I. List of Distinguished Lectures/Technical Talks

1. Date: 14.01.2020  
   Speaker: Prof. Durga Mishra  
   Topic: Nanoelectronics to Nanotechnology: More Moore and More than Moore  
   Attendees: 140  
   Venue: S.V. Auditorium, Heritage Institute of Technology  
   Organizing Institute: IEEE ED HITK SBC, Heritage Institute of Technology

A Distinguished Lecture Program was organized by the IEEE ED Heritage Institute of Technology SBC on January 14, 2020 with Dr. Durga Mishra from New Jersey Institute of Technology, Newark as the speaker. His lecture topic was ‘Nanoelectronics to Nanotechnology: More Moore and More than Moore’. His candid and in depth account of the evolution of nanotechnology was extremely enjoyed by all the attendees. The lecture session was attended by 140 participants.
2. Date: 17th January, 2020
Speaker: Dr. Ajit Kumar Panda, Professor and Dean, National Institute of Science and Technology, Berhampore
Topic: GaN-HEMT based front end transceiver for 5G communication technology
Attendees: 35
Venue: the Seminar Hall, Dept. of ECE, NSEC
Organizing Institute: IEEE ED NSEC SBC
Description: ED Netaji Subhash Engineering College Student Branch Chapter in association with the Department of Electronics and Communication Engineering organized an IEEE EDS "Distinguished lecture on GaN-HEMT based front end transceiver for 5G communication technology on 17th January, 2020 at the Seminar Hall, Dept. of ECE, NSEC. 35 students, including IEEE EDS SBC members, along with other students of both ECE and EE Departments attended the seminar. 5 Faculty members and Head of Department of ECE also attended this one day seminar. The IEEE EDS Distinguished Lecturer for the session was Dr. Ajit Kumar Panda, Professor and Dean, National Institute of Science and Technology, Berhampore. His lecture included the advancements in communication technology and introduction about 5G technology. His talk also included GaN HEMT technology, suitable for millimeter-wave 5G applications, for which a case study was presented in his talk. The students as well as the faculty members were highly benefited from this lecture. The participants were given food packets at the end of the session.
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The Chairman of All India Council for Technical Education (AICTE) Prof. Anil D. Sahasrabudhe, visited the IEEE ED HIT Student Branch Chapter and the IEEE EDS Center of Excellence on 25.01.2020. His address to the students and faculty members motivated them to engage in innovative ventures in the engineering domain. He highlighted that the AICTE shall be happy to incubate entrepreneurial ventures as well.

In the photograph (left to right), Prof. Anil D. Sahasrabudhe, Chairman AICTE, Dr. Mousiki Kar, Chairperson IEEE, EDS, Kolkata Chapter, Mr. P. K. Agarwal, CEO, KBT, Prof. Pranay Chaudhuri, Principal, HITK, Dr. Atanu Kundu, Advisor, IEEE ED HIT SBC.
4. Date: 27th January, 2020
Speaker: Prof. Amlan Chakrabarti, Professor and Director, A.K. Chowdhury School of Information Technology, University of Calcutta
Topic: Machine Learning for IoT Analytics
Attendees: 40
Venue: ECE Seminar hall, NSEC
Organizing Institute: IEEE ED NSEC SBC
Description: ED Netaji Subhash Engineering College Student Branch Chapter in association with the Department of Electronics and Communication Engineering organized an IEEE EDS one-day seminar on “Machine Learning for IoT Analytics” on 27th January 2020 at the Seminar Hall, Dept. of ECE, NSEC. The guest speaker for this seminar was Prof. Amlan Chakrabarti, Professor and Director, A.K. Chowdhury School of Information Technology, University of Calcutta. The members of IEEE EDS SBC attended the seminar with other students from departments like EE, ECE and AEIE. 4 of the faculty members of the ECE Department also attended the seminar. This session included basics of IoT Analytics and Prof. Chakrabarti started his lecture for the beginners interested in this field. The lecture also included the factors which paved the way for rapid developments in hardware and software, communication advancements, and the need for IoT these days. The seminar thus cleared the way for the interested students to take up IoT as their field of interest. 40 students participated in this seminar and were greatly satisfied with his lecture.
5. Date: 19th February, 2020  
Speaker: Dr. Imon Mondal, Asst. Professor, Dept. of Electrical Engineering, IIT Kanpur  
Topic: Wideband Tunable True-Time-Delay Architecture Using a Variable Order All-Pass Filter and its Applications to Continuous-Time Pulse Processing  
Attendees: 110  
Venue: Language Lab of Kalyani Govt. Engg. College  
Organizing Institute: IEEE ED KGEC SBC  
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6. Date: 14th March 2020  
Speaker: Dr. Subhankar Majumdar, Assistant Professor, Department of Electronics and Communication Engineering, NIT Meghalaya  
Topic: IoT Devices and Low power Applications  
Attendees: 85
Venue: Online
Organizing Institute: IEEE ED MSIT SBC
Description: One day technical talk on "IoT Devices and Low power Applications" organized by The ED MSIT Student Branch Chapter and MSIT Student Branch, in association with the Department of ECE, MSIT on 14th March 2020. Lecture was delivered by Dr. Subhankar Majumdar, Assistant Professor, Department of Electronics and Communication Engineering, NIT Meghalaya. Almost 85 students attended the event. Out of the 85, almost 31 IEEE student members attended the talk.

