

THE IEEE NORTH JERSEY SECTION NEWSLETTER

VOL. 68, NO. 4 APRIL 2022

Message from the IEEE North Jersey Section Chair Dr. Ajay Poddar

to ast

As April is entering, spring is endeavoring to spectacle its appearance in North Jersey East

Coast, and the excitement of in-person events is gaining momentum. I welcome you all in the spring of 2022, with this April newsletter. As we continue to pace into 2022, we are looking forward to a very active year. Our chapter officers, volunteers and student branches are busy planning various inperson as well as hybrid events in the coming months, while many successful events have taken place as well.

The Nokia Bell Labs New Jersey Regional Science Fair (NJRSF): (https://njrsf.org/)

The NJRSF is a high school student science competition in which students, individually or in groups, present a wide variety of projects. While accepting projects from ten counties in Northern New Jersey, Nokia Bell Labs NJRSF is here to support, encourage, and recognize student involvement in scientific research. Students are provided the necessary resources and also presented with various opportunities to interact with professional scientists and engineers. This endeavor has been receiving an overwhelming response and is continuing to make strides even through the virtual platform in the current pandemic situation.



Figure 1: From Top left – Student presenter, Judges panel Adriaan van Wijngaarden, Chitra Venkatraman, Jay Morreale, Anisha Apte, Craig Polk and Henry Moher

NJRSF IEEE NJ Young Engineer Award:: IEEE North Jersey Section sponsors awards to two projects in Engineering, Math, Physics and Biomedical Engineering that demonstrate the use of sound engineering principles. The IEEE NJ Section Young Engineer Award consists of \$250 cash and a certificate of achievement. This year due to the overwhelming response,

the IEEE North Jersey Section gave away three IEEE NJ Young Engineer Awards.

The panel of judges were sent the project descriptions and presentation slides, and out of 80 plus projects, a set of 11 projects were shortlisted to go for the final round and presented to the judges' panels. The presentations, followed by a Q/A session were held on March 24th, via the Gathertown platform. It was very satisfying to see the young generation pursuing STEM related studies and exploring the various scientific problems currently coming up in our societies and are working towards finding viable solutions to mitigate these problems.

The three awardees were:

- (EN05) Nathanael Gunawan: Novel Magnetic levitation train using triple-dipole-line track system
- (EN07) Samhita Pokkunuri: Real-Time 3D Human Tracking and Pose Construction Using Millimeter-Wave Radar System
- (BE06) Yuxuan Tian: Design of oxygen-carrying autonomous following vehicle for pulmonary rehabilitation

It was indeed a tough job for the judging team, consisting of Adriaan Wijngaarden, Chitra Venkatraman, Jay Morreale, Craig Polk, Henry Moher, Anisha Apte and Prasenjit Bhadra, to make the selections, as it was quite apparent that all the students had put in big efforts and were very enthusiastic and interested in the fields that they had chosen to address.

The award ceremony was held online on March 26th.

Hudson County's STEM Showcase 2022:

Another event promoting STEM education where our section is actively involved in the judging process is the Hudson County's STEM Showcase 2022. Following a rewarding experience of sponsoring the young engineer awards at the North Jersey Regional Science Fair in 2020 and 2021, Pre-University committee decided to sponsor awards for students with top two engineering projects at the Jersey City Medical center/ RWJ Barnabas Health STEM Showcase. Unlike the NJRSF where the students from a number of northern NJ counties participate, only students from the Hudson County schools participate at the STEM showcase.

Adriaan van Wijngaarden, Craig Polk, Henry Moher, Chitra Venkatraman and Jay Morreale served on the judging panel.

The following two projects were selected to receive the IEEE North Jersey Engineering Project Awards:

• Measuring Blood Alcohol Concentration with Near-Infrared Spectroscopy by Arnav Ambre

• Using the Seebeck Effect and body heat to harvest electricity in coats by Thanhloan Tran

Each winner will receive a \$100 check and a certificate from the North Jersey Section at our 2022 Banquet to be held in May 2022.

