

# IEEE North Jersey Section

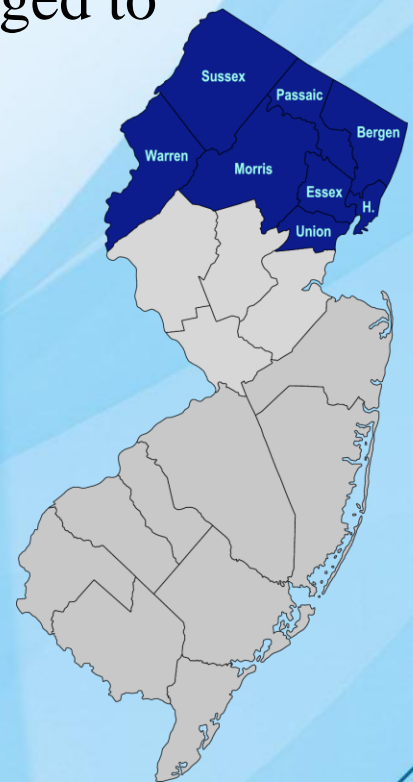
## IEEE North Jersey Section

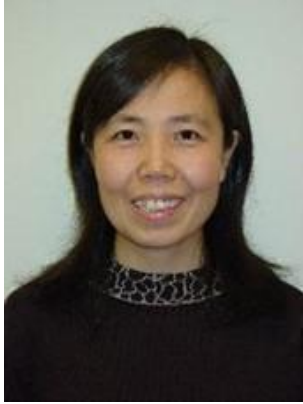
**VOL. 70, NO. 06 Issue: JUNE-JULY 2024**

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 approach the summer months, I am delighted to share with you some exciting updates and ongoing initiatives that underscore our commitment to fostering innovation, collaboration, and diversity within our community.

Our events span a variety of topics and formats, ensuring there is something for everyone. We have lectures cosponsored by the IEEE Special Interest Group on Humanitarian Technology (SIGHT) and Society on Social Implications of Technology (SSIT) Chapters and technical seminars addressing real-world problems and integrating AI into future education.

In alignment with our commitment to diversity and inclusion, we are excited about the upcoming activities aimed at high school female students. These events are designed to inspire and empower young women to pursue careers in STEM fields. By providing them with hands-on experiences and mentorship from accomplished professionals, we hope to spark a lifelong passion for technology and engineering.

As always, I encourage you to stay connected with the IEEE North Jersey Section, participate in our events, and share your ideas and feedback. Your active involvement is crucial to the vibrancy and success of our community.

Wishing you all a productive and enjoyable summer!

**Best wishes,**

*Hong Zhao, IEEE North Jersey Section Chair*

## IEEE North Jersey Section’s Computer and Signal Processing Chapter

- A Report by Prof. Hong Zhao,

On April 17, 2024, the North Jersey Computer Chapter and Signal Processing Chapter hosted a distinguished Lecturer talk titled “AI Cybersecurity “by Dr. Meikang Qiu, Professor of Computer Science from Augusta University. Dr. Qiu is a member of the Computer Society DVP (Distinguished Visitors Program).



Fig. 1: Dr. Meikang Qiu is with FDU faculty and Staff.

Fig. 2: A group of students seated in the auditorium, listening to the talk



On April 24, 2024, FDU Gildart Haase School of Computer Sciences and Engineering hosted a seminar with the IEEE North Jersey Section Computer Chapter, Singal Processing Chapter, and AP/MTT Chapter. The speaker, Bill Ochs, has over 40 years of experience in the aerospace field, working in private industry and NASA. Bill gave a talk titled “Bill Ochs on the James Webb Space Telescope”.



Fig. 3: Mr. Bill Ochs was presenting his work on Jams Web Telescope



Fig. 4: Group picture of the FDU industry advisory board and FDU faculty

**60th Anniversary 1st Measure of Cosmic Microwave Background Radiation, 20 May**

- *A Report by Dr. Ajay Poddar*

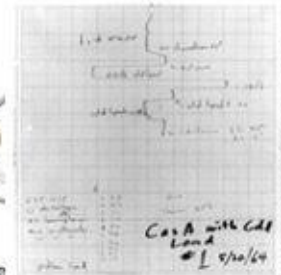
The Antenna and Propagation Society Chapter Activity Committee (AP-S CAC), Communication Society, Computer Society, and IEEE Region 1 co-sponsored an event on May 20th to celebrate the 60th anniversary of the first measurement of Cosmic Microwave Background Radiation.

