IEEE Region 6 and IEEE-USA.