We hope to continue to sponsor these awards going forward.

IEEE North Jersey Section AP-S COPE Project

The STEM program for the Girls Scouts in New Jersey was a huge success. It gained momentum with the STEM video posted by Craig Polk on LinkedIn, which can be found here: https://www.linkedin.com/posts/craigpolk_stem-story-craigpolk-activity-6877336232746065920-NAO0.

After 2 years of virtual events, it was amazing how preuniversity committees of IEEE North Jersey Section along with partner Phillips 66 brought together Girl Scouts Heart of New Jersey for an in-person hands-on NJ Makers Day STEM event. Creating astonishing projects in electrical, computer, mechanical, and chemical fields had many scouts saying "this is so much better than Zoom!". Depicted in Figure 2. Craig Polk and his team were able to support all 8 stations, 6 from IEEE + IEEE friend's volunteers (15 in total) as well as 2 Phillips 66 stations. There were close to 100 registrations for the event.



Figure 2: Shows the photo of New Jersey Girls Scout NJ Makers STEM Day event with partner Phillips 66 held on Saturday, March 26, 2022 in Linden, NJ.

2022 IEEE RADAR Conference, NY, March 21-25

For the first time, New York City (NYC) hosted the annual IEEE Radar Conference. The event took place during March 21-25, 2022, in Times Square. Figure (3) shows the photo of IEEE North Jersey Section AP-S Booth at Exhibit area at 2022 IEEE RADAR Conference, NY. The conference was a well-attended in-person event. Dr. Poddar, Chair IEEE AP-S Chapter Activity Committee, distributed the promotional gifts (T-shirt, Tie, Cap, and Face Mask) to attendees.



Figure 3: Shows the photo of IEEE North Jersey section AP-S Booth at Exhibit area at 2022 IEEE RADAR Conference, NY

IEEE North Jersey Section SIGHT Project Activities at RADAR Conference, NY, March 21-25

Karen Galuchie, Chair IEEE Foundation and Dr. Ajay Poddar, Chair of IEEE North Jersey Section, discussed SIGHT activities as seen in Figure 4, at NJ Section AP-S SIGHT booth at the RADAR Conference, NY, March 21-25.



Figure 4: shows the photo of Karen Galuchie, Chair IEEE Foundation and Dr. Ajay Poddar, Chair of IEEE North Jersey Section, discussing at NJ Section AP-S SIGHT booth at RADAR Conference, NY, March 21-25.

FDU (Fairleigh Dickinson University) Scholarship Luncheon Unites Donors, Students, March 24, 2022

For the first time in over two years, more than 100 scholarship recipients and donors gathered to enjoy a meal together at Fairleigh Dickinson University's Scholarship Luncheon, which was held on March 24 in Lenfell Hall on the University's Florham Campus. The goal of the event is to bring together the University's generous alumni and friends who make gifts to support student scholarships and the ambitious and determined students who benefit from that support. Dr. Ajay Poddar, Chair of IEEE North Jersey Section, interacted with the students and shared the importance of IEEE membership for the professional networking and career growth. Dr. Poddar discussed about IEEE STEM initiative, IEEE SIGHT and IEEE AP-S COPE projects for the benefit of underserved community. Students are encouraged to apply for the "Divyansh Atman Poddar Student Scholarship/Project Award".



Figure 5: Scholarship Luncheon Unites Donors, Students March 24 2022 (scholarship luncheon story (fdu.edu), Dr. Ajay Poddar, Chair of IEEE North Jersey Section, standing in the left, represented as a donor of "Ajay Kumar Poddar Endowed - Divyansh Atman Poddar Student Scholarship/Project Award"

IEEE JCAME STEAM (Science, Technology, Engineering, Arts and Mathematics) project Activities Feb 25, 2022

IEEE North Jersey, USA and Pune Section, India, cosponsored inter-section activities, some of the activities taken up as part of the collaboration:

- Cultural programs, involving school and college students showcasing ancient art and tradition and their relevance today (how the sixteen ways of ornaments ladies wore in olden times enhanced their beauty and its relationship to modern fashion world, how lovers communicated in ancient Indian classics before dawn of modern technology, etc.)
- Talks / Demo programs by experts on diverse topics such as art and science of musical instruments, coin collection, mind mapping, Data Science and its relationship to ancient Indian Epics
- Activity based learning where school children were given an opportunity to handle and work on some of the old gadgets specific to Indian tradition available in the museum, such as the potter's wheel, traditional Indian kitchenware (locally called Bhatukali) etc.

