NEWSLETTER
OF
IEEE KOLKATA SECTION

A COMPREHENSIVE COMPILATION OF VARIOUS ACTIVITIES AND EVENTS OF IEEE KOLKATA SECTION, ITS SUBSECTIONS, CHAPTERS, AFFINITY GROUPS, ETC, HELD DURING JANUARY - MARCH 2025

APRIL 2025

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE): THE WORLD'S LARGEST TECHNICAL PROFESSIONAL ORGANISATION DEDICATED TO ADVANCING TECHNOLOGY FOR THE BENEFIT OF HUMANITY.

Message from IEEE Kolkata Section, Chairperson 2025

Prof. Suparna Kar Chowdhury

Dear IEEE Kolkata Section Members, Greetings!!

It is my pleasure to present you the Quarter-1 Kolkata Section Newsletter for 2025. 1st Quarter of the year ranging from January to March witnessed many noteworthy events. The Chapters and AGs also organized many events. Four major events were organized by the Section:

- Annual General Meeting,
- Annual Social
- Student Hackathon organized by JU Student Branch in association with Kolkata Section
- One day workshop on MATLAB & its application by MathWorks jointly with Kolkata Section.
- All four events were marked by large turnout of members.

The Annual General Meeting of the Kolkata Section was held on 15th January, 2025, at the Eastern Metropolitan Club. More than 225 members attended the meeting. Annual Awards were presented on the date. Prof. Debatosh Guha, past Kolkata Section Chair, was conferred with the 'Lifetime Achievement Award' for his contribution to the growth of the Kolkata Section. I would also take this opportunity to inform the members that Prof. Sujit K. Biswas, past Chair of Kolkata Section, was conferred with the 'Section Chair Lifetime Achievement Award' by IEEE India Council. The felicitation took place during the Award Night on the sidelines of INDICON-2024 at IIT Kharagpur.

The Annual Social of Kolkata Section was arranged on 9th February, 2025 at a beautiful garden villa at Barrackpore Cantonment. The annual Social was attended by more than 110 participants. The members and their children & spouses spent the entire day merrily.

In the next quarter, we plan to organize 'CESC Milestone Commemorative Lecture'; 'Workshop on Conference Quality and Management' and the selection round of 'Innovation Challenge' organized by IEEE R10. The two best teams from the Kolkata Section will be nominated to participate in the Innovation Challenge to be organized by R10. The finals will be held on the sidelines of TENCON-2025 in Malaysia.

A new society chapter i.e. Technology Engineering Management Society (TEMS) was formed under Kolkata Section in March 2025 with Mr. Subhamoy Chakraborty as the interim Chair. Plans are afoot to organize a formal inauguration of the chapter sometime in May 2025. I wish the Chapter all success in future endeavors.

I once again thank all the members for their wholehearted support and cooperation and looking forward to another interesting edition of newsletter in the second quarter. I wish to place a special thanks to the Section newsletter team for the efforts which went behind this edition. Your feedback will be of great help to us, do send us your comments to ankita.telecom@faculty.iiests.ac.in.

Sd/-

Prof. Suparna Kar Chowdhury,

Chair, Kolkata Section

Section Event Report

Kolkata Section Annual General Meeting 2025

The Annual General Meeting of Kolkata Section was held on 15th January, 2025 at Eastern Metropolitan Club. Nearly 225 IEEE members attended the event starting from 7 pm. The event started with the award session. The awards were given to the members in three categories: Life Time Achievement, Outstanding Volunteer and Outstanding Student Volunteer. The meeting started after the award session. It was very interactive and important matters pertaining to Section Administration were discussed. All the points raised in the meeting were satisfactorily replied by the Section Chair. The meeting was followed by dinner.

Kolkata Section Annual Social-2025

The annual Social of Kolkata Section was held on 9th February, 2025 at a beautiful location called 'Amar Bari' (My House), in Barrackpore Cantonment. Nearly 100 IEEE members and their family members attended the daylong event starting from 9-30 am. A bus was arranged to ferry members from different corners of the city. The event provided a perfect platform to the members and their family members to interact and chat in a leisurely manner. Picturesque ambience, breakfast, sumptuous lunch, snacks and beverages made the day a memorable one.

