

# IEEE North Jersey Section

## IEEE North Jersey Section

**VOL. 71, NO. 02      Issue: February 2025**

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, Dr. Emad Farag

As the days grow longer, we are reminded that spring is approaching, bringing with it a renewed sense of energy and excitement. The IEEE North Jersey Section has planned many activities and events over the next few months, ranging from technical talks to student events at various universities. Please check the newsletter and monitor your email for event announcements. We look forward to seeing you at these events.

This year, the Awards Banquet will be held on Sunday, May 4<sup>th</sup>, at the Birchwood Manor in Whippany, NJ. We are excited to announce that three members of our Section have been elevated to IEEE Fellows and will be recognized at the banquet. In addition to these recognitions, we will also celebrate the IEEE Region One awards and other accolades.

Come join us to honor the award recipients and socialize with fellow members. We look forward to seeing you at the Section events!

- *Emad Farag,*

*IEEE* North Jersey Section Chair

### Schedule for the 2025 ExCom Meetings:

| Month     | Meeting Date   | Venue                                          |
|-----------|----------------|------------------------------------------------|
| January   | Wed: 08-Jan-25 | Zoom Meeting                                   |
| February  | Wed: 05-Feb-25 | Fairleigh Dickinson University, Teaneck + Zoom |
| March     | Wed: 05-Mar-25 | NJIT, Newark + Zoom                            |
| April     | Wed: 02-Apr-25 | Montclair State University, Montclair + Zoom   |
| May       | TBD            | Awards Banquet: Hanover Manor (no Zoom)        |
| June      | Wed: 04-Jun-25 | Montclair State University, Montclair + Zoom   |
| August    | TBD            | Picnic: TBD (no Zoom)                          |
| September | Wed: 03-Sep-25 | Fairleigh Dickinson University, Teaneck + Zoom |
| October   | Wed: 01-Oct-25 | NJIT, Newark + Zoom                            |
| November  | Wed: 05-Nov-25 | Nokia Bell Labs, New Providence + Zoom         |
| December  | TBD            | End of year celebration: TBD (no Zoom)         |

## As Edison Envisioned His Movies - *An article by Harry Roman*

I have spoken often of Thomas Edison as we are lucky because right in our geographical region is his famous West Orange Labs [the Thomas Edison National Historical Park-TENHP]. It was here he pioneered motion pictures and ultimately unified it with his previous innovation of recorded sound. He combined sight and sound ten years before it appeared in commercial movie theaters.

I enjoy Edison not only for his great inventions and innovations but for his visions of what technology might accomplish. Here is an example related to his movie accomplishments. I found this insight in a superb book about Edison, "Edison and the Rise of Innovation" by Leonard DeGraaf, Archivist at TENHP. The foreword was written by the venerable Bill Gates. The action takes place on page 128/129, whereupon Edison mused to the Chicago Evening Post about his fledgling movie ideas. Here is a key excerpt from this encounter:

"When this invention shall have been perfected a man will be able to sit in his library at home and, having electrical connection with the theater, see reproduced on his wall or a piece of canvas the actors and hear anything they say"

The date of this interview was 1891. Does this not sound like our modern-day concept of a TV or broadcast studio, except Edison saw wires as the connecting technology. He did not envision electromagnetic waves to transmit the sight and sound, as would surely become the mainstay in the 1950s/60s.

In 1892/93, his famous Black Maria movie theater was constructed on the grounds of the modern TENHP and the romantic journey of moviemaking began. Today, visitors can see and tour a 1954 reproduction of the Black Maria. All movie theaters derive from this first motion picture studio.

Talk to you again soon...