7. Date: 29th June 2020
Speaker: Dr. Soumya Pandit, Asst. Professor, Inst. Of Radio Physics & Electronics, University of Calcutta
Topic: Integrated Circuit Amplifier
Attendees: 57
Venue: Online
Organizing Institute:IEEE ED KGEC SBC

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8. Date: 30th June 2020  
Speaker: Dr. Bhaskar Gupta, Professor, Jadavpur University, Kolkata  
Topic: An Introduction to RF-MEMS Technology  
Attendees: 72  
Venue: Online  
Organizing Institute: IEEE ED KGEC SBC  
Description: IEEE ED Kalyani Govt. Engg. College Student Branch Chapter organized a Technical Lecture Program on 30th June 2020 by Dr. Bhaskar Gupta, Professor, Jadavpur University, Kolkata on “An Introduction to RF-MEMS Technology” in online mode using WebEx Platform. A total of 72 participants attended this activity.

9. Date: 16th July 2020  
Speaker: Paul R. Berger, Ohio State University, Department of Electrical and Computer Engineering, Columbus, Ohio, USA  
Topic: Fully Printable and Autonomously Powered Electronic Nodes for the Internet of Everything  
Attendees: 70  
Venue: Online  
Organizing Institute: IEEE ED KGEC SBC
Description: IEEE ED Kalyani Govt. Engg. College Student Branch Chapter organized a DL Program on 16th July 2020 by Prof. (Dr.) Paul R. Berger, Ohio State University, Department of Electrical and Computer Engineering, Columbus, Ohio, USA on “Fully Printable and Autonomously Powered Electronic Nodes for the Internet of Everything” in online mode using WebEx Platform. A total of 70 participants attended this activity. The talk was very much interactive and useful for all the participants.

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10. Date: 26.07.2020
Speaker: Dr. Meyya Meyyappan
Topic: Printed and Flexible Electronics
Attendees: 88
Venue: Online
Organizing Institute: IEEE ED HITK SBC, Heritage Institute of Technnology

The Department of Electronics & Communication Engineering, Heritage Institute of Technology in collaboration with IEEE Electron Devices HIT Student Branch Chapter, IEEE EDS Center of Excellence and IEEE EDS Kolkata Chapter organized a Distinguished Lecture Program (Webinar) on July 26, 2020.

We had Dr. Meyya Meyyappan, Chief Scientist, NASA Ames Research Center, as our speaker. Dr. Meyyappan is an IEEE EDS Distinguished Lecturer and President of IEEE EDS. He delivered a lecture on 'Printed and Flexible Electronics'.
The lecture was held on the WEBEX platform and was attended by 88 participants from 24 Institutions from across the globe.

11. Date: 09.08.2020
Speaker: Prof. Samar Saha,
Topic: Physics of Microelectronic Device Models for VLSI Circuit Design
Attendees: 92
Venue: Online
Organizing Institute: IEEE ED HITK SBC, Heritage Institute of Technology
The Department of Electronics & Communication Engineering, Heritage Institute of Technology in collaboration with IEEE Electron Devices HIT Student Branch Chapter, IEEE EDS Center of Excellence and IEEE EDS Kolkata Chapter organized a Distinguished Lecture Program (Webinar) on August 09, 2020.