Dr. Robert Woodrow Wilson, Nobel Laureate, and the community commemorated the 60th anniversary of the initial measurement of the Cosmic Microwave Background Radiation, a pivotal discovery regarding the Big Bang origins of the universe, at the AT&T Labs Science and Technology Innovation Center & Museum.

Robert Woodrow Wilson - Biographical <https://lnkd.in/eNE4bcTQ>

STEM students had a unique opportunity to meet and interact with leaders and luminaries at a luncheon, igniting their passion for future scientific discoveries. A STEM activity that was organized offered a chance to view historical recordings of scientific inventions at Bell Labs and engage in meet-and-greet sessions.

**Celebration:  
60<sup>th</sup> Anniversary  
1<sup>st</sup> Measure of CMB  
Evidence of Big Bang**



**Dr Robert Woodrow Wilson  
Nobel Laureate**



**Fig.1:** Picture Postcard of the event posted on vTools



**Fig. 2:** AP-S STEM Event: Dr. Robert Wilson, Nobel Laureate (seen in the middle at the end of the table), Interacted with Dr. Ajay Poddar, Chair IEEE AP-S CAC, and students during the event held at AT&T Labs Science and Technology Innovation Center & Museum



**Fig. 3:** AP-S event at the AT&T Labs Science and Technology Innovation Center & Museum, 200 S Laurel Ave Middletown, New Jersey, May 20, 2024; Dr. Robert Wilson (Fifth from left), along with his wife (Sixth from left), the IEEE Region-1 and IEEE AP-S Members, RCA, and AT&T Bell Labs dignitaries.



**Fig. 4:** AP-S STEM event at the auditorium where Dr. Robert Wilson, Nobel Laurette, addressed the attendees and was awarded a plaque to celebrate the 60th anniversary of the 1st Measure of Cosmic Microwave Background Radiation, May 20, 2024, at the AT&T Labs Science and Technology Innovation Center & Museum



Fig. 5: From left, Dr. Robert Wilson, Nobel Laurette, holding the specially made plaque showing the date of the discovery of the 1st Measure of Cosmic Microwave Background Radiation, made on May 20th, 1964, Dr. Ajay Poddar, Chair IEEE AP-S Chapter Activity Committee, and Kavita Poddar, at the AT&T Labs Science and Technology Innovation Center & Museum



Fig. 6: From right, Dr. Peter Vetter, President of Bell Labs Core Research at Nokia, Murry Hill, New Jersey; Dr. Robert Wilson, Nobel Laurette; Dr. Ajay Poddar, Chair IEEE AP-S Chapter Activity Committee; Howard Rosen, RCA (Radio Club of America), Bala Prasanna, IEEE R1 Director, and wife of Dr. Robert Wilson

**IEEE – IMPORTANT EVENTS, ARTICLES, ANNOUNCEMENTS, AND REMINDERS:**

- [This Month's Communications Society News from Around the World](#)
- **IEEE Heroes and Mentors-** An article by Harry Roman

**IEEE Heroes and Mentors**

Did you grow up in an IEEE-rich company or department where senior/fellow IEEE members took you under their wings and mentored your early years? I surely did, and as I look back over 53 years as an engineer, I realize how fortunate I was to have basked in the leadership of my mentors. Let me remember a few.

There was Neale, who taught me how to turn my creativity into useful systems and exposed me to the dynamics of project management. He also showed me the value of writing IEEE papers and documenting my progress. Neale gave me the confidence to let my imagination soar. Whenever I write a technical paper or article, I know Neale is looking over my shoulder.

Tom gave me an eternal gift....how to make incredible oral presentations. His talent for making presentations fun and challenging is an absolute mainstay of what I do today when I work with teachers and members of the general public.

Virginia taught me how to step into an unknown technical area and do what needed to be done to accomplish something significant. She taught me the power of making cogent arguments for my ideas. Virginia was the portal to my long career in R&D.

Jack made sure I understood the importance of using interdepartmental teams to solve problems and to think broadly and deeply at the same time. His insistence on good, succinct writing and presentations remains as vibrant today as when I first encountered it.

Steve showed me the essential and important difference between management and leadership, a lesson I have endlessly mined over the decades and often write about.

Peter and John kept my feet on the straight and narrow and showed me how to document and measure the direction and value of my work and my career. Their guidance taught me how to write award-winning proposals and to lead people on teams.

Was I lucky with a line-up of talent like that in front of me? You bet! Every time I attend an IEEE meeting, their warm memories come flooding back. I hope you have had a similar experience. I hope you can give other young engineers the benefit of your years and guidance.

Talk to you again soon...