Recently, groups of Pune engineering college students have started working on development of games involving the artefacts in the museum. The objective is to develop a comprehensive and holistic view of project development from design to deployment to marketing. Figure (6) shows the photo taken inside of the museum on Feb 25, 2022.

The teams include students from engineering, fine arts and design disciplines, working under the guidance of Game experts from Tata R&D Center, RKDM, MIT Design College and IEEE members. Though still in development stage, the work has been greatly appreciated by Vice-chancellor of Pune University, IEEE AP-S volunteers and local communities. On February, 25, 2022, Dr. Ajay Poddar, Global Chair of IEEE AP-S CAC and Prof. GS Mani, Chair IEEE JCAME Pune Section visited a small portion of the museum (other parts were closed due to maintenance activity), when one of the science game activities was demonstrated by Ms. Akanksha, a design undergrad student. Dr. Poddar had interactive discussions with Mrs. Sanjeevani Joglekar and Mrs. Ranade, who work in close association with the museum for engaging high school students.



Figure 6: Photo shows the demonstration student Game project. From left, Mrs. Sanjeevani Joglekar, Mrs. Ranade, Ms. Akanksha, Dr. Ajay Poddar, and Prof. GS Mani, venue Raja Dinkar Kelkar Museum, Feb 25, 2022

IEEE North Jersey Section & Pune Section joint collaboration Workshop Event March 02, 2022

Defense Institute of Advanced Technology (DIAT) is a premier institute located at Pune offering postgraduate courses in Defense related technologies. Dr. Ajay Poddar, Global Chair of the IEEE AP-S Chapter Activity Committee (CAC), Ex-Officio members of AP-S AdCom, and Chair of IEEE Humanitarian Activity Committee (HAC) Inter-Society Working Group, addressed to research scholars and faculty staff working in Antenna and wireless communication related technologies at DIAT, and many of them are members of IEEE AP-S. Dr. Poddar interacted with students and faculty members, explained the benefits of IEEE, a broader objective and goal towards "advancing technology for humanity". Dr. Poddar offered help and support to student members for AP-S Chapter related activities that can help STEM education and COPE Projects for the benefit of local members and community.

Dr. Ajay Poddar, Chief Scientist, Synergy Microwave, New Jersey and Prof. GS Mani, Chair, JCAME interacted and engaged students and motivated them for humanitarian project activities and also to build a personal relationship with industrial managements and local community for achieving a sustainable development goal. In addition to this, professional aspects related to their personal aspirations, how IEEE could help them in their career, and how they could contribute to society by participating in IEEE events was discussed in a broader sense.

Prof. GS Mani and Dr. Ajay Poddar also discussed with Dr. CP Ramnarayan, Vice-chancellor, DIAT and other staff members about possible collaborative activities between DIAT, IEEE AP-S, IEEE AP-S COPE, IEEE AP-S SIGHT, IEEE HAC and IEEE North Jersey Section, also the possibilities of establishing an AP-S student chapter at DIAT. It was agreed that an international workshop could be held at DIAT campus in the later part of 2022. In the afternoon on March 02, 2022, Dr. Poddar gave an invited talk on 'Critical Challenges: Calling for Humanitarian Technology Innovations" and Prof Mani on 'Electronic Warfare - From Rhine to Ukraine', Figure (7) shows the workshop held at DIAT. Both talks were well attended. Dr.

CP Ramnarayan, Vice-chancellor, DIAT, felicitated the speakers.