Math Works and IEEE Kolkata Section Host Seminar on Emerging Trends in Artificial Intelligence and Internet of Things

MathWorks, the leading developer of mathematical computing software, collaborated with IEEE Kolkata Section for a day-long seminar on 6th March 2025, titled "Kolkata Tech Seminar: AI and IoT Empowering Academia and Industry." The seminar brought more than 100 academicians, researchers, and industry professionals to The Westin Rajarhat, Kolkata to discuss emerging trends in Artificial Intelligence (AI) and the Internet of Things (IoT). The IEEE Kolkata Section covers the Kolkata region and works to create opportunities to advance technology in the education and industry ecosystem.

Dr. Arpan Pal, Distinguished Chief Scientist and Research Area Head, Embedded Devices and Intelligent Systems, TCS Research, India delivered the keynote talk that underscored the pivotal role of embedded systems in the future technological landscape for cyber-physical systems. Dr. Pal also discussed how integrating AI and IoT at the edge can unlock new possibilities for enterprise systems, enhance predictive maintenance, optimize operations, and enable real-time decision-making through data analytics and digital twins.

Additional educational sessions at the seminar included:

- "MATLAB® and Simulink® Transforming Industry 4.0 through Digital Twin": The session covered digital twins, scalable AI solutions, and real-world success stories in AI and Predictive Maintenance. It also explored how IoT converges to advance engineering domains in Industry 4.0.

- "Engineering the Future with an Industry-Ready Curriculum": The session emphasized on the importance of developing computational thinking within the next generation of engineers. The session introduced classroom-ready teaching content, training courses, and virtual lab modules. Educators were also encouraged to explore project-based learning with hardware to foster hands-on learning.

- "Interoperability with MATLAB, Simulink, Python, and Engineering AI Systems for Edge Computing": The session highlighted the evolving needs of the industry-academia-research ecosystem. The discussion demonstrated how integrating MATLAB and Python enhances AI research accessibility in Model-Based Design, advancing the development of engineered systems.

- The seminar featured demo booths, including one where MathWorks engineers focused on implementing motor control in real-world applications utilizing industry-standard hardware. Additionally, a MathWorks regional partner, ELMAX Systems and Solutions, presented a comprehensive demonstration of modeling, simulation, and control techniques of an Unmanned Aerial Vehicle (UAV) to seminar attendees. Chandan Pramanik, Director of Education, MathWorks India, Prof. Suparna Kar Chowdhury, Chairperson IEEE Kolkata Section were also present in the event.

IEEE Jadavpur University Student Branch

Double Slash 2025: IEEE Jadavpur University's 24-Hour Tech Marathon

Double Slash, the first-ever 24-hour hackathon of Jadavpur University, was organized by IEEE Jadavpur University, bringing together tech enthusiasts, innovators, and problem-solvers. The event unfolded in two phases: a preliminary online quiz round on 9th February 2025, followed by the finals on 15th-16th February at the SMCC Building, Salt Lake Campus, Jadavpur University. The online quiz, covering domains like Machine Learning, DSA, and Web Development, saw over 1200 participants, out of which the top 35 teams advanced to the finals.

The hackathon was made possible with the generous support of sponsors and partners. RedoQ joined as the *Associate Sponsor*, while Devfolio powered the event as the *Platform Partner*. Polygon, ETHIndia and Keeves backed the initiative as *Gold Sponsors*, with additional support from PepHub as the *Mentorship Partner*, TheDevArmy as the *Community Partner*, and .xyz as the *Domain Partner*. The final round was a 24-hour intense hackathon, where participants worked on groundbreaking projects across six tracks: *Web3, Education, Green Tech, Health, Cyber Security, and Slash (Open Track)*. Teams showcased innovative solutions, leveraging cutting-edge technologies to tackle real-world challenges. Throughout the event, 9 experienced mentors provided guidance, ensuring ideas were nurtured into viable prototypes. A panel of 6 expert judges from the tech industry rigorously evaluated the submissions based on innovation, feasibility, and execution. With a high-energy atmosphere and enthusiastic participation, Double Slash turned out to be a grand success.

Participants found the experience immensely rewarding, praising the event's smooth execution, insightful mentorship, and the opportunity to network with industry experts. With a prize pool exceeding ₹10,000, the hackathon not only provided a platform for innovation but also rewarded outstanding talent, further motivating participants to push their creative and technical limits. The overwhelming positive response has set the stage for future editions, and with continued support from IEEE Kolkata Section, Double Slash aims to grow into an even larger and more impactful event in the coming years.