Harry T. Roman, Life Senior Member

Author & Advisor, Edison Innovation Foundation

(Retired-PSE&G Co.) [htroman49@aol.com](mailto:htroman49@aol.com)

**IEEE North Jersey Section's Education Committee Technology Review Series:**

- **Articles for Feb 2025**

**Article 1: Exploratory Data Analysis and Visualization Part 1**

This article covers a number of important aspects of working with data. Specifically issues around data's statistical properties, its cleanliness, its completeness, and its visualization. A handful of techniques related to using tools to manage the data are described, rooted in Anaconda Navigator's JupyterLab notebooks. Details about using the Python programming language ecosystem tailored for data science and demonstrating commonly used libraries like pandas, numpy, scipy, matplotlib, and others. The article will provide exposure to a swath of ideas in a logical progression. Some of the mentioned packages will be demonstrated in either analyzing data from a variety of sources or drawing different graph types to show aspects of the plotted data and results obtained from the analysis. Additionally, some of the built-in library functionality for gathering statistics about the data will be reviewed, and also how to manipulate Pandas dataframes by changing, reducing and augmenting the stored data for study.

<https://ap20.github.io/nnj/NL/edutechrev/ExploreDAandVisPart1.pdf>

Contact: Amit Patel email: a.j.patel@ieee.org

**Article 2: AI-Driven Skin Cancer Detection: Enhancing Accuracy with Deep Learning Models**

Skin cancer remains one of the most prevalent and deadliest disease conditions worldwide, emphasizing the need for early and accurate diagnosis. In this work, we have explored the use of deep learning techniques using Convolutional Neural Networks (CNNs), hybrid models, and ensemble methods, for automated skin lesion classification. Preprocessing steps, including image resizing, hair removal, contrast enhancement, and lesion cropping, were applied to improve model accuracy. We have utilized the International Skin Imaging Collaboration (ISIC) dataset for our work and compared the performance of deep learning models such as Simple CNN, Hybrid CNN-RNN, Ensemble models, and SVM classifiers, achieving a maximum test accuracy of 83.48% with SVM.

Despite advancements, challenges such as data imbalance, imaging inconsistencies, and model interpretability persist. Ensemble techniques demonstrate robustness by leveraging strengths across multiple architectures, while explainable AI tools like Grad-CAM enhance trust by providing visual insights into model predictions. Future work aims to address ethical concerns, expand datasets, and optimize computational efficiency to ensure reliable deployment in clinical settings.

[https://ap20.github.io/nnj/NL/edutechrev/Project\\_Skin\\_Cancer\\_Prakash.pdf](https://ap20.github.io/nnj/NL/edutechrev/Project_Skin_Cancer_Prakash.pdf)

Contact: Prakash Das pdas4@stevens.edu

## SOME UPDATES FROM IEEE Women in Engineering

### 2025 IEEE Women in Engineering International Leadership Conference



Register Now!

<https://ieee-wie-ilc.org/registration/> Early

Bird Registration ends on 4 March

2025 Don't miss this chance to engage with leaders in engineering and technology.

#IEEEWIE #WIEILC2025

IEEE Women in Engineering (WIE) will celebrate the [2025 IEEE WIE Day](#) from 23rd June to 7th July 2025. The theme of this year's IEEE WIE Day is "Pioneering Safe Cyberspace: Women Bridging Technology and Light for Security"

We are inviting you to be the IEEE WIE Day Ambassadors. As an ambassador, you will play a key role in promoting, motivating, and engaging this global event.

Please sign up to be the IEEE WIE Day ambassador via this [form](#) by **7th March 2025**. After signing up as a WIE Day Ambassador, please introduce yourselves as Ambassadors in the [IEEE WIE Global Network](#).

### 2025 IEEE WIE FORUM EAST

The IEEE Women in Engineering (WIE) Forum USA East is dedicated to fostering leadership development for professionals at every career stage. Rotating between IEEE Region 1 and Region 2 in the Northeast USA, our forum offers attendees the chance to gain inspiration and empowerment from renowned leaders. Through dynamic workshops and engaging panel discussions, participants will explore emerging technologies and innovative STEM outreach initiatives.