Figure 7: shows the workshop held at DIAT, March 02, 2022. From left first row sitting: Dr. KP Ray, Director, DIAT Pune, Prof. GS Mani, Chair IEEE JCAME Pune Section, Dr. CP Ramnarayan, Vice-Chancellor, DIAT Pune, and Dr. Ing. Habil Ajay Poddar, Chair IEEE AP-S CAC and Chief Scientist, Synergy Microwave, NJ, USA

IEEE Pune and North Jersey Inter-Section Joint Collaboration Activities, March 05, 2022

A meeting was held on March, 5, 2022 to explore possible ways in which IEEE North Jersey and Pune section can collaborate, focusing on AP-S SIGHT, AP-S COPE and Technical Events. Later, a core group meeting was held on March, 11, 2022 to focus on specific projects, including formation of new AP-S Student Branch Chapters and Senior Membership Drives.

The meeting on March 5th also coincided with executive committee (ExCom) meeting of IEEE Pune section for the month of March 2022, shown in Figure (8). It was also arranged as a social gathering event for all members to get together at Garudmanchi Management Training Centre (GMTC) about 90 Kms from Pune city. Total 30 members attended the program. Some members stayed back for a second day and celebrated 'Keep Fit Day' at the venue. Mr. Girish Khilari, Chair of IEEE Pune Section gave an overview of the activities of Pune Section, highlighted the growth of the Pune section when it was a subsection under Bombay section and hardly had about 20-25 members. Now Pune Section has 1500 members. Dr. Ajay Poddar, Chair of IEEE North Jersey Section, shared details of the North Jersey Section along with its major sphere of activities. In the afternoon session, various section chairs gave a brief account of their activities. Mr. Pushkaraj Apte, GMTC, talked about 'Experiential Learning techniques' and also took members around various facilities in the GMTC campus. Later, the core group met on March, 11th and decided to follow up on the following activities: (i) Exchange of student / professional members between the two sections, (ii) Education-based activities with emphasis on Pre-University activities, (iii) Activities related to Disaster management, (iv) Formation of AP-S Student Branch Chapters, (v) Support related to IEEE Fellow Elevation Nomination Process, (vi) Senior Membership Drives, (vii) HAM Radio Station, (viii) SIGHT and COPE **Projects**



Figure 8: Photo shows from left front row, Prof. GS Mani, Chair IEEE JCAME Pune, Dr. Ajay Poddar, Chair IEEE North Jersey Section, Mr. Girish Khilari, Chair IEEE Pune Section, Dr. Neha Sharma, Secretary IEEE Pune Section, and Dr. Dinanath Kholkar, Past Chair IEEE Pune Section

IEEE Inter-Section (North Jersey and Pune Section) Events: Visit to Giant Meterwave Radio Telescope (GMRT) with Global Chair IEEE AP-S CAC, March 7, 2022

About 30 members of Joint Chapter of AP, MTT and EMC (JCAME), Pune Section visited GMRT Giant Meterwave Radio Telescope (GMRT), Junnar, and Narayangaon, near Pune on March 7, 2022. The IEEE Members and researchers working on Antenna related technologies were accompanied by Prof GS Mani, and Dr. KP Ray, Chair and Co-Chair, JCAME respectively. Dr. Ajay Poddar, Chair IEEE AP-S CAC from New Jersey, interacted with the attendees and suggested to hold workshop at GMRT in the 4th quarter of 2022.

Located 90 KMs, west of Pune, GMRT is a state-of-the-Art facility developed by Indian Scientists and Engineers for radio astronomical research. The facility has 30 fully steerable gigantic 45-meter diameter parabolic dish antennas which are spread over a distance of up to 25Km, shown in Figure (9).