It was our proud privilege to have Prof. Samar Saha, 2016-2017 President of IEEE Electron Devices Society (EDS) and currently, serving as the Sr. past President of the Society, as the speaker. Prof. Samar Saha, is an IEEE EDS Distinguished Lecturer, Chief Scientist at Prospicient Devices and an Adjunct Professor in the Electrical Engineering (EE) department,
Santa Clara University, USA. He delivered a lecture on 'Physics of Microelectronic Device Models for VLSI Circuit Design'.

The lecture was held on the GOOGLE MEET platform and was attended by 92 participants from 29 Institutions from across the world.

12. Date: 22nd August, 2020  
   Speaker: Prof. Sudeb Dasgupta, IIT Roorkee  
   Attendees: 96  
   Venue: Online  
   Organizing Institute: IEEE ED MSIT SBC  
   Description: Prof. Sudeb Dasgupta has delivered an illuminating talk on low power design in a technical talk program organized by IEEE ED MSIT SBC in association with Department of ECE, MSIT at 6:00 pm on 22nd August, 2020. The duration of the talk was about 90mins. Prof. (Dr.) Ankur Ganguly, the Principal of MSIT gave the introductory speech which was followed by a speech given by Dr. Swapnadip De, branch counselor of IEEE ED MSIT SB. Dr. Manash Chanda, the chapter advisor of IEEE ED MSIT SBC coordinated the session. About 96 participants attended the session. Dr. ChandiPani gave the vote of thanks at the end. We are extremely thankful to Prof. Dasgupta for this immensely benefiting talk. We look
forward to have more such sessions with him. Almost 54 IEEE members and 65 non IEEE members attended the talk and immensely benefitted from the talk.

13. Date: 15th September 2020
Speaker: Mr. Sankalp Jain, SoC Implementation Engineer, Apple, Austin, USA
Attendees: 105
Venue: Online
Organizing Institute: IEEE ED MSIT SBC
Description: IEEE ED MSIT SBC in association with Department of ECE, MSIT, Kolkata has organised IEEE EDS Technical Talk Program by Mr. Sankalp Jain, SoC Implementation Engineer, Apple, Austin, USA on 15th September, 2020. Prof (Dr.) Ankur Ganguly gave the introductory speech, which was followed by a speech of Dr. Swapnadip De, HOD, Dept. of ECE, MSIT and Branch Counselor, IEEE MSIT SB. Dr. Manash Chanda, Chapter Advisor, IEEE ED MSIT SBC coordinated the session. About 105 participants were present, out of which 35 were IEEE members. It was an engaging talk and the students were highly benefitted. We look forward to more such sessions.
Speaker: Dr. Ashutosh Dutta, IEEE fellow, senior scientist and 5G Chief Strategist at Johns Hopkins University, USA
Topic: 4G and 5G Security-Opportunities and Challenges
Attendees: 60
Venue: online
Organizing Institute: IEEE ED NSEC SBC
Description: ED Netaji Subhash Engineering College Student Branch Chapter and the Department of Electronics and Communication Engineering, in association with IEEE EDS Kolkata Chapter, organized a two-day webinar on “4G and 5G Security-Opportunities and Challenges” on 26th and 27th September, 2020 by Dr. Ashutosh Dutta, who is an IEEE fellow, a senior scientist and 5G Chief Strategist at Johns Hopkins University, USA. The online platform chosen for these two sessions was Google Meet. The session started from 7:00pm on both the days. Both the sessions had about 60 participants, where besides IEEE EDS members, there were other students from 1st to 4th year of the department of ECE, Faculty members and the Head of the Department of ECE, NSEC. The first session of Dr. Dutta on 26th September, 2020, was regarding 4G technology, security, advantages and scopes. The session was of one and a half hour and was concluded by our HOD, ECE. The second session on 27th September, 2020, was of about 2 hours. In this session, the speaker gave an insight of the 5G technology, the opportunities and challenges related to this. He gave a full overview of the advancements, utilities and probable hazards associated with the 5G world. At the end of the session, there was an interactive session, where along with the students, our HOD Sir
also took part. Finally, he concluded the session. These two sessions were very beneficial for all the participants, who were interested in this field. Dr. Dutta has answered all their doubts and has shown a path to go further into the field of 5G technology. The entire event, consisting of these two sessions, was indeed successful with the presence and keen interest of all the participants.