Glimpses of the event

IEEE KOLKATA SECTION

IEEE Women in Engineering (WIE) Kolkata

STEM for her

WIE IEEE Kolkata Section, ETCE Department, Jadavpur University, and DITO Social Welfare Association jointly organized an event "STEM for her" on 3rd January, 2025 at ETCE Department, Jadavpur University. This event was sponsored by Vivekananda Bridge Tollway Company Pvt. Ltd. Thirty meritorious students from Palghat Girl's High School visited the ETCE department to participate STEM for her training program. The students visited two departmental labs, one is AI and Robotics Lab under the supervision of Prof. Amit Konar and another is Electronics Circuit Lab under the supervision of Prof. Sheli Sinha Chaudhuri. The students gave verbal presentation on Arduino-based embedded systems and electronic circuits. During live demonstrations and explanations by the research scholars on advanced topics in robotics and electronics, the students showcased impressive understanding, knowledge, and engagement.

This event encouraged young minds to innovate and engage in STEM learning for a tech-driven future. This hands-on experience sparked curiosity, encouraging them to pursue STEM education and apply electronics and robotic technologies in real-world problem-solving.

Prof. Sheli Sinha Chaudhuri, Chair, WIE AG, IEEE Kolkata Section and Professor, ETCE Dept. Jadavpur University, India, Prof. Sudhabindu Ray, Professor and Head, ETCE Dept. Jadavpur University, India, Mr. Anjan Roy Chowdhury, CEO of Vivekananda Bridge Tollway Company Pvt. Ltd., Prof. Sayan Chatterjee, Professor and Coordinator IC Design and Fabrication Centre, ETCE Dept. Jadavpur University, India and Ms. Sahana Bhowmick, Director, DITO Social Welfare Association were present on the occasion. A total of 40 participants including 4 IEEE Members had participated in the event.

Program Opening Speech by WIE Chair

Students' participation at the event

Students' participation at Robotics Lab

Students' participation at Electronics Lab

National Girl Child Day Celebration

Distribution of school copies and crayon set

IEEE WIE Kolkata and IEEE WIE SBC of IEM had celebrated National Girl Child Day on 24th January, 2025 at Loreto Convert, Entally, Kolkata. As a part of Social Outreach events of WIE Kolkata, 52 girl children of Loreto Convert, Entally, Rainbow were handed over with some daily requirement items like school copies (104 in numbers) one black and one blue pen each and one crayon set. The birthdays of the children born in December and January were also celebrated by cake cutting ceremony. The students were made aware about the importance of National Girl Child Day celebration. The little learners showcased their recitation skills through a cultural program. A total of 60 participants including 2 IEEE members had participated in the program.

Poster paper presentation session conducted by WIE at IEMENTech 2025

The IEMENTech Conference 2025, was held from January 31 to February 2, 2025, at the Institute of Engineering and Management (IEM) in Kolkata. It commenced with an engaging opening session that set the stage for insightful discussion on electronics, materials engineering and nano-technology. The keynote session featured distinguished speakers who shared their expertise on various facets of technology and innovation. Prof. Dr. Riri Fitri Sari (University of Indonesia), Dr. Terumi Umematsu (Biometrics Research Laboratories, NEC Corporation, Kawasaki, Japan), Prof. Dr. Achintya Singha (Bose Institute), Prof. Dr. Ankit R. Patel (University of Minho, Portugal), Dwarkaprasad Dayama (Samsung R&D Institute, India), Preet Yadav (India Innovation Ecosystem at NXP), Dr. Jija Dasgupta (Manager Data Scientist, Adani Group), Mrs. Harini Kandadai (Micron Technology), Suhas Kashyap (Philips) were the Invited Speakers for the event. IEEE Women in Engineering (WIE) Kolkata Affinity group conducted poster paper session for the conference IEMENTech 2025. This event provided a platform for researchers to present their innovative work across various domains. The event saw a participation of 66 IEEE members and 84 non-IEEE members.

Delegates at the keynote session, poster presentation and WIE members at IEMENTech 2025 conference

Quiz Competition at Kolkata Book Fair

The IEEE Women in Engineering Student Branch Affinity group of IEM and IEEE WIE Kolkata section hosted a quiz contest at the Kolkata Book Fair on 4th February, 2025 at Kolkata Book Fair, Karunamoyee Mela Prangan, Salt Lake, Kolkata, with themes including general knowledge, sports, science and current trends. The audience from book fair had a great interest in responding to the questions posed. WIE chair, vice chair and other faculty members from WIE Affinity group gave prizes to the participants to encourage them. The audience also expressed their interest about IEEE WIE for their societal and educational activity around the year. The event saw a participation of 20 IEEE members and 130 non-IEEE members.

