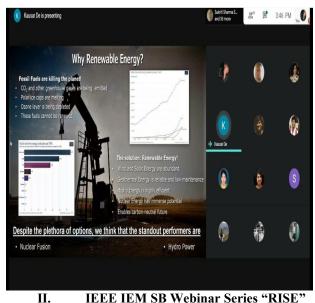
## **IEEE IEM STUDENT BRANCH "URJAA 2020"**

Venue: Institute of Engineering and Management, Kolkata (Virtual Mode) Date- 22<sup>nd</sup> November, 2020

URJAA 2020 was held on 22'nd of Nov, organized by IEEE IEM SB on the Google meet platform. The event started off with a welcome note by Spokespersons Aditya Pratyush and Sumedha Ghosh and an inaugural speech delivered by Prof. Nikhil Ranjan Das, ex-chair of IEEE Photonics Society, Kolkata Chapter and IEM's respected Principal Dr. Amal Kusum Nayak. The prestigious Dr. Mukul K Das (senior member of IEEE, Associate prof of Electrical Department, IIT, Dhanbad) graced the event as the Keynote Speaker of the Webinar on Emerging Trends in Solar Photovoltaic Technology, followed by a Power Point Presentation Competition on Renewable Energy.





**IEEE IEM SB Webinar Series "RISE"** 

Venue: Institute of Engineering and Management, Kolkata (Virtual Mode) Date-July-August, 2020

The IEEE IEM SB recently conducted a webinar series named RISE for the college students, which, later was extended to college students all over the nation. The aim of the series was to help students know about the recent ongoing in the field of technology and how people, like them, have adapted to this lockdown. Hence, we decided to invite speakers who are students presently or have graduated recently who have made a mark in their field and had an idea about the difficulties students might face during this time. Their presentation was followed by a Q and A session. We hoped having a less age gap between students and speakers would encourage our audience to be more open towards their doubts and difficulties they face in this lockdown. The event hosted 3 webinars and it was a success with the students and we received great feedback from both the students and the speakers.



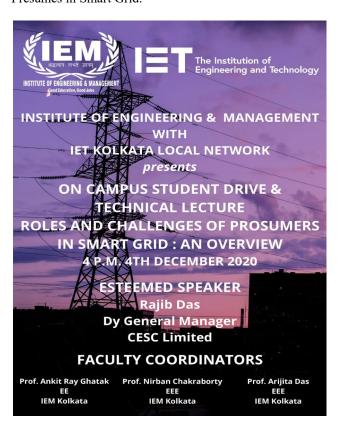




# III. Technical Lecture-The Institution of Engineering and Technology

Venue: IEM, Management House Date- 4<sup>th</sup> December, 2020

Faculties of EEE department organized and participated in Technical Lecture drive organized by IET Kolkata local network. The lecture was delivered by Mr. Rajib Das, Senior Manager, CESC Ltd on topic Roles and Challenges of Presumes in Smart Grid.



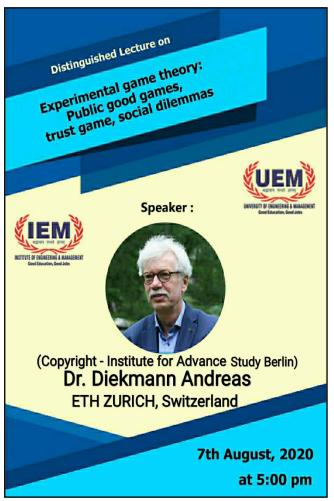
# IV. Distinguished Lecture Series

Faculty members from EEE department have taken initiative to organize and attend various distinguished lecture series using virtual mode on topics like Fundamentals of AI, Energy Storage with super capacitors, Big Data Analytics of Precision medicine, Experimental Game Theory, Plastic Recycling in the circular economy, The marriage between radio communication and Industry 4.0 and introduction to Social AI by Foreign Professors and Delegates.















V. IEEE IEM SB - TECH TALK

Venue: Institute of Engineering and Management,

Kolkata (Virtual Mode) Date- July-16, 2021

Speaker: Prof. Daniele Pucci, head of DIC-lab,

Instituto Italiano di Teachnologia Topic: Arial Humanoid Robot

IEEE IEM SB along with IEEE IEM Computer Society inaugurated its much-awaited Tech-talk series with a webinar on "Arial Humanoid Robot" by Prof. Daniele Pucci. The Tech Talk was inaugurated by Dr. Subhadip Basu, Chair of IEEE CS Chapter Kolkata Section along with Dr. Satyajit Chakraborty, Director IEM-UEM Group.

Dr Daniele Pucci is the head of DIC-lab, Instituto Italiano di Teachnologia. He presented the topic in a very attractive which enlightened all of us about Arial Humanoid Robots. He cleared all the doubts of the attendees. We had an interactive session with Dr. Daniele Pucci. He dived deep and also discussed about various technicalities involved in Robotics and even briefed about Artificial intelligence and Machine Learning implementations in the same and also discussed the future of Ariel Humanoid Robots.

We had a total registration of 155 attendees for the very first episode of Tech-Talk on Arial Humanoid Robots and attendees had gained insights about the same. It was pleasure to have all the attention from our attendees in the Tech-Talk. This event was held under the guidance of Dr. Senjuti Khanra; (faculty advisor) and cooperation of IEEE IEM Student Branch and IEEE IEM Computer Society to make it successful and peaceful.







