

IEEE North Jersey Section

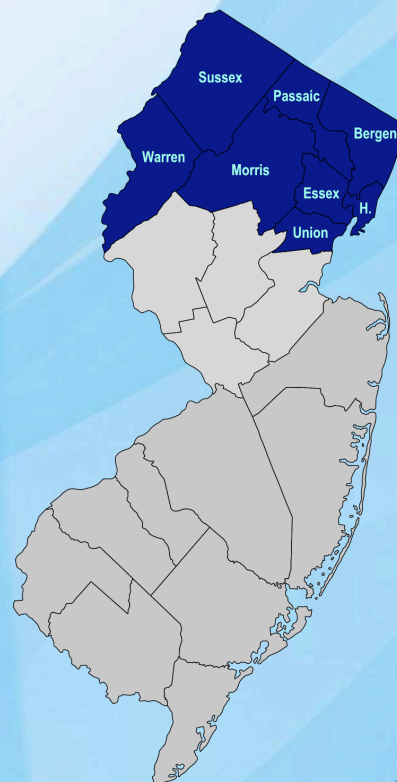
IEEE North Jersey Section Newsletter

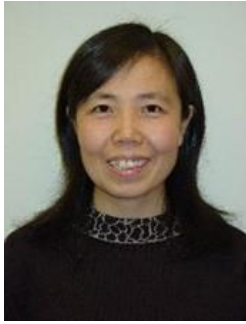
VOL. 70, NO. 02 Issue: February 2024

Prior registration is highly encouraged to attend any event.

IEEE North Jersey Section Website

IEEE North Jersey Section - Roster





Chair's Note - A Message from the IEEE North Jersey Section Chair, Prof. Hong Zhao

As we step into the month of February, we are thrilled to share with you the upcoming events the IEEE North Jersey Section has in store for you. We have organized a diverse array of topics catered to the ever-evolving landscape of technology. These events will explore health-associated hazards linked to electromagnetic waveform exposure in 5G and beyond, delve into the world of edge computing security, discover how Artificial Intelligence (AI) and Machine Learning (ML) is transforming optimization processes, unpack the security challenges inherent in Open RAN architectures, deepen your understanding of phase noise measurement techniques.

All these events will be conducted virtually, allowing us to transcend geographical boundaries and invite esteemed speakers from around the world. The convenience of virtual meetings ensures that you can join us from the comfort of your home or office.

I strongly encourage you to take advantage of these opportunities for professional development Looking and networking. Your active participation will contribute to the success of these events and foster a vibrant community of knowledge-sharing within our section.

forward to the exciting February events – Join Us Virtually!

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](#)
- [Comsoc Distinguished Lecture](#) - to be held on February 23, 2024
- [ED/CAS Distinguished Lecture](#) to be held on April 3, 2024
- IEEE Antennas and Propagation Society Explores Cutting-Edge Technologies at IEEE Future Networks World Forum in Baltimore, Maryland and connects with members & volunteers
- **The Edison-Fessenden Connection** - An article by Harry Roman

Comsoc Distinguished Lecture - to be held on February 23, 2024

		
<p><u>IEEE Communication Society</u> <u>North Jersey Chapter</u></p>		
<p>Co-sponsored by AP/MTT Chapter & North Jersey Section</p>		
<p>Damla Turgut University of Central Florida</p>		
<p><u>Title:</u> <i>I Did Not Sign Up for This: Limited Sharing in Privacy-Aware Smart Environments</i></p>		
<p><u>Date:</u> February 23, 2024, at 11:00am</p>		
<p><u>Location:</u> The Lewis P. and Julia Kiernan Conference Room (ECEC 202) 141 Warren St, Newark, NJ 07103 NJIT, Newark</p>		
		<p>Distinguished Lecture</p>
		<p>https://events.vtools.ieee.org/m/405574</p>