Quiz competition at Kolkata book Fair along with WIE members

Industrial Visit at Hydroelectric Power Plant, Purulia

The IEEE IEM Women in Engineering Student Branch Chapter, in collaboration with IEEE IEM IAS SBC, IEEE WIE Student Affinity Group, and IEEE IEM MTTS SBC, organized an industrial visit to the prestigious Hydroelectric Power Plant in Purulia on March 3, 2025, at 10 AM. This visit provided participants with a unique opportunity to explore one of India's leading renewable energy facilities, which generates an impressive 900 MW of electricity. The power plant features two Rockfill dams, twin water conductors, and four reversible turbines, each with a capacity of 225 MW and a discharge rate of 150 cum/sec. Participants also had the opportunity to witness the underground transformer cavern, which measures 119 meters in length, 17 meters in width, and 17 meters in height. This facility houses four 280 MVA transformers (16.5 kV/400 kV), playing a crucial role in power distribution.

Additionally, the visit highlighted the advanced 400 kV gas-insulated substation, linked through a dedicated cable tunnel. The plant's double circuit transmission lines connect it to the Durgapur and Arambagh substations, ensuring efficient power transmission. This industrial visit provided a valuable learning experience, bridging theoretical knowledge with real-world applications in large-scale power generation. A total of 24 participants including 20 IEEE members had participated in the program.

Students during the Hydroelectric Plant Visit at Bagmundi

ORIGAMI COMPETITION

Date of the Event: 11th March, 2025

Venue of the Event: Institute of Engineering and Management, Kolkata

On the occasion of International Women's Day, the IEEE IEM Women in Engineering Society organized an engaging Origami Competition on 11th March at Institute of Engineering & Management which focused on creativity and skill development. The event aimed to celebrate women's empowerment while promoting patience, precision, and design thinking among students. The competition attracted enthusiastic participants from various departments who showcased their artistic flair through intricate paper-folding techniques. The initiative provided a platform for students to express themselves artistically while enhancing focus and fine motor skills, which are valuable in both technical and personal growth. Judges appreciated the innovation and effort put into each creation, and the best entries were awarded certificates and prizes. The event successfully combined creativity with purposeful learning, making it a memorable and enriching experience for all attendees. It reflected IEEE WIE's commitment to holistic student development. A total of 40 participants including 28 IEEE members had participated in the program.

Participants showcasing their artwork and prize distribution

IEEE Communications Society (ComSoc) Kolkata Chapter

IEEE ComSoc Kolkata Chapter organized IT Convention in association with ILEAD and PTA

IEEE COMSOC Kolkata Chapter in association with ILEAD and PTA organized the prestigious IT Convention on 1st February 2025 at Park Regency Hotel, Topsia, Kolkata, West Bengal 700046. The convention covered topics on Data, AI, and Cyber Security from distinguished speakers and industry leaders. Speakers were Shri Kripadyuti Sarkar, Add 'l. Secretary, (Industry Collaboration), PTA CIO, Ambuja Neotia Corporate and Shri Krishnendu De, Head of Information Security and CISO, CESC Ltd. Shri Kripadyuti Sarkar shared the AI models being used in the real estate industry and the best practices, use cases of AI/ML models for various process industries. The talk saw an active participation by audience and students present. Shri Krishnendu De spoke from his vast experience and shared a great knowledge on cybersecurity domains, security maturity assessment, role of CISOs in power utility, modern days cyberattacks etc. during the IT Convention.

Flyer of the event   *Distinguished Guests*

IEEE ComSoc Kolkata Chapter organized IT Convention in association with ILEAD and PTA

IEEE ComSoc Kolkata Section had organised a Two-Day Workshop on Application of IoT in Smart Environments at Calcutta University on 10-11 February, 2025. Prof. Amlan Chakrabarti, Director and Head AKCSIT, University of Calcutta, Dr. Sangit Saha, Scientist D, CDAC Kolkata, Mr. Atanu Roy Chowdhury, Managing Director, Capsule Lab were the speakers for the event. Prof. Chakrabarti spoke on IoT Systems and Applications; Dr. Saha spoke on AI based Air Quality Monitoring System and Mr. Roy Chowdhury gave a lecture on Architecture of Commercial IoT Offerings. The event was held in collaboration with K2N Academy.