**GRADUATE SCHOOL VIRTUAL OPEN HOUSE!**

**Tuesday, February 18, 2025, 5 p.m.**

Fairleigh Dickinson University

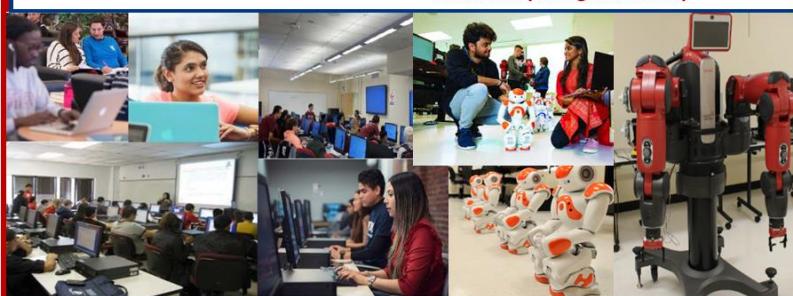
Gildart Haase School of Computer Sciences & Engineering (GHSCSE)

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*

- |                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| *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*



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- |                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| *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*



## Calendar of Events

### Upcoming Events: February 2025 Onwards

| Title                                                                                                                                             | Date                    | Hosts                                                                                                                                                                                                                                                                                                                                                                                                            | Location                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| IEEE AP-S SIGHT, AP-S COPE, and IEEE EPICS Projects: Antenna and Wireless Humanitarian Technology:<br>North Jersey Section Jt Chapter, AP03/MTT17 | 01 Feb 2025<br>05:00 PM | CH01092, SIGHT177                                                                                                                                                                                                                                                                                                                                                                                                | Paterson,<br>New<br>Jersey<br>Virtual<br>View |
| Careers in Technology Spring Series 2025 - Eamon J Wall, Esq - 04 February 8 pm EST / 7 pm CST: Northwest Florida Section Chap, C16/COM19         | 05 Feb 2025<br>01:00 AM | C-FN772, CH01013, CH01027, CH01047, CH01056, CH01070, CH01285, CH02069, CH02127, CH02131, CH02139, CH02170, CH03009, CH03081, CH03197, CH03225, CH03254, CH04025, CH04040, CH04055, CH04165, CH05005, CH05056, CH05079, CH05227, CH06198, CH06254, CH06291, CH07198, HKN217, LM10345, LM30557, R10327, R20013, R20035, R30171, R30557, R40021, R50043, SIGHT119, STB07591, STB14028, STB63891, STB96971, WE20027 | Virtual<br>View                               |
| February ExCom Meeting:<br>North Jersey Section                                                                                                   | 05 Feb 2025<br>11:30 PM | R10327                                                                                                                                                                                                                                                                                                                                                                                                           | Teaneck,<br>New<br>Jersey                     |

| <b>Title</b>                                                                                                                                        | <b>Date</b>             | <b>Hosts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Location</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Virtual<br>View |
| <a href="#">Adopting AI: How Artificial Intelligence is changing my work life: Lehigh Valley Section Affinity Group, WIE</a>                        | 07 Feb 2025<br>12:00 AM | C-FN772, CH01070,<br>CH02170, CH03197,<br>R10327, R20027, WE20027                                                                                                                                                                                                                                                                                                                                                                                                    | Virtual<br>View |
| <a href="#">Emerging Digital Transmitters for Wireless Communication From RF to mm-Wave: North Jersey Section Jt Chapter, AP03/MTT17</a>            | 11 Feb 2025<br>05:00 AM | CH01092, CH01178                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Virtual<br>View |
| <a href="#">Careers in Technology Spring Series 2025 - Rui Li, PhD - 11 February 8 pm EST / 7 pm CST: Northwest Florida Section Chap, C16/COM19</a> | 12 Feb 2025<br>01:00 AM | C-FN772, CH01013,<br>CH01027, CH01047,<br>CH01056, CH01070,<br>CH01285, CH02069,<br>CH02127, CH02131,<br>CH02139, CH02170,<br>CH03009, CH03081,<br>CH03197, CH03225,<br>CH03254, CH04025,<br>CH04040, CH04055,<br>CH04165, CH05005,<br>CH05056, CH05079,<br>CH05227, CH06198,<br>CH06254, CH06291,<br>CH07198, HKN217,<br>LM10345, LM30557,<br>R20013, R20035, R30171,<br>R30557, R40021, R50043,<br>SIGHT119, STB07591,<br>STB14028, STB63891,<br>STB96971, WE20027 | Virtual<br>View |

