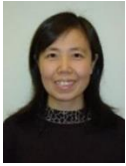




THE IEEE NORTH JERSEY SECTION NEWSLETTER

VOL. 69, NO. 02

FEBRUARY 2023



Message from the IEEE North Jersey Section Chair Prof. Hong Zhao

IEEE North Jersey Section had its hybrid ExCom meeting on Jan 11. Thanks to IEEE Region 1 for providing the Meeting OWL device, which brings us immersive experience. We had 50% people joining the meeting online, and 50% of people attending the meeting in person. It was a perfect hybrid meeting! Figures 1 and 2 show some pictures of this meeting.



Fig. 1: January 2023 Hybrid ExCom Meeting

Fig. 2. Online attendees of the January 2023 ExCom meeting

Congratulations to Durga Misra for receiving founding from IEEE Electron Device Society to support our pre-university activities. Thanks Russell Pepe, Ken Oexle and Har Da yal for finalizing the contract for North Jersey Section Awards Banquet.

Welcome our new volunteers, Melvin Lewis serving as Chair of Student Activities Committee, and Tao Han serving as Vice Chair of Computer Chapter.

We had wide range of seminar topics conducted in January organized by Chapters: AP03/MTT17, PE 31, CAS04/ED15, SIGHT177, PHO36, VT06, and CN10327. Thank you all for the hard work.

There are more fantastic events coming soon, please stay tuned to our Newsletter!

Best wishes,

Hong Zhao,

IEEE North Jersey Section Chair

IEEE – IMPORTANT EVENTS, ARTICLES, ANNOUNCEMENTS AND REMINDERS:

- [This Month's Communications Society News from Around the World](#)
- [“New Product Development Truths”](#) - An article by Harry Roman for the February Newsletter

New Product Development Truths

Some years back, I was privileged to teach a graduate course in R&D and new product development. Here are five powerful truths that came out of that course.

You do not have to be an IEEE member, but prior registration is encouraged to attend any event. [IEEE North Jersey Section Website](#) [The Section Executive Committee Roster](#)

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

- 75% of all new product launch failures can be traced back to poor interdepartmental communications in the nascent phases of the product's development.
- Only 65% of all new patent applications become issued patents. And of those issued patents, only 2% become highly successful.
- For every product you see on a store shelf, there were probably 49 or 50 failures that never made it to that shelf.
- A company needs to generate about 164 raw new product ideas to achieve 4 really, good commercial products.
- Employees must live and breathe creativity and innovation if that company wants to be a market powerhouse. Creativity and innovation are the province of corporate leadership.

So many of my students went on to become leaders in their industries.

Teaching is a powerful way to help change the world.

If you are able, become a teacher / mentor.

Leave your mark upon tomorrow!

Talk to you again soon...

- Harry

Harry T. Roman: Life Senior Member (htroman49@aol.com)

(Author & Advisor, Edison Innovation Foundation), (Retired-PSE&G Co.), (htroman49@aol.com)

In remembrance of our volunteer Carl Sulzberger

- By Howard Leach

We were sad to hear of the passing of Carl Sulzberger on January 9th. We express our deepest sympathy to Virginia and family. We



Fig. 3: Left to right: Carl Sulzberger, Warner Johnston, Lew Teman, Kirit Dixit, Charles Rubenstein, Robert Pellegrino

would like to remember that his legacy lives on through the IEEE Milestones that he helped to implement here and at other Sections through his dedicated work as an IEEE History Center Coordinator.

Here he is (seen in Fig.3) at the dedication of the Edison Laboratories North Jersey Section Milestone with left to right, Warner Johnston, NYC Section Vice Chair, Lew Terman, IEEE President, Kirit Dixit, North Jersey Section Chair, Charles Rubenstein, Region 1 Chair Elect, and Robert Pellegrino, METSAC Chair, at the West Orange, NJ, Municipal Building, on Oct 18, 2008.

Carl, as the IEEE History Center Milestone Coordinator and member of the North Jersey Section, provided the leadership in nominating the Edison Laboratories in West Orange, NJ, as an IEEE Engineering and Computing Milestone. There were a number of obstacles to overcome such as a location of the plaque, as the National Park Service would not allow it to be placed on a building or the grounds of the Edison National Park.

So eventually, it was placed on a mounting stone in front of the West Orange Municipal Building. He worked on many IEEE milestone proposals – however, this one so close to home was probably one of his favorites. At the dedication, he explained the IEEE Milestone nomination and a approval process.

This IEEE Milestone (also seen in Fig. 3) reads as follows.

“Thomas A. Edison West Orange Laboratories and Factories, 1887”

“Thomas Alva Edison, a West Orange resident from 1886 until his death in 1931, established his final and most comprehensive laboratory and factory complex about one-half mile (0.8 km) north of here in 1887. Edison’s visionary combination in one organization of basic and applied research, development, and manufacturing became the prototype for industrial enterprises worldwide. Work here resulted in more than half of Edison’s 1,093 patents.”

Carl not only worked on the proposals, but attended the plaque dedications and wrote about them as the Associate Editor of the IEEE Power and Energy Magazine. In an article in the July/August 2009 issue, p.58, he states: “The principal purpose of the program is to promote public and scientific community awareness, knowledge, and understanding of the importance and rich history of electrotechnology.”