Figure 9: Photo shows the attendees standing in front of Giant Meterwave Radio Telescope, GMRT Pune, March 07, 2022

They operate in in different bands in the frequency range 125 MHz – 1460 MHz. The complete facility has been upgraded recently with better quality receivers, and fiber optic links with a usable instantaneous bandwidth of 400 MHz. Scientists from all over the world make use of this facility for investigating a variety of radio astrophysical problems ranging from nearby Solar system to the edge of observable Universe. GMRT was awarded the IEEE Milestone award for its novel engineering, advanced technology and scientific contributions made in the field of Radio Astronomy. IEEE Members were able to visit various labs including Antenna, Frontend LNA, Fiber optic, feed positioning, signal processing, control system labs and also the Faraday cage. After visiting the various labs, they also paid homage to Dr. Govind Swarup; (1929-2020) the father of Radio astronomy in India and the chief architect of GMRT, Fig. (10) depict the photo taken at Govind Swarup Hall, March 07, 2022.



Figure 10: Photo shows from left, Dr. KP Ray, Vice-Chair IEEE JCAME Pune, Prof. GS Mani, Chair IEEE JCAME Pune, Dr. Ajay Poddar, Chair IEEE AP-S CAC, and Mr. Suresh Kumar, at Govind Swarup Hall, March 07, 2022

IEEE Inter-Section (North Jersey and Pune Section) Events: Visit to National Center for Radio Astrophysics (NCRA), March 11, 2022

The National Center for Radio Astrophysics (NCRA) is a leading research institution located in Pune and forms a part of Tata Institute of Fundamental Research (TIFR) in India. A meeting was arranged on March 11, 2022 in the board room of NCRA to discuss possible areas of coordinated activities between IEEE Pune Section, IEEE North Jersey Section and NCRA. The meeting was attended by Dr. Yashwant Gupta, Director, NCRA, Mr. Girish Khilari, Chairman, IEEE Pune Section, Dr. Ajay Poddar, Chair, IEEE New Jersey North Section and others. Some researchers of Giant Meterwave Radio Telescope (GMRT) joined through video link. Some of the areas identified for working together included:

• Digital Farming: Extending digital technology to farmers of the area; It was decided to arrange a meeting with leading farmers of the region shortly in this connection

- Extending Measurement facilities to colleges: Possibilities of extending RF and signal processing measurement facilities available at Research laboratories to colleges through remote fiber optic terminals
- Popularizing Science and Technology: Arranging S &T Fairs jointly by IEEE and NCRA could be planned to coincide with National Technology Day / any other suitable occasion
- Visit to GMRT facilities: In order to expose college students to indigenous technologies, frequent visits of college students to GMRT facility could be arranged

The meeting was adjourned after thanking Director NCRA and other scientists at NCRA.



Figure 11: Photo shows the meeting conducted at NCRA, Pune March 11, 2022. From left, Dr. Dinanath Kholkar, past-Chair IEEE Pune Section, Dr. KP Ray, Vice-Chair IEEE JCAME Pune Section, Dr. J.K. Solanki, NCRA Pune, Dr. Ajay Poddar, Chair IEEE AP-S CAC, Dr. Yashwant Gupta, Director NCRA Pune, Prof. GS Mani, Chair IEEE JCAME Pune Section, Dr. Neha Sharma, Secretary, IEEE Pune Section, Dr. Preeti Ramdasi, IEEE Pune Section ExCom Member, Mr. Girish Khilari, Chair IEEE Pune Section. The background screen shows the scientists of GMRT joined through video link, venue NCRA, Pune.

IEEE Entrepreneurship Workshop April 15-19h 2022

Vaughn College, East Elmhurst, Queens, NY, USA

IEEE Entrepreneurship, in partnership with **Vaughn College of Aeronautics and Technology** (Queens, NY), plans to conduct an on-site 5-day entrepreneurship workshop for enthusiastic college-level STEM students during 15-19 June 2022. The workshop theme is to create innovative technology solutions that can convert into business cases while addressing the Sustainable Development Goals (SDGs). The emphasis will be on innovative technical solutions and business models to ensure access to all potential market segments.