ED/CAS Distinguished Lecture to be held on April 3, 2024

			
<p><u>Electron Devices and Circuit & Systems</u> <u>Distinguished Lecture</u></p>			
<p>Co-sponsored by AP/MTT Chapter & North Jersey Section</p>			
<p>Tsu-Jae King Liu Dean and Roy W. Carlson Professor of Engineering University of California, Berkeley</p>			
<p><u>Title:</u> <i>Semiconductor Innovation for Transformative Impact</i></p>			
<p><u>Date:</u> April 3, 2024, at 2:30pm</p>			
<p>Lecture Followed by a Reception</p>			
<p><u>Location:</u> Campus Center Ballroom B</p>			
			<p>Abstract, Biography & Registration https://events.vtools.ieee.org/m/376864</p>

- **IEEE Antennas and Propagation Society Explores Cutting-Edge Technologies at IEEE Future Networks World Forum in Baltimore, Maryland and connects with members & volunteers - by Craig Polk**

The IEEE Antennas and Propagation Society (AP-S) recently participated in the IEEE Future Networks World Forum held in the vibrant city of Baltimore, Maryland, in November 2023. This event served as a dynamic platform for experts in the field of antennas, propagation, and wireless communication to converge, exchange ideas, and explore the latest advancements in future network technologies. The IEEE Future Networks World Forum is an annual gathering that brings together professionals, researchers, and industry leaders from various disciplines within the realm of future networks. The forum acts as a hub for discussions on emerging technologies, standards, and challenges in the rapidly evolving landscape of telecommunications and wireless communication.



The IEEE Antennas and Propagation Society's presence at the forum was marked by active participation in sessions and the exhibits area where insights were shared into the latest developments in antenna related

technologies. The society played a crucial role in shaping conversations around the future of wireless communication and its impact on diverse applications, ranging from 5G and beyond as a financial sponsor of IEEE Future Networks. The insights shared and collaborations formed during this event are expected to contribute significantly to shaping the future networks communication and fostering innovation in the broader telecommunications landscape.

For more information about the conference of IEEE Future Networks, please visit the following sites: <https://fnwf2023.ieee.org>, <https://futurenetworks.ieee.org>

- **The Edison-Fessenden Connection** - *An article by Harry Roman*

Reginald Aubrey Fessenden (1866-1932) is celebrated by IEEE for his great contributions to the early days of radio and wireless transmission. He was responsible for the first radio transmission in 1900, discovering the principle of amplitude modulation that led to AM radio and even developing sonar systems that determined things like ocean depth and iceberg collision avoidance. Fessenden is considered the Father of radio-telephony.

However, before he went on to create 500+ patents, Fessenden was a lifelong admirer of Thomas Edison, and in 1886, he applied to work for him so that he could learn from the best. He was hired for a semi-skilled position as an assistant tester for the Edison Machine Works laying underground electrical mains in New York City.

Fessenden moved to Edison's West Orange labs in 1887, where he was Edison's assistant and participated in a broad range of projects, which included solving problems in chemistry, metallurgy, and electricity. Edison valued him for his ability to work out solutions across a variety of technical areas. Fessenden could think on his feet, and Edison highly prized this ability. Eventually, Fessenden would become the chief chemist of Edison Electrical Co.

Taking advantage of the practical experience that he gained with Edison, Fessenden had no problem finding positions with a series of manufacturing companies, including his own. Fessenden taught electrical engineering at Purdue and the University of Pittsburg, teaching others the Edison style of thinking and project management.

Another fascinating connection between these two great electrical icons is that both had WWII naval fighting vessels named in their honor: DD 439, the USS Edison (destroyer), and DE 142, the USS Fessenden (destroyer escort).

Talk to you again soon...

Harry

Harry T. Roman, Life Senior Member, Author & Advisor, Edison Innovation Foundation
(Retired-PSE&G Co.), htroman49@aol.com



FDU
Gildart Haase School
of Computer Sciences
& Engineering

GRADUATE SCHOOL VIRTUAL OPEN HOUSE!

Tuesday, February 20, 2024, 5 p.m.

Fairleigh Dickinson University

Gildart Haase School of Computer Sciences & Engineering (GHCSE)

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

*Cybersecurity & Information Assurance	*Management Information Systems
*Electrical Engineering	*Computer Engineering
*E-Commerce	*Computer Science (Data Science, Cloud Computing and more)

Scan Zoom Registration



Scan Grad Program Info




























FDU
Gildart Haase School
of Computer Sciences
& Engineering

GRADUATE SCHOOL VIRTUAL OPEN HOUSE!