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Calendar of Events

Events for the month of February 2023

Title	Date/Time	Hosts	Location
IEEE North Jersey Section EXCOM - Meeting 6:30 PM: North Jersey Section	01 Feb 2023 06:30 PM	R10327 - North Jersey Section	Teaneck, New Jersey
International Women in STEM Day at Crestron: North Jersey Section	10 Feb 2023 03:00 PM	R10327 - North Jersey Section	Rockleigh, New Jersey
Developing optical elastography techniques for intra operative breast cancer detection: North Jersey Section Jt Chapter, CAS04/ED15	13 Feb 2023 04:30 PM	CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36, CH01081 - North Jersey Section, EMB18	Newark, New Jersey
RF Design for Sustainability: North Jersey Section Jt Chapter, AP03/MTT17	14 Feb 2023 12:00 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, SIGHT177 - North Jersey Section SIGHT	Virtual
Communications and Networking in LEO Mega-Constellations: North Jersey Section Affinity Group, CN	16 Feb 2023 07:30 PM	CN10327 - North Jersey Section Affinity Group, CN	Virtual
Senior Member and Student Membership drive: North Jersey Section	23 Feb 2023 06:30 PM	R10327 - North Jersey Section	Teaneck, New Jersey
Lead Generation for Consultants: North Jersey Section Affinity Group, CN	16 Mar 2023 06:30 PM	CN10327 - North Jersey Section Affinity Group, CN	Virtual
Innovation Day at Nokia Bell Labs : North Jersey Section	25 Mar 2023 08:00 AM	R10327 - North Jersey Section	New Providence, New Jersey
Terra North Jersey STEM Fair - IEEE Young Engineer Award: North Jersey Section	25 Mar 2023 09:00 AM	R10327 - North Jersey Section	Union, New Jersey
2023 IEEE Stevens Undergraduate and Graduate AI Workshop (IEEE SUGAIW-2023): North Jersey Section	06 May 2023 09:00 AM	R10327 - North Jersey Section, CH01081 - North Jersey Section, EMB18	Hoboken, New Jersey

Past Events: Events for the month of January 2023

Title	Date/Time	Hosts	Location
Digital Predistortion of Wireless Transmitters Using Machine Learning: North Jersey Section Jt Chapter, AP03/MTT17	10 Jan 2023 12:00 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36	Virtual

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LabVIEW vs. Python: Why Not Both: North Jersey Section Chapter, EMC27/PSE43	11 Jan 2023 01:00 PM	CH01265 - North Jersey Section Chapter, EMC27/PSE43	Virtual
IEEE North Jersey Section EXCOM - Meeting 6:30 PM: North Jersey Section	11 Jan 2023 06:30 PM	R10327 - North Jersey Section	Teaneck, New Jersey
How high-precision GNSS enables new automotive applications: North Jersey Section Jt Chapter, AP03/MTT17	17 Jan 2023 11:00 AM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, SIGHT177 - North Jersey Section SIGHT, CH01178 - North Jersey Section Chapter, PHO36, CH01153 - North Jersey Section Chapter, VT06	Virtual
Testing Avionic Digital Bus Architectures: North Jersey Section Jt Chapter, AP03/MTT17	18 Jan 2023 11:00 AM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, SIGHT177 - North Jersey Section SIGHT, CH01178 - North Jersey Section Chapter, PHO36, CH01153 - North Jersey Section Chapter, VT06	Virtual
5G network slicing - all you need to know: North Jersey Section Jt Chapter, AP03/MTT17	18 Jan 2023 01:00 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, SIGHT177 - North Jersey Section SIGHT, CH01178 - North Jersey Section Chapter, PHO36, CH01153 - North Jersey Section Chapter, VT06	Virtual
AI-based Claims Solutions for the Auto Insurance Industry: North Jersey Section Jt Chapter, AP03/MTT17	18 Jan 2023 06:30 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01178 - North Jersey Section Chapter, PHO36, CH01081 - North Jersey Section, EMB18, CH01285 - North Jersey Section Chapter, SIT30	Virtual
MultiDomain Operations Modernization - a Lunch & Learn Event: North Jersey Section Chapter, AES10	24 Jan 2023 11:30 AM	CH01215 - North Jersey Section Chapter, AES10, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36	Clifton, New Jersey
Capturing your share of \$1.3 Trillion in consulting opportunities: North Jersey Section Affinity Group, CN	26 Jan 2023 06:30 PM	CN10327 - North Jersey Section Affinity Group, CN	Virtual
Electrical Safety and Predictive Maintenance - Ground Fault detection and location systems for Grounded, Ungrounded, and Resistance Grounded electrical systems: North Jersey Section Chapter, PE31	27 Jan 2023 09:00 AM	CH01097 - North Jersey Section Chapter, PE31, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17	South Plainfield, New Jersey

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GRADUATE SCHOOL VIRTUAL OPEN HOUSE!

Wednesday, February 15, 2023, 5 p.m.

Fairleigh Dickinson University

Gildart Haase School of Computer Sciences & Engineering (GHSCSE)

Cybersecurity Leadership: "National Center of Academic Excellence for Cyber Defense Education (CAE-CDE)" by NSA

18 cutting-edge labs, among the best in the North and Mid-Atlantic Regions

Offers 6 Masters of Science (MS) Programs

<p>*Cybersecurity & Information Assurance</p> <p>*Electrical Engineering</p> <p>*E-Commerce</p>	<p>*Management Information Systems</p> <p>*Computer Engineering</p> <p>*Computer Science (Data Science, Cloud Computing and more)</p>
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Scan Zoom Registration



Scan Grad Program Info







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Scan Zoom Registration



Scan Grad Program Info





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