| Title                                                                                                                                   | Date                    | Hosts                                                                                                                                                                                                                                                                                          | Location                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| A 40-minute Short Course on Artificial Intelligence: North Jersey Section Chapter, SP01                                                 | 12 Feb 2025<br>05:00 PM | CH01091, CH01092, CH01177, CH01178                                                                                                                                                                                                                                                             | <a href="#">Virtual View</a>                  |
| Robotics Seminar: Foster progress and sustainability in multiple sectors via robotics: Montclair State Univ                             | 12 Feb 2025<br>07:00 PM | CH01081, CH01092, CH01096, CH01178, CH01278, STB21201                                                                                                                                                                                                                                          | <a href="#">Montclair, New Jersey View</a>    |
| 2025 7th IEEE 5G Workshop on First Responder and Tactical Networks: IEEE Future Networks Community                                      | 18 Feb 2025<br>12:30 PM | C-FN772, CH01250, CH02009, CH02109, R1, R10327, R10329, R10345, R2, R20003                                                                                                                                                                                                                     | <a href="#">Laurel, Maryland Virtual View</a> |
| Improve Throughput in Characterization and Production: North Jersey Section Jt Chapter, AP03/MTT17                                      | 18 Feb 2025<br>06:00 PM | CH01092                                                                                                                                                                                                                                                                                        | <a href="#">Virtual View</a>                  |
| Careers in Technology Spring Series 2025 - Alvin Chin, PhD - 18 February 8 pm EST / 7 pm CST: Northwest Florida Section Chap, C16/COM19 | 19 Feb 2025<br>01:00 AM | C-FN772, CH01013, CH01027, CH01047, CH01056, CH01070, CH01285, CH02069, CH02127, CH02131, CH02139, CH02170, CH03009, CH03081, CH03197, CH03225, CH03254, CH04025, CH04040, CH04055, CH04165, CH05005, CH05056, CH05079, CH05227, CH06198, CH06254, CH06291, CH07198, HKN217, LM10345, LM30557, | <a href="#">Virtual View</a>                  |

| Title                                                                                                                                                              | Date                    | Hosts                                                                                                             | Location                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                                                                                                                                                                    |                         | R10327, R20013, R20035, R30171, R30557, R40021, R50043, SIGHT119, STB07591, STB14028, STB63891, STB96971, WE20027 |                                   |
| Towards an AI-native Air Interface in 6G: Machine Learning-based Channel State Information (CSI) Feedback Enhancement: North Jersey Section Jt Chapter, AP03/MTT17 | 19 Feb 2025<br>04:00 PM | CH01092, CH01178                                                                                                  | Virtual View                      |
| Goal-Oriented Generative Semantic Communications with Multimodal LLMs: Philadelphia Section                                                                        | 20 Feb 2025<br>12:00 PM | C-FN772, CH01102, R10327, R2, R20035                                                                              | Virtual View                      |
| Dry Type Transformer Fundamentals and Power Quality Solutions - Hammond (PLEASE NOTE NEW DATE & TIME): North Jersey Section Chapter, PE31                          | 20 Feb 2025<br>01:00 PM | CH01081, CH01092, CH01097, CH01178                                                                                | South Plainfield, New Jersey View |
| Internet of Vehicles in the Realms of VLC and FSO: North Jersey Section Chapter, VT06                                                                              | 21 Feb 2025<br>04:00 PM | CH01092, CH01153, CH01177, CH01178                                                                                | Virtual View                      |
| Careers in Technology Spring Series 2025 - Peter James Kootsookos, PhD - 25 February 8 pm EST / 7 pm CST:                                                          | 26 Feb 2025<br>01:00 AM | C-FN772, CH01013, CH01027, CH01047, CH01056, CH01070, CH01285, CH02069, CH02127, CH02131,                         | Virtual View                      |

