

THE IEEE: WHAT'S IN IT FOR ME?

(<u>www.ieee.org</u> <u>www.IEEE.LI</u>)

Presenters:

Bill DeAgro – Chairman, IEEE Long Island Sandy Mazzola – Vice Chair, Long Island Nick Golas – Membership Development Chair Michael Co – Student Activities/GOLD Chair Dan Rogers – LI Computer Society Chair



CONTENTS:

- I. Introduction to IEEE
- II. IEEE: Its Value to Students and Young Engineers
- III. Graduates of the Last Decade (GOLD)



TODAY'S PRESENTERS: IEEE LONG ISLAND SECTION OFFICERS

Bill DeAgro – IEEE Long Island Section Chair (Telephonics Corporation)



Sandy Mazzola – Vice Chair LI Section (BAE Systems)



Nick Golas – Membership Development Chair (Telephonics Corporation)



Michael Co – Student Activities/GOLD Chair (Parker Hannifin)





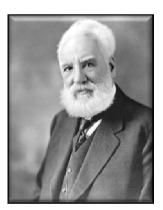
INTRODUCTION TO IEEE: HISTORY ... 125 Years in the Making

American Institute of Electrical Engineers-AIEE

- Founded in NY in 1884
- Major Fields:
 - Power (Thomas Edison)
 - Telegraphy (Norvin Green)
 - Telephone (Alexander Graham Bell)

First technical meeting in Philadelphia









INTRODUCTION TO IEEE: HISTORY ... 125 Years in the Making

Institute of Radio Engineers – IRE

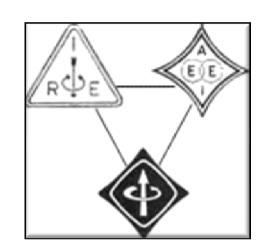
- Formed in 1912 (after Guglielmo Marconi's wireless telegraphy experiments)
- Modeled on the AIEE, but devoted to radio
- Increased to electronics and grew faster
- 1957 became the larger group



INTRODUCTION TO IEEE: HISTORY ... 125 Years in the Making

IEEE (Institute of Electrical and Electronics Engineers)

- Result of Merger of AIEE & IRE in 1963



- Consisted of 150,000 members (140,000 US)
- 2009: IEEE's 125th Anniversary (~ 375,000 Members)

♦IEEE

IEEE: MISSION AND VISION

MISSION

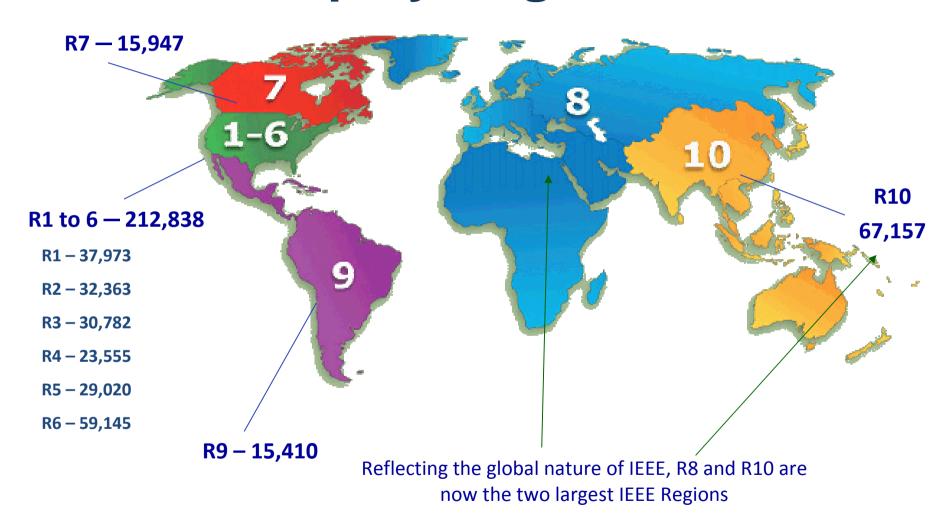
IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

VISION

IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.