Felicitating Participants and guests

Distinguished Guests

Convolution 2025 in association with Dept. of Electrical Engineering, Jadavpur University

IEEE ComSoc had partnered with Dept. of Electrical Engineering, Jadavpur University to organise Convolution 2025 during 20th-22nd February, 2025. Convolution 2025, the tech-management fest by Jadavpur University's Electrical Engineering Department, began on February 20th. The Vice Chancellor, the Head of the Department, and Mr. Sujoy Ray, along with Mr. Sougata Das Gupta from Techno Electric Co. Ltd., inaugurated the event. Techno Electric Co. Ltd. hosted a seminar with an interactive session from its founders. Eureka! featured 80+ teams and 350+ participants, with the top 10 advancing through aptitude-based challenges.

Inauguration of Convolution

Workshop and Activities of Students

Day two of Convolution X featured Circuistics, attracting 70+ teams from West Bengal colleges, and SparkHack, where 10 finalists impressed judges with innovative solutions. The second round of Eureka! engaged the top 10 teams in a scavenger hunt. The day continued with Abol Tabol, featuring quirky scientific pitches, with Mr. Subham Chaudhury, aka "Bong Short," as the special guest. The day ended successfully, praised for its exciting challenges and creative presentations.

The final day of Convolution X featured the finals of Algomaniac, which saw over 250 participants in the prelims and 20 finalists, followed by the Circuistics finals with 16 competing teams. The highlight of the day was JU Talks, where distinguished speakers shared insights on thought-provoking topics. After all events concluded, winners were awarded for their excellence in technology and science. Esteemed guests, including Prof. Tridibesh Nag, Prof. Subrata Biswas, and Mr. Shankar Nath Mukherjee, graced the occasion. The Closing Ceremony marked the successful conclusion of Convolution X.

Competitors of Algomaniacs and Circuistics along with Distinguished Guests

Industry talk by Mr. Arindam Hari at GMIT, Baruipur with PTA

IEEE ComSoc in association with IIDR, and PTA had organised on 22nd February, 2025, a Saturday Corporate Matinee Program. 2 CIO from Greenwell Group and Satwik Power had attended the event. The target audience were 2nd, 3rd and 4th year students from departments like EE, CSE, CSBS and ECE. There was discussion on IT Infrastructure and recent development and PTA also discussed different Internship opportunities as well. It was a very interesting and engaging session. Students also interacted with the speaker and making the talks an effective one.

Flyer of the Program   *Audience of the Talk*

Enhancing Skills, Ensuring Employability: Summer Internships as Hands-on Pathways to Experiential Learning

Swami Vedatitananda addressing the audience

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IEEE KOLKATA SECTION

IEEE ComSoc Kolkata Chapter organised a Program titled "Enhancing Skills, Ensuring Employability: Summer Internships as Hands-on Pathways to Experiential Learning", an NEP-Based Orientation Program on Internship and Placement Opportunities on February 24, 2025, at Ramakrishna Mission Vidyamandira, Belur Math, Howrah. It was jointly organised with Ramakrishna Mission Vidyamandira, Belur Math, Howrah. A total of 70 participants including Principals, TICs, IQAC Coordinators, Placement Officers, faculties from colleges, universities, institutions, IEEE Students, Faculties and Industry members, attended the event. Eminent speakers for the event were Swami Vedatitananda, Correspondent, Ramakrishna Mission Shilpamandir, Assistant Secretary, Ramakrishna Mission Saradapitha, Belur Math, Swami Shastrajnananda, Secretary, Ramkrishna Mission Ashram, Narendrapur, Gargi Bhattacharjee, Group Head, Digital IT, Shyam Metalics and Debashis Biswas, Inspector of Colleges, University of Calcutta. The event provided valuable insights into experiential learning and placement strategies for students and institutions. It concluded with an interactive session, fostering dialogue to enhance employability and career readiness.