| Title                                                                                                                                | Date                    | Hosts                                                                                                                                                                                                                                                                                                          | Location                                        |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Northwest Florida Section Chap, C16/COM19                                                                                            |                         | CH02139, CH02170, CH03009, CH03081, CH03197, CH03225, CH03254, CH04025, CH04040, CH04055, CH04165, CH05005, CH05056, CH05079, CH05227, CH06198, CH06254, CH06291, CH07198, HKN217, LM10345, LM30557, R20013, R20035, R30171, R30557, R40021, R50043, SIGHT119, STB07591, STB14028, STB63891, STB96971, WE20027 |                                                 |
| IEEE North Jersey Student and YP Social Networking Event: North Jersey Section Affinity Group, YP                                    | 02 Mar 2025<br>01:00 AM | SIGHT177, YP10327                                                                                                                                                                                                                                                                                              | Jersey City, New Jersey<br><a href="#">View</a> |
| Careers in Technology Spring Series 2025 - Elizabeth Alves - 04 March 8 pm EST / 7 pm CST: Northwest Florida Section Chap, C16/COM19 | 05 Mar 2025<br>01:00 AM | C-FN772, CH01013, CH01027, CH01047, CH01056, CH01070, CH01285, CH02069, CH02127, CH02131, CH02139, CH02170, CH03009, CH03081, CH03197, CH03225, CH03254, CH04025, CH04040, CH04055, CH04165, CH05005, CH05056, CH05079, CH05227, CH06198, CH06254, CH06291,                                                    | Virtual<br><a href="#">View</a>                 |

| Title                                                                                                                          | Date                    | Hosts                                                                                                                                                          | Location                                  |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                                                                                                                |                         | CH07198, HKN217,<br>LM10345, LM30557,<br>R20013, R20035, R30171,<br>R30557, R40021, R50043,<br>SIGHT119, STB07591,<br>STB14028, STB63891,<br>STB96971, WE20027 |                                           |
| <a href="#">IEEE SSIT Lecture: Climate Change, from Fundamentals to Smart Solutions: UK and Ireland Section Chapter, SIT30</a> | 06 Mar 2025<br>06:00 PM | CH01285, CH03252,<br>CH04055, CH08667,<br>SIGHT060                                                                                                             | <a href="#">Virtual View</a>              |
| <a href="#">Leveraging Intent-Driven rApps for Intelligent RAN Automation: Philadelphia Section</a>                            | 06 Mar 2025<br>11:00 PM | C-FN772, CH01092,<br>CH01102, R10327, R2,<br>R20035                                                                                                            | <a href="#">Virtual View</a>              |
| <a href="#">The Meaning Behind the Signal: How Semantics are Transforming Wireless Communications: Philadelphia Section</a>    | 20 Mar 2025<br>12:00 PM | C-FN772, CH01092,<br>CH01102, R10327, R2,<br>R20035                                                                                                            | <a href="#">Virtual View</a>              |
| <a href="#">Terra North Jersey STEM Fair - IEEE Young Engineer Award 2025: North Jersey Section</a>                            | 23 Mar 2025<br>01:00 PM | C-FN772, CH01081,<br>CH01092, CH01153,<br>CH01178, R10327,<br>SIGHT056, SIGHT177                                                                               | <a href="#">Union, New Jersey View</a>    |
| <a href="#">2025 IEEE North Jersey Section Awards Reception: North Jersey Section</a>                                          | 04 May 2025<br>07:00 PM | R10327                                                                                                                                                         | <a href="#">Whippany, New Jersey View</a> |

