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

IEEE North Jersey Section continues to serve our local members with seminars, senior and student membership drive, consultant network events, and supporting student activities. More events are coming in March.

The IEEE North Jersey Section is pleased to announce its annual “Awards Banquet Event”. On behalf of the North Jersey Section, I would like to invite you to attend our prestigious event “Awards Banquet” to be held on Sunday, May 7, 2023, at the Birchwood Manor, in Whippany, New Jersey, from 3:00 pm until 6 pm. The event is meant to appreciate and honor the newly elevated Fellows in our Section, as well as the recipients of technical and other major IEEE awards, IEEE Region-1 Awards, and IEEE Section Awards. It is also a great opportunity to relax, unwind and enjoy the company of all members and non-members at the banquet. Please come join us!

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
- “My Favorite Slogan” - An article by Harry Roman for the February Newsletter
- 2023 IEEE NORTH JERSEY SECTION STUDENT PRESENTATION COMPETITION

My Favorite Slogan

I have the privilege of giving many talks about our economy and invention and Edison. I have always admired the GE slogan, "Progress is our most important product".

This slogan, originally emblazoned on the wall of GE's Outdoor Lighting Center in North Carolina in 1958, certainly champions the importance of progress, but it also has another powerful message...meaning that process is more important than content (any products that can be developed); that is, it does not matter how "smart" a company is, their true value lies in what they can do with what they know, and how fast they can do this for strategic advantage in global markets.

This is just what Thomas Edison would applaud as well. He was all about process—the entire mantra behind R&D labs as an example. In the 80's/90's great companies rejuvenated this process philosophy by emphasizing "strategic corporate processes for success". Now in our current Internet driven world, I do think we need to bring that powerful process message back again.

Incidentally, this is the value of a STEM education, for nowhere else in the national educational curriculum does the message about process get told and practiced, certainly not in the traditional academic curriculum which stubbornly emphasizes content---with the result that students struggle to "apply" what they have learned. STEM holds a clear advantage for students going into technical fields. Employers want STEM educated applicants for their workforce. By the way, Edison is the great, grand-daddy of STEM! His long-established process for converting raw ideas to products for sale is what STEM teachers refer to today as the "engineering design process".

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)
2023 IEEE NORTH JERSEY SECTION STUDENT PRESENTATION COMPETITION

Undergraduate and Graduate students must be enrolled full time in a program of electrical engineering study at an educational institution located in the IEEE North Jersey Section of Region 1. A brief abstract must be submitted to M. Lewis (mlewis@fdu.edu) before 14 March, 2023. Participating students must be members of the IEEE or have their IEEE application pending. There will be separate first, second, and third place winners for Undergraduate and Graduate categories. No equipment demonstration or formal technical paper is required, this is a presentation competition. Judging of the presentation will be based on its organization of content, oral presentation, knowledge of the material, and clarity / legibility of images, charts, graphs, and text where applicable.

All entries must report on the student’s own research or original circuit design/build/test. No team projects or research. No multiple presenters per entry. Topic may be describing either ongoing or completed work. Only one entry per student.

- Date: 21 Mar 2023, Time: 06:30 PM to 09:30 PM
- FDU, Muscarelle Center M105, 1000 River Rd. North Parking Lot, Teaneck, NJ 07666, Date: 21 Mar 2023