One Week FDP on Industry 4.0: Control System for Robotics and

Prof. P Hazra facilitating Mr. Atanu Roy Chowdhury Founder CEO, Capsulelabs

Prof. A Chakraborty addressing the audience

A One Week Faculty Development Program (FDP) on Industry 4.0: Control System for Robotics and Automation was successfully organized by IEEE ComSoc Kolkata Chapter, Department of Electronics and Communication Engineering, Narula Institute of Technology from 24th Feb to 28th Feb, 2025, at Narula Institute of Technology to enhance participants' knowledge of emerging technologies in automation and robotics. Dr. Neeraj Saxena, Pro Chancellor, JIS University, Dr. Amlan Chakrabarti, Professor and Director, A. K. Choudhury School of Information Technology, Calcutta University, Mr. Atanu Roy Chowdhury Founder CEO, Capsulelabs, Mr. Soumya Misra, Co-Founder SISIR Radar, Dr. Arindam Sarkar, HoD, Computer Science and Electronics, Belur Math, Dr. Tushar Kanti Bera, NIT Durgapur, Mr. Partha Sengupta, Senior Vice President, ITC, Dr. Subrata Sarkar, Scientist, CDAC, Kolkata and Mr. Ravi Sankar, Scientist, CDAC, Kolkata were the resource persons for the event.

The FDP witnessed enthusiastic participation from 117 participants representing various locations across the country. The program was conducted in a hybrid mode, allowing attendees to join both online and offline, ensuring wider accessibility and engagement. The FDP featured expert lectures on cybersecurity, IoT, robotics, automation in agriculture and healthcare, and machine learning applications, providing a comprehensive understanding of Industry 4.0.

Prof. S Saha addressing the audience   *Speaker delivering his speech*

The sessions on cybersecurity and IoT highlighted the importance of secure communication and data management in automated systems. Discussions on robotics and automation explored their applications in various industrial sectors, emphasizing efficiency and precision. The use of automation in agriculture and healthcare demonstrated how smart technologies can optimize productivity and improve patient care. Additionally, the session on machine learning focused on its role in predictive analysis and intelligent decision-making in automated systems.

The FDP encouraged active participation through interactive discussions. Participants gained valuable insights into the integration of advanced control systems in industrial automation. The program concluded with a feedback session, where attendees appreciated the opportunity to learn from experts and engage with real-world applications of Industry 4.0. Overall, the FDP successfully bridged the gap between academic knowledge and industry practices.

Design and Detection of Controller Manipulation Attack on RIS-Assisted Communication

ETCE Colloquium
on
Design and Detection of Controller Manipulation Attack on RIS Assisted Communication

Organized by
Dept. of Electronics and Telecommunication Engineering (ETCE), JU
in association with
IEEE Communication Society, Kolkata Chapter
&
IEEE Communication Society, Student Branch Chapter, JU

Speaker: Dr. Arpan Chattopadhyay
Dept. of Electrical Engineering, IIT Delhi

Dr. Arpan Chattopadhyay completed his B.E. from Jadavpur University, Kolkata in 2008, and M.E. and PhD from Indian Institute of Science, Bangalore, in 2010 and 2015, respectively. Currently, he is working as an Assistant Professor at the Electrical Engineering department, IIT Delhi. Previously, he had held Postdoc positions at INRIA, Paris, France, and the University of Southern California, Los Angeles, USA. His research interests include wireless communication and networks, signal processing and online learning. He is currently serving as an Associate Editor of IEEE Signal Processing Letters and IEEE Internet of Things Journal.

Abstract: *In recent years, research on signal and information theory from the electromagnetics viewpoint has drawn significant attention, mostly due to its potential use in various communication technologies such as Multiple-Input-Multiple-Output (MIMO) and Reconfigurable Intelligent Surface (RIS). In this talk, the speaker will introduce a new attack called Controller Manipulation Attack (CMA) on a RIS assisted communication system between a transmitter and a receiver. He will mainly focus on a number of attack detection models such as: (i) Composite hypothesis testing based attack detection in a given fading block for known channel gains, (ii) Quickest detection of CMA in a given fading block for known channel gains, (iii) Nonparametric hypothesis test to detect CMA for unknown channel gains over a fading block, and (iv) Signal-to-Noise-Ratio (SNR) moment based detection over possibly multiple fading blocks.*

Date: March 18, 2025
Time: 2:30 p.m.
Venue: Room No.: T-3-7, Dept. of ETCE, Jadavpur University

Flyer of FDP

IEEE ComSoc and the Department of Electronics and Telecommunication Engineering (ETCE) at Jadavpur University organized a colloquium on "Design and Detection of Controller Manipulation Attack on RIS-Assisted Communication" on March 18, 2025. The session was delivered by Dr. Arpan Chattopadhyay, Assistant Professor, Department of Electrical Engineering, IIT Delhi. Dr. Chattopadhyay provided an in-depth analysis of Reconfigurable Intelligent Surface (RIS)-assisted communication and the potential vulnerabilities posed by controller manipulation attacks. He elaborated on various detection mechanisms, mitigation strategies, and the significance of securing next-generation wireless communication networks. The talk was followed by an engaging Q&A session where students and faculty members discussed real-world applications and challenges in implementing robust security measures in RIS-assisted networks. The event was highly informative and provided valuable insights into a critical aspect of modern communication security. The Department of ETCE expressed gratitude to Dr. Chattopadhyay for his enlightening lecture and looked forward to future collaborations.