Membership by Region





IEEE Organizational Structure

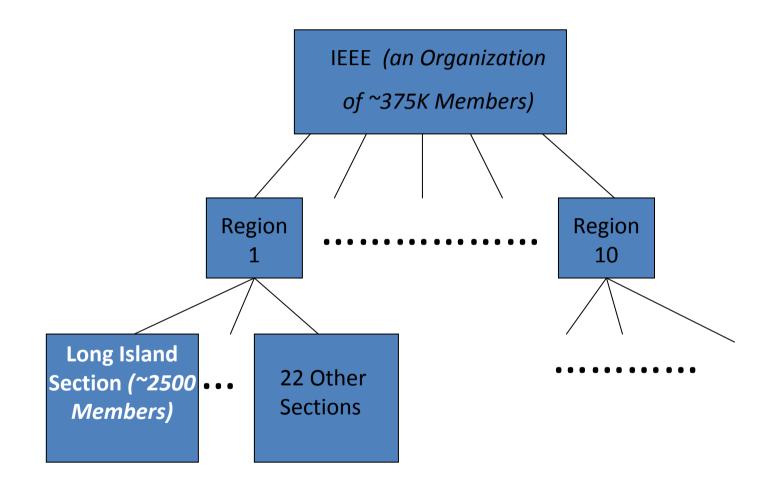
- We're the: "Long Island Section" (~ 2500 Members)
- We're part of: "REGION 1" (i.e. US Northeast)
- Region 1 consists of 22 Sections
- IEEE consists of 10 Regions in >150 Countries
- Approximately 375,000 Members in total
- Our Members Are: The IEEE Organization
- Numerous Events*: Organized by Volunteers

www.lEEE.Ll

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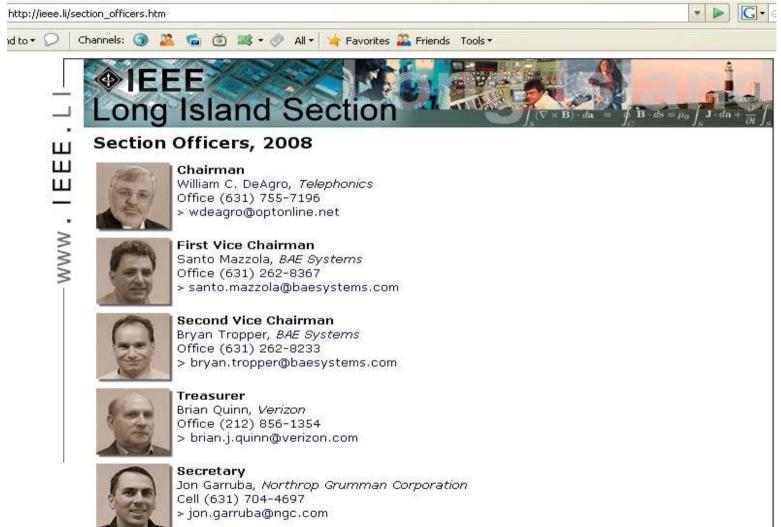
^{*} e.g. Trainings, Lectures & Symposiums, Standards Control, Massive Technical Reservoir of Information, Awards Recognition & Ceremonies, Member Networking etc. - If ever interested in being Hands-On & volunteering, don't hesitate to contact us

ORGANIZATIONAL STRUCTURE





IEEE LI SECTION OFFICERS





CURRENT MISSION OF IEEE LI

- 1. Better Understand the Student & their needs
- 2. Support the Student by:
 - A. Providing Hands-On Support to Student Activities
 - B. Utilize Industry Resources to Support the Student
 - C. Increased Communication to Students & Faculty (for better awareness of events & activities outside University)
 - D. Mentor and provide guidance with Senior Projects
 - E. Continue providing mentoring, guidance & support to Graduates of the Last Decade (GOLD)

IEEE

Society Membership

IEEE Society membership enhances the benefits of IEEE membership

- □ 38 Societies representing a full spectrum of technical interests
- □Subscriptions and online content
- □ Local technical chapters
- ☐ Networking w/innovators, experts, and practitioners
- ☐ Members-only rates on additional publications
- □Volunteering opportunities
 - **❖**Technical committees
 - ❖Journal editors
 - Conference organizers



Additional dues for Societies memberships



Society Membership

Ц	Aerospace & Electronic Systems	■Instrumentation & Measurement
	Antennas & Propagation	☐Intelligent Transportation Systems
	Broadcast Technology Circuits & Systems	☐ Lasers & Electro-Optics
	Communications Components, Packaging, & Manufacturing Technology	☐ Magnetics☐ Microwave Theory & Techniques☐ Nuclear & Plasma Sciences
	Computational Intelligence (formerly Neural Networks) Consumer Electronics Control Systems Dielectrics & Electrical Insulation Education Electromagnetic Compatibility Electron Devices Engineering in Medicine & Biology Geoscience & Remote Sensing Industrial Electronics Industry Applications Information Theory	□ Oceanic Engineering □ Power Electronics □ Power Engineering □ Product Safety Engineering □ Professional Communication □ Reliability □ Robotics & Automation □ Signal Processing □ Society on Social Implications of Technology
		□ Solid-State Circuits □ Systems, Man, & Cybernetics □ Ultrasonics, Ferroelectrics, & Frequency Control □ Vehicular Technology