Calendar of Events

Events for the month of March 2023

<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th>Hosts</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEEE North Jersey Section EXCOM - Meeting 6:30 PM: North Jersey Section</td>
<td>01 Mar 2023</td>
<td>R10327 - North Jersey Section</td>
<td>Teaneck, New Jersey</td>
</tr>
<tr>
<td>Women in Electrical and Computer Engineering (Wie): North Jersey Section Jt Chapter, CAS04/ED15</td>
<td>07 Mar 2023</td>
<td>CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH01178 - North Jersey Section Chapter, PHO36, WE10327 - North Jersey Section Affinity Group, WIE</td>
<td>Newark, New Jersey</td>
</tr>
<tr>
<td>Towards Low-Power and Internet-Scale Mixed Reality: North Jersey Section Chapter, C16</td>
<td>09 Mar 2023</td>
<td>CH01177 - North Jersey Section Chapter, C16</td>
<td>Newark, New Jersey</td>
</tr>
<tr>
<td>Lead Generation for Consultants: North Jersey Section Affinity Group, CN</td>
<td>16 Mar 2023</td>
<td>CN10327 - North Jersey Section Affinity Group, CN</td>
<td>Virtual</td>
</tr>
<tr>
<td>2023 IEEE North Jersey Section Student Presentation Competition: North Jersey Section</td>
<td>21 Mar 2023</td>
<td>R10327 - North Jersey Section, STB00591 - Fairleigh Dickinson University</td>
<td>Teaneck, New Jersey</td>
</tr>
<tr>
<td>A Simulation Perspective: Cross-Coupling Effects analysis of devices for advanced technological nodes: North Jersey Section Jt Chapter, CAS04/ED15</td>
<td>22 Mar 2023</td>
<td>CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01092 - North Jersey Section Jt Chapter, AP03/MTT17, CH011258 - North Jersey Section Chapter, TEM14</td>
<td>Newark, New Jersey</td>
</tr>
<tr>
<td>Event</td>
<td>Date</td>
<td>Time</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Innovation Day at Nokia Bell Labs: North Jersey Section</td>
<td>25 Mar</td>
<td>08:00 AM</td>
<td>New Providence, New Jersey</td>
</tr>
<tr>
<td>Terra North Jersey STEM Fair - IEEE Young Engineer Award: North Jersey</td>
<td>25 Mar</td>
<td>09:00 AM</td>
<td>Union, New Jersey</td>
</tr>
<tr>
<td>2023 IEEE Metropolitan AI Medicine Symposium (IEEE MAIMS-2023): North</td>
<td>25 Mar</td>
<td>08:00 AM</td>
<td>Hoboken, New Jersey</td>
</tr>
<tr>
<td>Jersey Section</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Channel Speech Enhancement: From Wiener Filtering to Neural</td>
<td>29 Mar</td>
<td>12:00 PM</td>
<td>North Jersey Section Chapter, SP01, C16</td>
</tr>
<tr>
<td>Networks: North Jersey Section Chapter, SP01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023 IEEE Stevens Undergraduate and Graduate AI Workshop (IEEE SUGAIW-</td>
<td>06 May</td>
<td>09:00 AM</td>
<td>Hoboken, New Jersey</td>
</tr>
<tr>
<td>2023) : North Jersey Section</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023 IEEE North Jersey Section Awards Banquet : North Jersey Section</td>
<td>07 May</td>
<td>03:00 PM</td>
<td>Whippany, New Jersey</td>
</tr>
<tr>
<td>Distributed beamforming aided wireless energy transfer : North Jersey</td>
<td>12 Jun</td>
<td>06:00 PM</td>
<td>Newark, New Jersey</td>
</tr>
<tr>
<td>Section Jt Chapter, AP03/MTT17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Past Month’s Events: The month of February 2023