It is free to all the participants selected. Here is the link to the newsletter article and application form

https://entrepreneurship.ieee.org/2022_06_13_vaughn_college _workshop/

IEEE AP-S Ulrich L. Rohde Humanitarian Project Award Call for Proposal

IEEE AP-S SIGHT are currently offering a **special Call for Proposals to support AP-S Chapter projects** that utilize AP-S-relevant technology to address local community challenges.
The Call is open through 15 June 2022. Ulrich L. Rohde Humanitarian Project Awards of up to US\$10,000 will be made to selected projects on pressing issues challenging an

underserved community. For detail information, contact Dr. Anisha Apte (anisha_apte@ieee.org), member AP-S SIGHT and elected IEEE AP-S AdCom member, 2022-2024.

Our section will continue to support STEM activities and promote DEI and address humanitarian cause within the boundaries of the IEEE. I would like to encourage everyone to

find more opportunities to volunteer and contribute towards a worthy cause and benefit of the members and our community. I wish all the members good health and a productive time ahead. IEEE North Jersey Section Chair Ajay Poddar

IEEE – IMPORTANT EVENTS, ARTICLES, ANNOUNCEMENTS AND REMINDERS:



- This Month's Communications Society News from Around the World
- "Atomic Boilers" An article by Harry Roman for the April Newsletter

Atomic Boilers

A decade after the use of atomic bombs, world leaders were anxious to show how atomic energy could be used for peaceful purposes. One such application developed by scientists and engineers involved something called the "atomic boiler".

It was to be a small nuclear reactor, with enough fuel to run for 6 years, occupying a space the size of 1-2 large storage batteries. It would be turned on at its manufacturing point and installed in homes to provide space heating, hot water and air conditioning --- what we would call today, a triple appliance. After its allotted run time of 6 years, the unit would be replaced by a new one. Clearly, this vision of atomic power was one of distributed generation, probably the first case of it in the literature. No energy storage, just plentiful energy on demand as needed.

Presumably, the atomic boiler would be "sunk" into the basement of a home and kept away from all other things, especially humans, treated like a special kind of "fire", like one would find in a boiler/furnace or water heater, only more intense. I wonder how this would have affected the impact of burning fossil fuels in the home [i.e., coal, oil, or natural gas; and the resulting air pollution]. One can even

envision reactors made to operate on nuclear waste byproducts [from recycling of spent nuclear fuels] to get the most out of domestic nuclear resources.

Electricity was generated for the first time by a nuclear reactor on December 20, 1951, at the EBR-I experimental station near Arco, Idaho, which initially produced about 100 kW. In 1953, American President Dwight Eisenhower gave his "Atoms for Peace" speech at the United Nations, emphasizing the need to develop "peaceful" uses of nuclear power quickly. This was followed by the Atomic Energy Act of 1954 which allowed rapid declassification of U.S. reactor technology and encouraged development by the private sector. From my research into atomic boilers, this concept seems to have been popular around 1955.

Talk to you again soon...