IEEE TECHNICAL CHAPTERS

☐ IEEE has over 1500 Chapters comprised of local members with similar technical interest ☐ Long Island Section has 14 active chapters ☐ We can start new chapters if enough interest is generated ☐ No additional dues to attend any chapter meetings



IEEE TECHNICAL CHAPTERS

- ☐ Chapter meetings posted on www.leee.ll website
- Online registration for attending Chapter meetings
- ☐ Topics are varied and interesting
- Topic recommendations gladly accepted
- Chapters meetings allow for networking with peers, and meeting with potential and future employers



ACTIVE LONG ISLAND CHAPTERS

☐ Aerospace and Electronic Systems Society **Antennas And Propagation Society Circuits and Systems Society Communication Society Computer Society Electromagnetic Compatibility Society** Engineering in Medicine and Biology **Industrial Applications** Instrumentation and Measurement Society Microwave Theory and Techniques Nuclear and Plasma Sciences ■ Power And Energy ☐ Signal Processing Society ☐ Vehicular Technology

IEEE



Benefits of IEEE Membership



IEEE: THE FACTS

IEEE is organized into:

- » 324 local sections in 10 geographic regions;
- » 1,784 **chapters** comprised of local members with similar technical interests;
- » 38 societies and 7 technical councils;
- » 1,616 student branches at colleges and universities in 80 countries;
- » 452 student branch chapters.



IEEE: THE FACTS

- ·375,000+ IEEE members in over 150 countries around the world
- The IEEE *Xplore*® digital library contains **more than 1.2 million documents** from IEEE and IEE journals, transactions, magazines, letters, conference proceedings and active IEEE standards.
- · Each year, over 100,000 technical professionals attend the more than 300 conferences sponsored or cosponsored by the IEEE.



IEEE Membership: Its benefits, its mission, the organization

Benefits of IEEE Membership

□Keeps you technically current
☐Grows your professional network locally and internationally
□Access to in-person technical forums
☐Members-only discounts—IEEE products, conferences, and insurance coverage
☐Provides tools for career development and advancement
□Developing critical, non-technical skills to be more effective
□Opportunities to volunteer, and give back to society

Special Interest Memberships

Expands the scope and depth of your technical knowledge	al
□Extends your professional network	
☐Influence the direction and application of technology through standards development	
□Promotes the entry into and retention of women in engineering programs	∋r

IEEE—the Organization

- ☐ The world's largest technical professional association
- □ 375,000+ members
- ☐ Local activities, and global network
- World-renowned standards body
- ☐ Sponsors 350+ conferences annually
- □ Publisher of 1/3 of the world's literature on electro-technology
- ☐ 125 years of heritage

IEEE Membership Goal for the 125th Anniversary is:

385,000 Members



\$30.00 – student membership fee for one year \$169.00 – regular member (half price on first year after graduation)

WHERE DOES MY \$30 GO?

Microsoft Software Offer for IEEE Students

• The IEEE, in conjunction with Microsoft, is pleased to offer a wide selection of development software to IEEE Student members.

• Software highlights include Vista Business Edition, Visual Studio Team System, Expression Web Designer, Project 2007, Visio 2007, Windows Server 2003

IEEE Spectrum Magazine

 Monthly, the award-winning IEEE Spectrum magazine explores the creation, application and implications of new technologies







IEEE.tv

• IEEE's Internet television, exclusive Member programming and file downloading privileges

The Institute Newsletter

•Monthly (4 print, 8 online) newsworthy IEEE activities both in professional and technical areas

IEEE Potentials Magazine

•6 issues (online), the magazine for technology's rising, student innovators

IEEE Xplore Digital Library

•Table-of-contents and abstracts (1.9 million documents)

IEEE MemberNet

Networks personalized to each member







IEEE e-Mail Alias

- Identifies you as the IEEE 'family'
- Virus protection and spam filtering

IEEE Mentoring Connection

- Peer-to-peer advice and counsel
- Participate as either mentor or mentee

Awards & Scholarships

- Recognizes the accomplishments of IEEE members
- Enhance your resume with an IEEE scholarship

IEEE Job Site, Career Alert

- Locate career opportunities easily and confidentially
- Weekly email newsletter containing career advice





mylEEE -

members-only personalized gateway into IEEE membership

Continuing Education Partners Program

•Up to a 10% discount on online degree programs

IEEE Society membership enhances the benefits of IEEE membership

- 38 Societies representing a full spectrum of technical interests
- Local technical chapters
- Subscriptions and online content

IEEE Expert Now

• Online video conference tutorials, short courses & workshops





Volunteer Opportunities: Get Involved!!!

- probably the most important benefit from IEEE
- a rare opportunity to work with people with the same interests
- develop a professional network of individuals locally that will allow sharing of ideas and providing assistance to other fellow members

* THIS IS ONE AREA WE WOULD LIKE TO PUT EMPHASIS TO STUDENTS AND YOUNG ENGINEERS ON LONG ISLAND!!!