<table>
<thead>
<tr>
<th>Title</th>
<th>Date/Time</th>
<th>Hosts</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEEE North Jersey Section EXCOM - Meeting 6:30 PM: North Jersey Section</td>
<td>01 Feb 2023 06:30 PM</td>
<td>R10327 - North Jersey Section</td>
<td>Teaneck, New Jersey</td>
</tr>
<tr>
<td>International Women in STEM Day at Crestron: North Jersey Section</td>
<td>10 Feb 2023 03:00 PM</td>
<td>R10327 - North Jersey Section</td>
<td>Rockleigh, New Jersey</td>
</tr>
<tr>
<td>Developing optical elastography techniques for intraoperative breast</td>
<td>13 Feb 2023 04:30 PM</td>
<td>CH01184 - North Jersey Section Jt Chapter, CAS04/ED15, CH01092 - North Jersey Section Jt Chapter, AP03/MMIT17, CH01178 - North Jersey Section Chapter, PHO36, CH01081 - North Jersey Section, EMB18</td>
<td>Newark, New Jersey</td>
</tr>
<tr>
<td>cancer detection: North Jersey Section Jt Chapter, CAS04/ED15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF Design for Sustainability: North Jersey Section Jt Chapter, AP03/MMIT17</td>
<td>14 Feb 2023 12:00 PM</td>
<td>CH01092 - North Jersey Section Jt Chapter, AP03/MMIT17, CH01178 - North Jersey Section Chapter, PHO36, CH01184 - North Jersey Section Jt Chapter, CAS04/MMIT15, SIGHT177 - North Jersey Section SIGHT</td>
<td>Virtual</td>
</tr>
<tr>
<td>Communications and Networking in LEO Mega-Constellations: North</td>
<td>16 Feb 2023 07:30 PM</td>
<td>CN10327 - North Jersey Section Affinity Group, CN</td>
<td>Virtual</td>
</tr>
<tr>
<td>Jersey Section Affinity Group, CN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Member and Student Membership drive: North Jersey Section</td>
<td>23 Feb 2023 06:30 PM</td>
<td>R10327 - North Jersey Section</td>
<td>Teaneck, New Jersey</td>
</tr>
<tr>
<td>Lead Generation for Consultants: North Jersey Section Affinity Group,</td>
<td>16 Mar 2023 06:30 PM</td>
<td>CN10327 - North Jersey Section Affinity Group, CN</td>
<td>Virtual</td>
</tr>
<tr>
<td>CN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Day at Nokia Bell Labs: North Jersey Section</td>
<td>25 Mar 2023 08:00 AM</td>
<td>R10327 - North Jersey Section</td>
<td>New Providence, New Jersey</td>
</tr>
<tr>
<td>Terra North Jersey STEM Fair - IEEE Young Engineer Award: North Jersey</td>
<td>25 Mar 2023 09:00 AM</td>
<td>R10327 - North Jersey Section</td>
<td>Union, New Jersey</td>
</tr>
<tr>
<td>Section</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023 IEEE Stevens Undergraduate and Graduate AI Workshop (IEEE SUGAIW-</td>
<td>06 May 2023 09:00 AM</td>
<td>R10327 - North Jersey Section, CH01081 - North Jersey Section, EMB18</td>
<td>Hoboken, New Jersey</td>
</tr>
<tr>
<td>2023): North Jersey Section</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

VOL.69, NO. 03

MARCH 2023
2023 IEEE North Jersey Section Volunteers

**Executive Committee**
Chair – Hong Zhao - zhao@fdu.edu
First Vice-Chair – Emad Farag
enfarag@ieee.org
Second Vice-Chair – Anisha Apte
anisha_apse@ieee.org
Secretory – Adriaan J. van Wijngaarden
avw@ieee.org
Treasurer – Avimanyou Vatsa
avasa@fdu.edu
Member-at-Large
Naresh Chand - chandra@synergywave.com
Har Dayal – dayalhar@gmail.com
Alfredo Tan – tan@fdu.edu
Junior Past Chair – Ajay K. Poddar
akpoddar@synergywave.com
Senior Past Chair – Yu-Dong Yao
Yu-Dong.Yao@stevens.edu

**Society Chapters**
Aerospace Electronic Systems
Chair – Cherif Chibane
cherif.chibane@gmail.com
Vice-Chair – Kirit Dixit - kdixit@ieee.org

Antennas and Propagation / Microwave Theory and Techniques
Co-Chairs
Ajay Poddar akpoddar@synergywave.com
Edip Niver niver@adm.njit.edu
Vice-Chair – Anisha Apte
anisha_apse@ieee.org

Circuits and Systems / Electron Devices
Chair – Durga Misra dmsra@njit.edu
Vice Chair - Shaahin Angizi
shaahin.angizi@njit.edu

Communications
Chair – Amit Patel - a.j.patel@ieee.org

Computer
Chair – Hong Zhao - zhao@fdu.edu
Vice Chair -Tao Han - tao.han@njit.edu

Computational Intelligence Society
Chair: Prasenjit Bharda - prasenjit@ieee.org
Vice-Chair: Ratna Raj - ratna.raj@njit.edu

Control Systems
Chair – Marcos Neto
marcos.neto@njit.edu

Electromagnetic Compatibility / Product Safety Engineering
Chair – Russell C. Pepe - rcppepe@ieee.org

Engineering in Medicine and Biology
Chair – Yu-Dong Yao - Yu-Dong.Yao@stevens.edu