Harry

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

Calendar of Events

Current Events – April 2022 Events

Date & Time	Title
01 Apr 2022 09:00 AM To 11:00 AM	Cybersecurity For Industrial Control Systems - SEL: North Jersey Section Chapter, PE31 (PES/ IAS/ LM Joint Meeting) North Jersey/Prin-Ctr Jersey Jt Sections, Chapter, IA34, North Jersey Section Affinity Group, LM
	Location: Required For Joining: Virtual Event Link Contact: Ronald Quade (rwquade@ieee.org) Speaker: Tom Bartman of Cybersecurity
06 Apr 2022 06:00 PM To 08:30 PM	IEEE North Jersey Section - EXCOM - Zoom Meeting 6:00 PM: North Jersey Section - North Jersey Section
	Location: Required - vTools Registration Link Virtual Event: Zoom Meeting Link Contact: Adriaan van Wijngaarden (avw@ieee.org)
13 Apr 2022 12:00 PM To 01:00 PM	Input Intelligence on Mobile Devices: North Jersey Section Chapter, C16, SP01
	Location: Required - vTools Registration Link Virtual Event: Zoom Meeting Link Contact: Hong Zhao (zhao@fdu.edu), Alfredo Tan (tan@fdu.edu) Speaker: Dr. Jerome R. Bellegarda of Apple Inc.
23 Apr 2022 01:00 PM To 02:30 PM	Recent Advances in Motion Control of Underwater Vehicles for Inspection Applications: North Jersey Section Chapter, AES10, COM 19
	Location: Required - vTools Registration Link Virtual Event (Email host for Joining Link) Contact: Cherif Chibane (cherif.chibane@ieee.org) Speaker: Dr. Ahmed Chemori of LIRMM
01 May 2022 03:00 PM To 06:00 PM	2022 IEEE North Jersey Section Awards Banquet: North Jersey Section
	Location: Birchwood Manor, 111 North Jefferson Road, Whippany, NJ 07981 Contact: Ken Oexle (k.oexle@ieee.org), Adriaan J. van Wijngaarden (avw@ieee.org), Russell Pepe (russell.pepe@atm1.com), Har Dayal (dayalhar@gmail.com)
16 May 2022 07:00 PM To 08:00 PM	An Introduction to the IEEE 802 LAN/MAN Standards Committee: North Jersey Section Chapter, COM 19, C16, New York Section Chapter, COM19, C16
	Location: Required - vTools Registration Link Virtual Event: Zoom Meeting Link Contact: Amit Patel (a.j.patel@ieee.org), Hong Zhao (zhao@fdu.edu), Z. Peng (zpeng@ccny.cuny.edu) Speaker: Paul Nikolich, partner in YAS Broadband Ventures LLC.

Past Month's Events – March 2022 Events

Date and Time	Event - Details
10 Mar 2022 05:45 PM to 07:45 PM	Towards Energy-Efficient Domain-Specific In-Sensor and In-Memory Accelerators, From Device to Algorithm, North Jersey Section Jt Chapter, CAS04/ED15, AP03/MTT17
	Location: ECEC 202, NJIT, 154, Summit Street. Newark, NJ 07102 Required - vTools Registration Link Contact: Ajay Poddar (akpoddar@ieee.org), Durga Misra (dmisra@ieee.org), Edip Niver (edip.niver@njit.edu), Anisha Apte (anisha_apte@ieee.org)
	Speaker: Prof. Shaahin Angizi of New Jersey Institute of Technology
18 Mar 2022 09:00 AM To 11:30 AM	Fuel Cells - Bloom Energy: North Jersey Section Ch PES/IAS/LM Joint Meeting (PES/ IAS/ LM Joint Meeting) North Jersey/Prin-Ctr Jersey Jt Sections, Chapter, IA34, North Jersey Section Affinity Group, LM
	Location: Required vTools Registration For Joining: Virtual Event Link Contact: Ronald Quade (rwquade@ieee.org)
	Speaker: Marshall Tsien of Fuel Cell
23 Mar 2022 12:00 PM to 01:00 PM	Policy Optimization in Reinforcement Learning: A Tale of Preconditioning and Regularization: North Jersey Section Chapter, C16 CH01177 - North Jersey Section Chapter, C16, CH01091 - North Jersey Section Chapter, SP01, Teaneck, New Jersey
	Location: Zoom Meeting Link Meeting ID: 936 1200 9151, Required: vTools Registration Link 1000 River Road, Muscarelle Center, M105, Teaneck, NJ 07666
	Contact: Prof. Hong Zhao (zhao@fdu.edu), Prof. Alfredo Tan (tan@fdu.edu) Speaker: Dr. Yuejie Chi of ECE Department, Carnegie Mellon University
26 Mar 2022 09:00 AM to 12:00 PM	Big Data Market Research in Seven Saturdays via Zoom: North Jersey Section Jt Chapter, AP03/MTT17 CH01092 - North Jersey Section Jt Chapter, AP03/MTT17 Newark, New Jersey
	Location: Zoom OR NJIT, ECEC 202, 154, Summit Street. Newark, NJ 07102 (To be Decided) Required: vTools Registration Link
	Contact: Donald Hsu (yanyou@hotmail.com) Speaker/Instructor: Donald Hsu, Ph.D.
29 Mar 2022 07:00 PM to 08:15 PM	Integration of Terrestrial Networks and Extreme Environments: Challenges and Capabilities COM19
	Location: Required: vTools Registration Link
	Contact: Amit Patel (amitjpatel@netzero.net)
	Speaker: Mehdi Rahmati