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





**FDU**  
Gildart Haase School  
of Computer Sciences  
& Engineering

**GRADUATE SCHOOL VIRTUAL OPEN HOUSE!**

**Tuesday, June 18, 2024, 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><b>*Cybersecurity &amp; Information Assurance</b></p> <p><b>*Electrical Engineering</b></p> <p><b>*E-Commerce</b></p>	<p><b>*Management Information Systems</b></p> <p><b>*Computer Engineering</b></p> <p><b>*Computer Science (Data Science, Cloud Computing and more)</b></p>
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**Scan Zoom Registration**



**Scan Grad Program Info**

















Co-sponsored by North Jersey Section Jt Chapters, CAS<sub>04</sub>/ED<sub>15</sub>, AP<sub>03</sub>/MTT<sub>17</sub>, PHO<sub>36</sub>, North Jersey Section SIGHT, Affinity Group, WIE and the North Jersey Section

Speakers – Faculty & Industry Panel

- Speakers will be female University Professors and female Industry Leaders



**Title:** *One-Day Summer Camp for Female High School Students: SHE in ECE*

**Date:** July 02, 2024, 08:15 AM to 04:30 PM

**Brief Agenda:** One-Day Summer Camp for Female Middle School and High School Students” to join engineering, especially electrical and computer engineering. SHE@IEEE is Soaring High -powered Excellence in Electrical and Computer Engineering (ECE): SHE in ECE.

**Location:** 154 Summit Street, Newark, NJ 07102

## Calendar of Events

### Upcoming Events: June 2024 Onwards

Title	Date	Hosts	Location
IEEE North Jersey Section June 2024 EXCOM - Meeting 6:30 PM: North Jersey Section	05 Jun 2024 06:30 PM	R10327	Virtual <a href="#">View</a>
Designing a Standard to Minimize Misuse of Technology for Coercive-Control (P2987): UK and Ireland Section Chapter, SIT30	11 Jun 2024 06:00 PM	CH01070, CH01285, CH04055, CH06042, CH07171, CH08667, SIGHT060, SIGHT119	Virtual <a href="#">View</a>
1. Transforming Technical Education: Practical Uses of AI, MR, Gamification, cloud and IoT for Personalized and Scalable Learning; 2. CASE: Traffic and energy load balancing in cooperative dual-powered green cellular networks: North Jersey Section Jt Chapter, CAS04/ED15	13 Jun 2024 06:00 PM	CH01092, CH01153, CH01178, CH01184, SIGHT177, WE10327	Hybrid <a href="#">View</a> Newark, New Jersey
AI-based Software Innovations for 5G and Beyond: IEEE Future Networks Community	20 Jun 2024 12:00 PM	C-FN772, CH02009, R10327	Virtual <a href="#">View</a>
Havana Syndrome -- an IEEE Perspective: IEEE Future Networks Community	26 Jun 2024 11:00 AM	C-FN772, R10327	Virtual <a href="#">View</a>

<p>Summer Camp for Female Middle School and High School Students: SHE in ECE: North Jersey Section Jt Chapter, CAS04/ED15</p>	<p>02 Jul 2024 08:15 AM</p>	<p>CH01092, CH01178, CH01184, R10327, SIGHT177, WE10327</p>	<p>Newark, NJ <a href="#">View</a></p>
<p><a href="#">Celebrating Telstar Launch with Dr Iwama: 1962 and Future of Communication in this decade: New Jersey Coast Section Affinity Group, LM</a></p>	<p>10 Jul 2024 11:30 AM</p>	<p>C-FN772, C016, CH01070, CH01092, COM019, LM10345, SIGHT119, WE10327</p>	<p>Middletown, New York <a href="#">View</a></p>
<p>Prioritizing Societal and Ethical Concerns with Responsible AI: IEEE Future Networks Community</p>	<p>11 Jul 2024 11:00 AM</p>	<p>C-FN772, R10327</p>	<p>Virtual <a href="#">View</a></p>
<p>New Space Economy: The Rise of Small Satellites: New Jersey Coast Section Jt. Chapter, AES10/TEM14</p>	<p>17 Jul 2024 06:30 PM</p>	<p>CH01215, CH01253, CH02067</p>	<p>Virtual <a href="#">View</a></p>
<p>IEEE SSIT Lecture: Automating Empathy in Human-AI Partnerships: Issues, Ethics and Governance: UK and Ireland Section Chapter, SIT30</p>	<p>10 Sep 2024 06:00 PM</p>	<p>CH01070, CH01092, CH01177, CH01258, CH01285, CH02100, CH04055, CH07171, CH08031, CH08667, CH08917, SIGHT060, SIGHT119, SIGHT177, WE10327</p>	<p>Virtual <a href="#">View</a></p>
<p>38th Annual Symposium and Mini-Show - Exhibitor Registration Site: North Jersey Section Jt Chapter, AP03/MTT17</p>	<p>09 Oct 2024 08:00 AM</p>	<p>CH01092</p>	<p>East Hanover, New Jersey <a href="#">View</a></p>