Experts and academicians in the Colloquium

Hako-O-NiT

Flyer-1

Flyer-2

IEEE ComSoc Kolkata Chapter in association with Narula Institute of Technology had organized an overnight Hackathon, Hack-O-NiT 2025, under the banner of Kritanj 2025, the premier Techno-Management Fest of NIT, on 20-21 March 2025 at the NiT Campus. The event was technically co-sponsored by IEEE ComSoc Kolkata Chapter, IEEE CIS Student Chapter, IEEE PES Chapter and IETE Student Chapter. Mr. Subhamoy Chakraborty, Industry Chairman, IEEE ComSoc Kolkata Chapter, as well as esteemed industry professionals, academicians, representatives from professional bodies, and members of the Chamber of Commerce, had graced the occasion as guests and judges, adding prestige to the competition.

Mr. Subhamoy Chakraborty, Industry Chair, IEEE ComSoc Kolkata Chapter with the organizer

The organizers, esteemed dignitaries, and students

Hack-O-NiT 2025 had provided an exciting platform for students to showcase their problem-solving skills and provided them with opportunity to collaborate with like-minded innovators, and unleash their creativity to develop ground breaking solutions. It offered a unique opportunity to push boundaries, think outside the box, and compete for exciting prizes.

IEEE ComSoc Kolkata Chapter Sponsored International Conference

Flyer of FDP

IEEE Communications Society (ComSoc) Kolkata Chapter had sponsored the 1st International Conference on Smart Technology for Emerging Problems (STEP 2K25), organized by Gargi Memorial Institute of Technology (GMIT). The event was held on 21st and 22nd March 2025 in hybrid mode and was hosted by GMIT at its campus in West Bengal. The event saw Prof. (Dr.) Suparna Kar Chowdhury, Chair, IEEE Kolkata Section, Dr. Pallab Ganguly - Chairman, IEEE ComSoc, Kolkata Chapter, Mr. Sankar Nath Mukherjee - Chair, IET Kolkata Network, Mr. Prabir Kumar Mukhopadhyay - Ex-Chairman, DVC and Ex-Chair, IE(I), Mr. Indrajit Biswas - Project Associate, International Copper Association, Mr. Chanchal Chakraborty - MD & CEO, ATM Towers India, Prof. (Dr.) Jhon Ham C Pretorius - University of Johannesburg, South Africa, Prof. (Dr.) Frede Blaabjerb - Aalborg University, Denmark, Prof. (Dr.) Akhtar Kalam - Victoria University, Australia, sharing their knowledge, and discussing emerging trends in smart technology through keynote speeches

Conference Details

Plenary Speaker on "Process framework and standardisation for planning a Smart City" by Dr. Pallab Ganguly, Chairman IEEE ComSoc, Kolkata Chapter

The theme of the conference, "Innovating Solutions for Future Challenges", underscored the importance of smart technologies in addressing contemporary global challenges. A Panel Discussion on Smart Technology for Emerging Problems with Mr. Kaustav Chatterjee, T&P Officer, GMIT as Moderator and Dr. Pallab Ganguly, Chair, IEEE ComSoc Kolkata Chapter and Mr. Chanchal Chakraborty, CEO & MD, ATM Towers as Panelists were also held on the occasion. The event, which brought together researchers, academicians, and industry professionals to discuss innovative solutions for emerging technological challenges. The event provided a platform for engaging discussions and the exchange of groundbreaking ideas among academicians, researchers, industry professionals, and students.