HOW CAN I GET INVOLVED:

As a student member:

Stony Brook IEEE Student Branch

- the only current active student branch in the Long Island Section
- the IEEE Long Island Section is planning to provide more support to this branch
- help develop/support programs for students
 - the Micromouse competition,
 - IEEE Extreme Programming
 - Industry-related events
 - Talks, etc.



The IEEE Presidents' Change the World Competition

Recognizes students who develop unique solutions to real-world problems using engineering, science, computing and leadership skills to benefit their community or humanity

Prizes:

IEEE Student Humanitarian Supreme: US\$10,000

IEEE Distinguished Student Humanitarian: US\$5,000

IEEE Exceptional Student Humanitarian: US\$2,500

IEEE Outstanding Student Humanitarian: US\$1,000

(up to five awarded)

People's Choice (online vote): US\$500

The IEEE Presidents' Change the World Competition is part of the global celebration of IEEE's 125th Anniversary







GRADUATING SENIORS: WHY WOULD YOU WANT TO KEEP YOUR MEMBERSHIP

Career-Related Benefits:

Career Alert

• Career Alert is a weekly email newsletter which contains career advice plus the job of the week from the IEEE Job Site. It provides members with links to news about engineering careers, education, and professional issues.



Education Partners Program

- exclusive **10% discount** to IEEE members, for the following offerings:
 - On-line degree programs
 - Continuing Education
 - Certifications

Today's Engineer

• monthly webzine devoted to the issues affecting IEEE members careers, such as professionalism, management skills, engineering performance, engineering skills and competencies. It also addresses issues such as product development practices, project management issues, innovation and entrepreneurship.



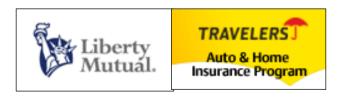


GRADUATING SENIORS: WHY WOULD YOU WANT TO KEEP YOUR MEMBERSHIP

Financial Advantage Benefits:

- ➤ Insurance Services
- > Financial Services
- ➤ Home & Office Services
- > Travel Services









GRADUATING SENIORS: WHY WOULD YOU WANT TO KEEP YOUR MEMBERSHIP

Networking Benefits:

Automatic membership to IEEE Local Section



- Option to add membership to IEEE Technical Societies
- ➤ Automatic membership in GOLD (Graduates of the Last Decade)

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GOLD HISTORY

Marking the milestone of the conception of IEEE GOLD in 1996 and its launch that year at the IEEE 1996 Sections Congress, GOLD has moved forward in forming affinity groups - organized for professional development activities (technical, social, personal development, etc.)





VISION:

To increase value and worth of IEEE services and programs to young professionals and recent graduates.

MISSION:

Develop programs and foster relationships to provide tangible value to members; Promote the GOLD program to students; Recruit, develop and nurture volunteers.



SCOPE:

- GOLD Program focuses on needs of the recent graduates and young professionals.
- **Recent graduates** are defined as those typically 2-3 years after graduation with their first professional degree in an IEEE related field. This includes graduate student members (GSM).
- Young professionals are defined as graduates in the early stages of their career.

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WHAT DO I GET FROM GOLD:

- GOLDRush Newsletter
- Involvement in local community service programs
- Widen your knowledge of the inner workings of IEEE

- Online seminars
- Professional networking opportunities
- Peer connection
- Local social activities
- Leadership opportunities





LONG ISLAND GOLD AFFINITY GROUP

Mission:

Our mission is to establish a network young engineers who will be the future driving force in the Long Island region through continuous professional and technical development as well as emphasis on community service

Vision:

To make GOLD LI as a vehicle for promoting the science and engineering profession to young engineers through IEEE

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LONG ISLAND GOLD AFFINITY GROUP

- opens the doors to meet engineers to major Long Island companies
- learn from senior LI EXCOM officers
- be heard and implement your ideas
- be recognized for your effort as a volunteer
- get your name out as a professional engineer
- meet engineers with similar interests
- do "good" things for the LI community
- make new friends
- get valuable information about careers in other companies
- represent your company in IEEE LI programs (LISAT, Societies)
- and more!!!

∲IEEE

CONCLUSION



- IEEE is a global organization that promotes the engineering profession and technological advancements
- As young engineers, IEEE provides us all the necessary benefits and tools to help us become better and well-informed engineers
- Here on LI, the IEEE Section wants to reach out more to students to solidify student involvement and volunteerism
- However, this can only be successful if students show interest!
- IEEE also reaches out to young engineers through the GOLD program. We can make history here on Long Island by helping us build our GOLD Affinity Group!
- COME ON-BOARD WITH US!!!

Thank you! Questions?