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15. Date: 10.10.2020  
Speaker: Prof. Sushmita Mitra  
Topic: From Learning To Deep Learning  
Attendees: 36  
Venue: Online  
Organizing Institute: IEEE ED HITK SBC, Heritage Institute of Technology

The Department of Electronics & Communication Engineering, Heritage Institute of Technology in collaboration with IEEE Electron Devices HIT Student Branch Chapter, IEEE EDS Center of Excellence and IEEE EDS Kolkata Chapter organized a Lecture Program (Webinar) on October 10, 2020.

It was an honour to have Prof. Sushmita Mitra, Fellow IEEE and INAE Chair Professor and Fulbright-Nehru Senior Researcher, Machine Intelligence Unit (MIU), Indian Statistical Institute, Kolkata. She delivered a lecture on the topic 'From Learning To Deep Learning'.
16. Date: 16th October, 2020
Speaker: Subham Sahay, Assistant Professor, Dept. of Electronics and Communication Engineering, IIT Kanpur
Topic: Neuromorphic Computing
Attendees: 35
Venue: Online
Organizing Institute: IEEE ED MSIT SBC
Description: Subham Sahay, Assistant Professor, Dept. of Electronics and Communication Engineering, IIT Kanpur delivered a IEEE EDS technical Talk on “Neuromorphic Computing” on 16th October, 2020. The IEEE EDS Technical Talk program has been organized by the IEEE EDS MSIT SBC, in association with the Dept. of ECE. Almost thirty five students attended the event. Out of which, twenty six IEEE EDS student members also attended.
17. Date: 18.10.2020

Speaker: Mr. Saptarshi Chatterjee, Visvesvaraya PhD fellow, Electrical Engineering Department, Jadavpur University

Topic: Signal Processing Tools for Condition Monitoring of Biomedical Systems

Attendees: 35

Venue: online

Organizing Institute: IEEE ED NSEC SBC

Description: ED Netaji Subhash Engineering College Student Branch Chapter in association with the GnZ Student Cell, Department of Electronics and Communication Engineering organized a one day webinar on “Signal Processing Tools for Condition Monitoring of Biomedical Systems” on 18th October, 2020 by Mr. Saptarshi Chatterjee, Visvesvaraya PhD fellow, Electrical Engineering Department, Jadavpur University. The online session started at 5pm IST and continued for one and half hours on Google meet platform. About 35 participants, including IEEE EDS members, B.Tech students of various departments and faculty members participated in the webinar. The session highlighted Development of Computer Aided Diagnosis (CAD) Systems as an emerging research trend in recent years, as well as, the challenges in this field. At the end of his presentation, there was an interactive session, where many enthusiastic students and faculties took part to discuss possible research in this field. The entire session was very informative and beneficial for the interested participants. Our speaker cleared all the doubts of the attendees and has encouraged them to pursue further research in this emerging domain of Signal Processing Tools implementation for biomedical applications thereby indicating the success and impact of the webinar.
II. Student Paper Contest
1. Date: 26th June, 2020
Domain: VLSI device and circuits
Attendees: 65
Venue: online
Organizing Institute: IEEE ED MSIT SBC
Description: A student paper contest has been organized by the IEEE EDS MSIT SBC in association with the Dept. of ECE, MSIT on 26th June, 2020. Almost 31 papers have been presented in this event. Total 65 students participated out of which total 24 were the IEEE members. Total 26 IEEE EDS student members attended the paper contest. The contest has been organized to motivate the students towards the research of the VLSI device and circuits.

III. Technical Event
1. Date: 15.09.2020
Topic: Celebration of ‘Engineers Day 2020’
Attendees:
Venue: online
Organizing Institute: Techno International Batanagar
Type of sponsorship: Technically co-sponsored
Brief Description: Techno International Batanagar organized technical event through students’ activities to observe the Engineers’ Day 2020 on virtual platform on 15th
September, 2020. The event was technically sponsored by IEEE EDS Kolkata Chapter. Students demonstrated innovative project ideas and almost more than hundred fifty students participated in technical quiz competition. IEEE EDS Chair delivered motivating speech to encourage students.