**For Past Month's Events – January 2025 - [Click Here](#)**

## 2025 IEEE North Jersey Section Volunteers

### *Executive Committee*

|                           |                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------|
| <b>Chair:</b>             | Emad Farag <a href="mailto:enfarag@ieee.org">enfarag@ieee.org</a>                       |
| <b>First Vice-Chair:</b>  | Anisha Apte <a href="mailto:anisha_apte@ieee.org">anisha_apte@ieee.org</a>              |
| <b>Second Vice-Chair:</b> | Alfredo Tan <a href="mailto:tan@fd.edu">tan@fd.edu</a>                                  |
| <b>Secretary:</b>         | Avimanyou Vatsa <a href="mailto:avatsa@fd.edu">avatsa@fd.edu</a>                        |
| <b>Treasurer:</b>         | Weitian Wang <a href="mailto:wangw@montclair.edu">wangw@montclair.edu</a>               |
| <b>Member-at-Large</b>    | Michael Miller <a href="mailto:michaelamiller8@gmail.com">michaelamiller8@gmail.com</a> |
|                           | Adriaan van Wijngaarden <a href="mailto:avw@ieee.org">avw@ieee.org</a>                  |
|                           | Yu-Dong Yao: <a href="mailto:yyao@stevens.edu">yyao@stevens.edu</a>                     |
| <b>Junior Past Chair:</b> | Hong Zhao <a href="mailto:zhao@fd.edu">zhao@fd.edu</a>                                  |
| <b>Senior Past Chair:</b> | Ajay K. Poddar <a href="mailto:akpoddar@ieee.org">akpoddar@ieee.org</a>                 |

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### *Society Chapters*

|                                                                   |            |                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Aerospace Electronic Systems</i>                               | AES10      | <b>Chair:</b> Cherif Chibane<br><a href="mailto:cherif.chibane@gmail.com">cherif.chibane@gmail.com</a><br><b>Vice-Chair:</b> Kirit Dixit <a href="mailto:kdixit@ieee.org">kdixit@ieee.org</a>                                                                                                                                                                      |
| <i>Antennas and Propagation./ Microwave Theory and Techniques</i> | AP03/MMT17 | <b>Co-Chairs:</b><br>Ajay Poddar <a href="mailto:akpoddar@ieee.org">akpoddar@ieee.org</a><br>Edip Niver <a href="mailto:niver@adm.njit.edu">niver@adm.njit.edu</a><br><b>Vice-Chair:</b> Anisha Apte <a href="mailto:anisha_apte@ieee.org">anisha_apte@ieee.org</a><br><b>Secretary:</b> Vishal Kumar <a href="mailto:tovpoddar@gmail.com">tovpoddar@gmail.com</a> |
| <i>Circuits and Systems/ Electron Devices</i>                     | CAS04/ED15 | <b>Chair:</b> Durga Misra <a href="mailto:dmisra@njit.edu">dmisra@njit.edu</a><br><b>Vice Chair:</b> Shaahin Angizi <a href="mailto:shaahin.angizi@njit.edu">shaahin.angizi@njit.edu</a>                                                                                                                                                                           |
| <i>Communications</i>                                             | COM19      | <b>Chair:</b> Amit Patel <a href="mailto:a.j.patel@ieee.org">a.j.patel@ieee.org</a>                                                                                                                                                                                                                                                                                |
| <i>Computer</i>                                                   | C16        | <b>Chair:</b> Hong Zhao <a href="mailto:zhao@fd.edu">zhao@fd.edu</a><br><b>Vice Chair:</b> Tao Han <a href="mailto:tao.han@njit.edu">tao.han@njit.edu</a>                                                                                                                                                                                                          |