2022 IEEE North Jersey Section Volunteers

Executive Committee

Chair – Ajay K. Poddar akpoddar@synergymwave.com

First Vice-Chair- Hong Zhao

zhao@fdu.edu

Second Vice-Chair – Emad Farag

enfarag@ieee.org

Secretary – Adriaan J. van Wijngaarden

avw@ieee.org

Treasurer - Avimanyou Vatsa

avatsa@fdu.edu

Member-at-Large

Har Dayal – dayalhar@gmail.com Kirit Dixit – kdixit@ieee.org

Anisha Apte - anisha_apte@ieee.org

Junior Past Chair – Yu-Dong Yao Yu-Dong.Yao@stevens.edu

Senior Past Chair - Kalyan Mondal

mondal@fdu.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-Chair – Ajay Poddar

akpoddar@synergymwave.com

Co-Chair -Edip Niver niver@adm.njit.edu

Co-Chair – Anisha Apte anisha_apte@ieee.org

Circuits and Systems/Electron Devices

Chair – Durga Misra dmisra@njit.edu

Communications Chair – Amit Patel

a.j.patel@ieee.org

Computer

Chair – Hanna (Hong) Zhao

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Computational Intelligence Society

Chair: Prasenjit Bhadra prasenjit@ieee.org Control Systems Chair – David Haessig davidhaessig@ieee.org

Electromagnetic Compatibility/Product

Safety Engineering
Chair – Russell C. Pepe rcpepe@ieee.org

Engineering in Medicine and Biology Chair – Har Dayal dayalhar@gmail.com

Industrial Applications
Chair – Ken Oexle
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Information Theory

Chair - Adriaan J. van Wijngaarden

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Instrumentation & Measurement

Chair – Russell C. Pepe rcpepe@ieee.org

Photonics

Chair – Naresh Chand chandnaresh@gmail.com

Power & Energy

Co-Chair - Ronald W. Quade

rwquade@ieee.org

Co-Chair – Michael Miller michaelamiller8@gmail.com

Robotics & Automation

Chair - Naresh Chand chandnaresh@gmail.com

Vice Chair - Shilpi Chakraborty

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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

zhou@njit.edu

Technology & Engineering Management

Chair – Kirit Dixit kdixit@ieee.org Vehicular Technology

Chair - Ionel Bajescu nelu108@yahoo.com

Affinity Groups and Councils

Consultants Network
Co-Chair – Jim Julian
consultant@jimjulian.com
Co-Chair – Jay Morreale
p-brane@p-brane.com
Young Professionals
Chair – Larry Yang

Chair – Larry Yang larry.yang@alcatel-lucent.com

Women in Engineering

Co-Chair - Chitra Venkatraman

chitrav55@gmail.com **Co-Chair** – Reena Dahle reena.dahleh@gmail.com

LIFE Members

Co-Chair – Ken Oexle k.oexle@ieee.org

Co-Chair – Michael Miller michaelamiller8@gmail.com *Nanotechnology Council*

Chair - Eui-Hyeok Yang ehyang@ieee.org

North Jersey SIGHT Group Chair – Anisha Apte anisha_apte@ieee.org

 $\textbf{Co-Chair}-Dushyant\ Deshmukh$

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Committees
Audit Committee

Co-Chair - Kalyan Mondal

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Co-Chair – Mani Iyer
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Awards & Recognitions
Co-Chair – Ken Oexle

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Co-Chair - Adriaan J. van Wijngaarden

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Educational Activities

Co-Chairs

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Employment Network

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