Tuesday, March 19, 2024, 5 p.m.

Fairleigh Dickinson University

Gildart Haase School of Computer Sciences & Engineering (GHCSE)

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

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Scan Zoom Registration



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Calendar of Events

Upcoming Events: February 2024 Onwards

Title	Date	Hosts	Location
Redefining testing for Bluetooth Low Energy: North Jersey Section Jt Chapter, AP03/MTT17	01 Feb 2024 01:00 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36	Virtual
IEEE North Jersey Section EXCOM - Meeting 6:30 PM: North Jersey Section	07 Feb 2024 06:30 PM	R10327 - North Jersey Section	Montclair, New Jersey, Hybrid
Understanding over the Horizon low-frequency radar: North Jersey Section Jt Chapter, AP03/MTT17	08 Feb 2024 11:00 AM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01153 - North Jersey Section Chapter, VT06	Virtual

Title	Date	Hosts	Location
Health Aspects of Millimeter-Wave Radiation in 5G and Beyond: North Jersey Section Jt Chapter, AP03/MTT17	13 Feb 2024 12:00 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01178 - North Jersey Section Chapter, PHO36, CH01285 - North Jersey Section Chapter, SIT30	
Understanding Phase Noise: Mastering Phase Noise Measurements from 50 GHz to sub-THz and beyond North Jersey Section Jt Chapter, AP03/MTT17	14 Feb 2024 02:00 PM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36	Virtual
Optimization Techniques for RISs - AI/ML webinar: North Jersey Section	15 Feb 2024 12:00 PM	R10327 - North Jersey Section	Virtual
Galentine's Day with Meditation: North Jersey Section Affinity Group, WIE	16 Feb 2024 11:30 AM	WE10327 - North Jersey Section Affinity Group, WIE	NJIT, Newark, New Jersey
Security Considerations for Mobile Edge Computing webinar: North Jersey Section	21 Feb 2024 11:00 AM	R10327 - North Jersey Section	Virtual

Title	Date	Hosts	Location
The Metaverse & Extended Reality - A First Test & Measurement Perspective: North Jersey Section Jt Chapter, AP03/MTT17	21 Feb 2024 11:00 AM	CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36, CH01184 - North Jersey Section Jt Chapter, CAS04/ED15	Virtual
IEEE Montclair State University STEM Fair: Montclair State Univ	21 Feb 2024 02:30 PM	STB21201 - Montclair State Univ, R10327 - North Jersey Section	Montclair, New Jersey
Battery Monitoring and Maintenance for NERC Compliance - BatteryDAQ: North Jersey Section Chapter, PE31	22 Feb 2024 09:00 AM	CH01097 - North Jersey Section Chapter, PE31, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17	South Plainfield
Distinguished Lecture: I Did Not Sign Up for This: Limited Sharing in Privacy-Aware Smart Environments: North Jersey Section Chapter, COM 19	23 Feb 2024 11:00 AM	CH01156 - North Jersey Section Chapter, COM 19, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17	Newark, New Jersey
Optimizing ORAN Security Design and Considerations: North Jersey Section	20 Mar 2024 11:00 AM	R10327 - North Jersey Section	Virtual

Title	Date	Hosts	Location
EDS/CASS Distinguished Lecture: Semiconductor Innovation for Transformative Impact: North Jersey Section Jt Chapter, CAS04/ED15	03 Apr 2024 02:15 PM	CH01184 - North Jersey Section Jt Chapter,CAS04/ED15, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17	Newark, New Jersey
Summer Camp for Female Middle School and High School Students: SHE in ECE: North Jersey Section Jt Chapter, CAS04/ED15	02 Jul 2024 08:15 AM	CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, R10327 - North Jersey Section, SIGHT177 - North Jersey Section SIGHT, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, WE10327 - North Jersey Section Affinity Group, WIE, CH01178 - North Jersey Section Chapter, PHO36	NJIT, Newark, New Jersey

[For Past Month's Events - January 2024 - Click Here](#)

2024 IEEE North Jersey Section Volunteers

Executive Committee

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Vice-Chair – Kirit Dixit -
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Chair – Vacant

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Student Representative Committee

Chair - Kalyan Mondal
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