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|--------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Computational<br/>Intelligence Society</i>                            |                | <b>Co-Chair:</b> Prasenjit Bhadra <a href="mailto:prasenjit@ieee.org">prasenjit@ieee.org</a><br>Manfred.Minimair <a href="mailto:Manfred.Minimair@shu.edu">Manfred.Minimair@shu.edu</a>                  |
| <i>Control Systems</i>                                                   | CS23           | <b>Vice-Chair:</b> Ratna Raj <a href="mailto:ratna.raj@njit.edu">ratna.raj@njit.edu</a><br><b>Chair:</b> Marcos Netto <a href="mailto:marcos.netto@njit.edu">marcos.netto@njit.edu</a>                   |
|                                                                          |                | <b>Vice-Chair:</b> David Haessig<br><a href="mailto:dahaessig@gmail.com">dahaessig@gmail.com</a>                                                                                                         |
|                                                                          |                | <b>Secretary:</b> SangWoo Park<br><a href="mailto:sangwoo.park@njit.edu">sangwoo.park@njit.edu</a>                                                                                                       |
| <i>Electromagnetic<br/>Compatibility/ Product<br/>Safety Engineering</i> | EMC27/PSE43    | <b>Chair:</b> Russell C. Pepe <a href="mailto:rcpepe@ieee.org">rcpepe@ieee.org</a>                                                                                                                       |
| <i>Engineering in Medicine<br/>and Biology</i>                           | EMB18          | <b>Chair:</b> Yu-Dong Yao <a href="mailto:Yu-Dong.Yao@stevens.edu">Yu-Dong.Yao@stevens.edu</a><br><b>Vice-Chair 1:</b> Amrita Poddar<br><a href="mailto:amritapoddar@ieee.org">amritapoddar@ieee.org</a> |
|                                                                          |                | <b>Vice Chair 2:</b> Elisa Kallioniemi<br><a href="mailto:elisa.kallioniemi@njit.edu">elisa.kallioniemi@njit.edu</a>                                                                                     |
| <i>Industrial Applications</i>                                           | IA34 (w. P/CJ) | <b>Chair:</b> Ken Oexle <a href="mailto:k.oexle@ieee.org">k.oexle@ieee.org</a>                                                                                                                           |
| <i>Information Theory</i>                                                | IT12 (w. NY)   | <b>Chair:</b> Adriaan J. van<br>Wijngaarden <a href="mailto:avw@ieee.org">avw@ieee.org</a>                                                                                                               |
| <i>Instrumentation &amp;<br/>Measurement</i>                             | IM09           | <b>Chair:</b> Russell C. Pepe <a href="mailto:rcpepe@ieee.org">rcpepe@ieee.org</a>                                                                                                                       |
| <i>Photonics</i>                                                         | PHO36          | <b>Co-Chairs:</b> Naresh Chand<br><a href="mailto:chandnaresh@gmail.com">chandnaresh@gmail.com</a><br>Ajay Poddar <a href="mailto:akpoddar@ieee.org">akpoddar@ieee.org</a>                               |
| <i>Power &amp; Energy</i>                                                | PE31           | <b>Co-Chairs:</b> Ronald W. Quade<br><a href="mailto:rwquade@ieee.org">rwquade@ieee.org</a><br>Michael Miller <a href="mailto:michaelamiller8@gmail.com">michaelamiller8@gmail.com</a>                   |
| <i>Robotics &amp; Automation</i>                                         | RA24           | <b>Chair:</b> Mengchu Zhou <a href="mailto:zhou@njit.edu">zhou@njit.edu</a><br><b>Vice Chair:</b> Shilpi Chakraborty <a href="mailto:shilpi@ieee.org">shilpi@ieee.org</a>                                |
| <i>Signal Processing</i>                                                 | SP01           | <b>Chair:</b> Alfredo Tan <a href="mailto:tan@fd.edu">tan@fd.edu</a>                                                                                                                                     |