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IV. Workshop
1. Date: 27th July, 2020
Theme: spread the awareness of IEEE membership
Attendees: 42
Venue: online
Organizing Institute: IEEE ED MSIT SBC
Description: A workshop has been organized for the 1st year students on 27th July, 2020 to spread the awareness of IEEE membership and also to involve them in the research of VLSI
Device and circuit design and modelling. Dr. Manash Chanda, Chapter Advisor, IEEE ED MSIT SBC and Dr. Swapnadip De, Counsellor, Student Branch were the key person of this event. Total 42 students from the first year have taken the membership of IEEE EDS after the event. Other students were also immensely benefitted and motivated by the talk of the Advisor and counsellor.

V. International Conference

1. Date: 18\textsuperscript{th}-19\textsuperscript{th} July, 2020

Event Name: International Conference IEEE VLSI DCS 2020

Attendees: 150

Venue: online

Organizing Institute: IEEE ED MSIT SBC

Description: 2020 IEEE VLSI Device, Circuit and System Conference (VLSI-DCS) has been organized by the IEEE ED MSIT SBC on 18\textsuperscript{th}-19\textsuperscript{th} July, 2020. The conference was dedicated to provide an international forum for researchers and participants to report up-to-the minute innovation and development and exchange ideas and advances in all aspects of VLSI device, circuits and systems. The response to the conference’s call for papers has been outstanding. Total 236 papers were submitted to our conference out of which 104 papers have been registered for presentation, after being peer-reviewed. Total 104 reviewers have been selected to provide a broad range of expertise, to balance junior and senior members, and to represent a variety of geographical locations. The reviewers have worked diligently to select papers and speakers that met the criteria of high quality and relevance to our various fields of interest. It takes time and a great amount of effort to review a paper carefully, and every member of the Technical Program Committee is to be commended for his or her contribution to the success of this conference. Total 20 Plenary and Keynote speakers deliver their talks and 32 distinguished Professors chaired 16 parallel technical sessions. More than 150 attendee were present in the program out of which 73 were the IEEE members. All the papers have been included in IEEE Explorer. Dr. Manash Chanda, Vice Chairman, IEEE EDS Kolkata Chapter acted as General Chair under the patronage of Techno India Group.

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2. Date: 25th - 26th September 2020
Event Name: Advances in Medical Physics and Healthcare Engineering
Attendees: 118
Venue: online
Organizing Institute: Adamas University
Type of sponsorship: Technically co-sponsored
url: http://science.adamasuniversity.ac.in/amphe2020/
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3. Date: 8th - 9th October 2020
Event Name: International Conference on Emerging Wireless Communication Technologies and Information Security
Attendees: 350
Venue: online
Organizing Institute: Amity University Jharkhand
Type of sponsorship: Technically co-sponsored
url: http://ewcis.in/
Description: The proceeding of the conference is published as a book series in Springer Lecture Notes in Electrical Engineering (ISI Proceedings, EI-Compendex, SCOPUS, MetaPress, Web of Science), Title of the book “Trends in Wireless Communication & Information Security”. Keynote speakers are Hiroshi Inokawa (Professor, Research Institute of Electronics, Shizuoka University, Japan), Ajith Abraham (Director, Machine Intelligence Research Labs, USA), Amit Banerjee (Department of ECE, National University of Singapore, Singapore), Arun K. Majumdar (Research Scientist, San Diego, California, USA), Celia Shahnaz (Professor, Dept. of EEE, BUET, Dhaka, Bangladesh Chair, IEEE Bangladesh Section), Jemal H. Abawajy (Professor at Faculty of Science, Deakin University, Australia), Lalit Garg (Faculty of Computer & Information Systems, University of Malta), Vijay Chatterjee (Scientist, CSIR, CEERI, Ministry of Science & Technology, Govt. of India). 82
articles are received, from which 42 are accepted. 3 technical sessions are organized, and best paper awards are given in each session.

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