IEEE ComSoc AI Masterclass with PTA & Microsoft

Flyer

The theme of the conference, "Innovating Solutions for Future Challenges", underscored the importance of smart technologies in addressing contemporary global challenges. A Panel Discussion on Smart Technology for Emerging Problems with Mr. Kaustav Chatterjee, T&P Officer, GMIT as Moderator and Dr. Pallab Ganguly, Chair, IEEE ComSoc Kolkata Chapter and Mr. Chanchal Chakraborty, CEO & MD, ATM Towers as Panelists were also held on the occasion. The event, which brought together researchers, academicians, and industry professionals to discuss innovative solutions for emerging technological challenges. The event provided a platform for engaging discussions and the exchange of groundbreaking ideas among academicians, researchers, industry professionals, and students.

Dignitaries engrossed in session

Session chairs are discussing

GRSS Kolkata Chapter

Inauguration of the GRSS Student Branch Chapter at University of Engineering and Management Kolkata (UEMK SBC)

Inauguration of the University of Engineering and Management Kolkata Student Branch Chapter (UEMK SBC) on 18th December 2025

The inauguration of the GRSS Student Branch Chapter at the University of Engineering and Management Kolkata (UEMK SBC) took place on 18th December 2024, marking a significant milestone in advancing geoscience and remote sensing education. The event witnessed the enthusiastic participation of 25 students, alongside esteemed GRSS leaders who shared insights on the latest trends in geospatial technology. The ceremony included an inaugural address, a technical session on remote sensing applications, and an interactive discussion on career opportunities in the field. The establishment of the chapter will foster research, innovation, and collaboration among students, encouraging them to engage in GRSS activities and contribute to the global scientific community. The event concluded with a networking session, strengthening connections between students and professionals. The UEMK SBC is set to organize future workshops, technical talks, and outreach programs, further enhancing students' exposure to geoscience and remote sensing advancements

InGARSS 2025 Organizing Committee Meeting and Social Meet-up

InGARSS 2025 Organizing Committee Meeting and Social Meet-up at Bhubaneswar on 8th March 2025

The InGARSS 2025 Organizing Committee Meeting and Social Meet-up was held on 8th March 2025 at Hotel Orange, Bhubaneswar, bringing together the GRSS India Liaison, GRSS Professional Chapter Chairs, and the InGARSS 2025 Organizing Committee. The event included discussions on key aspects of InGARSS 2025 planning, logistics, and technical sessions, ensuring a well-structured roadmap for the upcoming conference. Attendees exchanged insights on sponsorship, paper review processes, and outreach activities to enhance participation. The meeting concluded with a networking dinner, providing an opportunity for informal interactions and strengthening collaborations among GRSS members. The event was attended by 21 members.

GRSS Student Branch Chapter Chairs Meet-up

The All India GRSS Student Branch Chapter Chairs Meet-up was successfully held on 9th March 2025 at IIIT Bhubaneswar, bringing together the GRSS India Liaison, GRSS Professional Chapter Chairs, and GRSS Student Branch Chapter Chairs. The event provided a platform for discussions on strengthening collaboration between student and professional chapters, enhancing technical activities, and expanding outreach initiatives. Attendees shared their experiences, challenges, and innovative ideas to improve engagement within the GRSS community in India. The meeting also emphasized the importance of mentorship, research opportunities, and funding support for student-led initiatives. After an engaging discussion, a networking lunch was served, allowing participants to connect informally and explore potential collaborations. The event was attended by 18 members. The meet-up concluded with a roadmap for future activities and strategies to enhance the impact of GRSS initiatives across the country

GRSS Student Branch Chapter Chairs Meet-up at IIIT Bhubaneswar on 9th March 2025

Power & Energy Society (PES)

2nd Annual General Meeting (AGM) of IEEE Kolkata Section Industry Applications & Power & Energy Joint Societies Chapter- Rourkela (CH11091)

Event Category Administrative Event Sub-category ExCom

The 2nd Annual General Meeting of the IEEE Kolkata Section Industry Applications & Power & Energy Joint Societies Chapter-Rourkela was held on Wednesday, 15th January, 2025 at 11:00 A.M. (IST) at Meeting Room, Department of Electrical Engineering, NIT Rourkela. 11 IEEE Members had joined the meeting.

NEWSLETTER

OF
IEEE KOLKATA SECTION

A COMPREHENSIVE COMPILATION OF VARIOUS ACTIVITIES AND EVENTS OF IEEE KOLKATA SECTION, ITS SUBSECTIONS, CHAPTERS, AFFINITY GROUPS, ETC, HELD DURING JANUARY - MARCH 2025

APRIL 2025

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE): THE WORLD'S LARGEST TECHNICAL PROFESSIONAL ORGANISATION DEDICATED TO HUMANITY.