|                                                |        |                                                                                                                                                                                        |
|------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Social Implications of Technology</i>       |        | <b>Chair:</b> Kirit Dixit <a href="mailto:kdixit@ieee.org">kdixit@ieee.org</a><br><b>Vice Chair:</b> Anujkumarsinh Donvir <a href="mailto:anujdonvir@ieee.org">anujdonvir@ieee.org</a> |
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| <i>Vehicular Technology</i>                    | VT06   | <b>Chair:</b> Ionel Bajescu <a href="mailto:nelu108@yahoo.com">nelu108@yahoo.com</a><br><b>Vice-Chair:</b> Dr. Muhammad Umer <a href="mailto:m.umer@fd.edu">m.umer@fd.edu</a>          |

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#### *Audit Committee*

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*Affinity Groups & Councils*

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| <i>LIFE Members</i>                 | LM  | <b>Chair:</b> Louis Fiore <a href="mailto:ltfiore@aol.com">ltfiore@aol.com</a><br><b>Treasurer:</b> Stephen WILKOWSKI <a href="mailto:Stephen_WILKOWSKI@ieee.org">Stephen_WILKOWSKI@ieee.org</a><br><b>Secretary:</b> Michael Miller <a href="mailto:millerm@ieee.org">millerm@ieee.org</a><br><b>Member at Large:</b> Kenneth Oexle <a href="mailto:k.oexle@ieee.org">k.oexle@ieee.org</a> , |
| <i>Magnetic/UFFC/Sensor Council</i> |     | <b>Chair:</b> Philip Pong <a href="mailto:philip.pong@njit.edu">philip.pong@njit.edu</a>                                                                                                                                                                                                                                                                                                      |
| <i>Nanotechnology Council</i>       |     | <b>Chair:</b> Eui-Hyeok Yang <a href="mailto:ehyang@ieee.org">ehyang@ieee.org</a>                                                                                                                                                                                                                                                                                                             |
| <i>North Jersey SIGHT Group</i>     |     | <b>Co-Chairs:</b> Ajay Poddar <a href="mailto:akpoddar@ieee.org">akpoddar@ieee.org</a><br>Anisha Apte <a href="mailto:anisha_apte@ieee.org">anisha_apte@ieee.org</a><br><b>Vice Chair:</b> Vishal Kumar <a href="mailto:tovpoddar@gmail.com">tovpoddar@gmail.com</a>                                                                                                                          |
| <i>Systems Council</i>              |     | <b>Chair:</b> Michael Newell <a href="mailto:msnewell2000@yahoo.com">msnewell2000@yahoo.com</a><br><b>Vice Chair:</b> Avimanyou Vatsa <a href="mailto:avatsa@fdu.edu">avatsa@fdु.edu</a>                                                                                                                                                                                                      |
| <i>Women in Engineering</i>         | WIE | <b>Co-Chairs:</b> Chitra Venkatraman <a href="mailto:chitrav55@gmail.com">chitrav55@gmail.com</a><br>Ratna Raj <a href="mailto:ratna.raj@njit.edu">ratna.raj@njit.edu</a><br><b>Vice-Chair:</b> Rui Li <a href="mailto:liru@montclair.edu">liru@montclair.edu</a>                                                                                                                             |
| <i>Young Professionals</i>          | YP  | <b>Chair:</b> Larry Yang <a href="mailto:yangl@ieee.com">yangl@ieee.com</a><br><b>Vice-Chair Kalyani Matey</b> <a href="mailto:kalyanirajivshah@gmail.com">kalyanirajivshah@gmail.com</a><br><b>Vice Chair:</b> Patrick Beesley <a href="mailto:Patrick.Beesley@se.com">Patrick.Beesley@se.com</a>                                                                                            |

*Student Branches*

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                                 **Vice President:** Kevin Fana  
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**Stevens Institute of  
Technology**

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**Union community  
college**

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