**[For the Past Month's Events \(MAY 2024\) Click Here](#)**

## 2024 IEEE North Jersey Section Volunteers

### *Executive Committee*

**Chair** – Hong Zhao [zhao@fdu.edu](mailto:zhao@fdu.edu)

**First Vice-Chair** – Emad Farag  
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**Second Vice-Chair** – Anisha Apte  
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**Secretary** - Adriaan J. van  
Wijngaarden [avw@ieee.org](mailto:avw@ieee.org)

**Treasurer** – Avimanyou Vatsa  
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### **Member-at-Large**

Naresh Chand -  
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Har Dayal – [dayalhar@gmail.com](mailto:dayalhar@gmail.com)

Alfredo Tan – [tan@fdu.edu](mailto:tan@fdu.edu)

**Junior Past Chair** – Ajay K.  
Poddar [akpoddar@ieee.org](mailto:akpoddar@ieee.org)

**Senior Past Chair** – Yu-Dong Yao  
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### *Society Chapters*

#### *Aerospace Electronic Systems*

**Chair** – Cherif Chibane  
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**Vice-Chair** – Kirit Dixit -  
[kdixit@ieee.org](mailto:kdixit@ieee.org)

#### *Antennas and Propagation / Microwave Theory and Techniques*

### **Co-Chairs**

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Edip Niver [niver@adm.njit.edu](mailto:niver@adm.njit.edu)

**Vice-Chair** – Anisha Apte  
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#### *Circuits and Systems/Electron Devices*

**Chair** – Durga Misra  
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**Vice Chair** – Shaahin Angizi  
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#### *Communications*

**Chair** – Amit Patel -  
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#### *Computer*

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**Vice Chair** -Tao Han -  
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#### *Computational Intelligence Society*

**Chair:** Prasenjit Bhadra -  
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**Vice-Chair:** Ratna Raj -  
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#### *Control Systems*

**Chair** – Marcos Netto  
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#### *Electromagnetic Compatibility/Product Safety Engineering*

**Chair** – Russell C. Pepe -  
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#### *Engineering in Medicine and Biology*

**Chair** – Yu-Dong Yao -  
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#### *Industrial Applications*

**Chair** – Ken Oexle -  
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#### *Information Theory*

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#### *Instrumentation & Measurement*

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#### *Photonics*

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#### *Power & Energy*

### **Co-Chairs**

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#### *Robotics & Automation*

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**Vice Chair** - Shilpi Chakraborty  
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#### *Signal Processing*

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#### *Social Implications of Technology*

**Chair** – Kirit Dixit -  
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#### *Systems, Man, and Cybernetics*

**Chair** – Weitian Wang  
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#### *Technology & Engineering Management*

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Rakesh Singh  
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#### *Vehicular Technology*

**Chair** – Ionel Bajescu  
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***Affinity Groups and Councils***

***Consultants Network***

**Co-Chairs**

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***Young Professionals***

**Chair** – Larry Yang –

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***Women in Engineering***

**Co-Chairs**

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***LIFE Members***

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***Nanotechnology Council***

**Chair** - Eui-Hyeok Yang -  
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***North Jersey SIGHT Group***

**Co-Chairs**

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***Committees***

***Audit Committee***

**Co-Chairs**

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Mani Iyer - mani.iyer@ieee.org

***Awards & Recognitions***

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***Educational Activities***

**Co-Chairs**

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***Employment Network***

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***Government and Industrial Liaisons***

**Co-Chairs**

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**Chair** – Howard Leach -  
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***Legal Activities***

**Chair** – Vacant

***Membership Development***

**Chair** – Michael Newell -  
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***MTT/AP Trade Show and Symposium***

**Chair** – Kirit Dixit -  
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**Vice-Chair** – Har Dayal -  
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**TPC Co-Chair** – George Kennall

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**TPC Co-Chair** – Ajay Poddar  
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***Newsletter***

**Chair** – Anisha Apte  
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***Nominations and Appointments***

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***PACE***

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***Pre-University Activities***

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***Program Review Committee***

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***Student Activities***

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***Student Representative Committee***

**Chair** - Kalyan Mondal  
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***Webmaster***

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