Industrial Applications
Chair – Ken Oexle - k.oexle@ieee.org

Information Theory
Chair – Adriaan J. van Wijngaarden
avw@ieee.org

Instrumentation & Measurement
Chair – Russell C. Pepe - rcppepe@ieee.org

Photronics
Chair – Naresh Chand
chandra@ece.njit.edu

Power & Energy
Co-Chairs
Ronald W. Quade wquade@ieee.org
Michael Miller michaelamiller8@gmail.com

Robotics & Automation
Chair - Naresh Chand
chandra@ece.njit.edu
Vice Chair - Shilpi Chakraborty
shilpi@ieee.org

Signal Processing
Chair – Alfredo Tan - tan@fdu.edu

Social Implications of Technology
Chair – Kirit Dixit - kdixit@ieee.org

Systems, Man, and Cybernetics
Chair – Mengchu Zhou zhong@njj.com

Technology & Engineering Management
Chair – Kirit Dixit - kdixit@ieee.org

Vehicular Technology
Chair – Ionel Bajescu nelu108@yahoo.com

Affinity Groups and Councils
Consultants Network
Co-Chairs
Jim Julian consultant@jimjulian.com
Jay Morreale p-brane@p-brane.com

Young Professionals
Chair – Larry Yang - larry.yang@alcatel-lucent.com
Vice Chair - Pattern Bheeley
Patrick.Beesley@se.com

Women in Engineering
Co-Chairs
Chitra Venkatraman chitrav55@gmail.com
Reena Duble reena.duble@njit.edu
Ratna Raj (ratna.raj@njj.com)

LIFE Members
Co-Chairs
Ken Oexle - k.oexle@ieee.org
Michael Miller - michaelamiller8@gmail.com

Nanotechnology Council
Chair - Eui-Hyeok Yang - ehyang@ieee.org

North Jersey SIGHT Group
Co-Chairs
Anisha Apte - anisha_apse@ieee.org
Dushyant Deshmukh
pranavdush@gmail.com

Committees
Audit Committee
Co-Chairs
Ajay Poddar - akpoddar@ieee.org
Kalyan Mondal - mondal@fdu.edu
Mani Iyer - mani.ayer@ieee.org

Awards & Recognitions
Co-Chairs
Ken Oexle - k.oexle@ieee.org
Adrian J. van Wijngaarden avw@ieee.org

Educational Activities
Co-Chairs
Donald Hsu – yanyou@hotmail.com
Kalyan Mondal – mondal@fdu.edu
Amit Patel – a.j.patel@ieee.org

Employment Network
Co-Chairs
Chitra Venkatraman chitrav55@gmail.com
Naresh Chand chandra@gmail.com

Government and Industrial Liaisons
Co-Chairs
Art Greenberg a.h.greenberg@ieee.org
Russell C. Pepe rcppepe@ieee.org

Group coordinator / History
Chair – Howard Leach - h.leach@ieee.org

Legal Activities
Chair – Vacant

Membership Development
Chair – Michael Newell - mnewell@ieee.org

MTT/AP Trade Show and Symposium
Chair – Kirit Dixit - kdixit@ieee.org
Vice-Chair – Har Dayal - dayalhar@gmail.com

TPC Co-Chair – George Kennedy
gck@lgsinnovations.com

TPC Co-Chair – Ajay Poddar
akpoddar@ieee.org

Newsletter
Chair – Anisha Apte anisha_apse@ieee.org

Nominations and Appointments
Ajay Poddar - akpoddar@fdu.edu
Kalyan Mondal - mondal@fdu.edu
Durga Misra - dmsra@njj.com

PACE
Chair – Russell C. Pepe - rcppepe@ieee.org
Co-Chair – Paul E. Ward
peward@ieee.org

Pre-University Activities
Co-Chair – Chitra Venkatraman
chitrav55@gmail.com

Program Review Committee
Kirit Dixit - kdixit@ieee.org
Ajay Poddar - akpoddar@fdu.edu
Emad Farag - enfarag@ieee.org

Student Activities
Chair - Kalyan Mondal  mondal@fdu.edu

Webmaster
Co-Chairs
Adriaan J. van Wijngaarden - avw@ieee.org
Avimanyou Vatsa - avatsa@fdu.edu