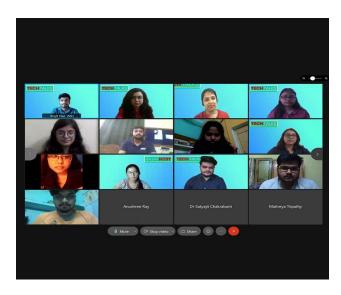












# VI. IEMCONNECT – INDUSTRIAL TALK

Venue: Institute of Engineering and Management,

Kolkata (Virtual Mode) Date- January-1, 2021

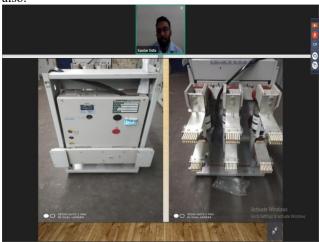
Topic: Power Plant Basics & implementation of

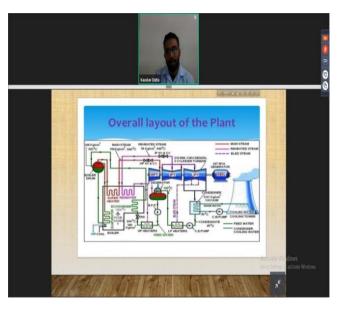
modern technologies in its various fields

Speaker: Mr. Kaustav Dutta, Executive Engineer

Mejia Thermal Power Plant (MTPS) under Damodar Valley Corporation (DVC)

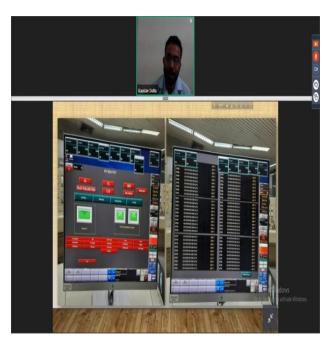
With the invention of the new technologies, the implementation of those technologies in the power plants is becoming an emerging topic. The main objective of this industry talk is to familiarized the students from different engineering domains with those new invention and also more importantly their application in power plant. We have over 150 student participant from different streams for this event. It was a very interactive session as the student was introduced not only theoretically but also able see those new technologies with live photographs. Students have also cleared their doubts from the speaker about the new technologies that has been applied in the industries. Students were looking forward to this kind of events in near future also.

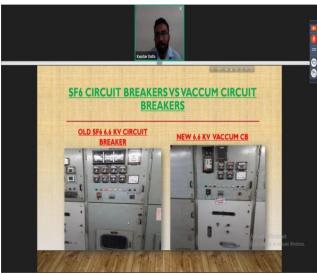




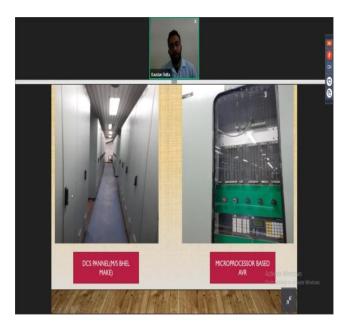












VII. WORKSHOP – SENSOR BASED IOT

Venue: Institute of Engineering and Management,

Kolkata (Virtual Mode) Date- March 6 - 7, 2021

Speaker: Dr. Tapan Kumar Jain

Professor, Head of the Department in Electronics and Communication Engineering at Indian Institute

of Information technology, Nagpur

The topic of the workshop included realizing the application of sensors in hands on projects, incorporating the knowledge of Microcontroller and its interfacing between microcontroller and circuit, understanding the importance of programming and executing the output through sensors Gaining hands on knowledge on Smart sensors and its working.

The workshop started with words from in house professors and dignitaries from IET. It was followed by a session on definition, importance, scope of IoT by the invited speaker. The second session of the same day was a hands-on session where the students were made aware of usage of Arduino Uno board and some sensors like Temperature sensor & Soil sensor. The session ended with some questions & answers.

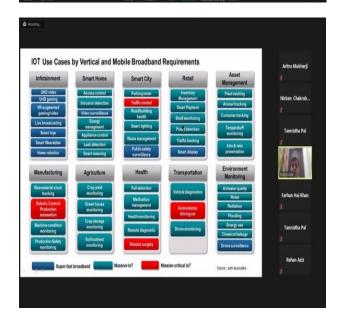
On the next day i.e., 7<sup>th</sup> March 2021, started with the 3<sup>rd</sup> session of the workshop. It was an informative & interesting session about the smart cities.

The fourth season was a hands-on session where the students were made aware of usage and connectivity in node MCU and BLYNK APP.

The workshop ended with a valedictory session and words from the faculty coordinators. The brain of loT, Analog and Digital Sensor World, Hands-on Arduino IDE, Hands-on Node MCU and BLNYK app were explained and demonstrated to the students throughout the two days of the workshop. About 47 students had attended the workshop, where 41 of them were IET members and rest were non IET.









#### VIII. IET - WEBINER

Venue: Institute of Engineering and Management,

Kolkata (Virtual Mode) Date- April 4, 2021

Topic: An overview of detecting and characterizing

Abusive speech in online social media

Speaker: Dr. Mainak Mandal, Assistant Professor, Department of Computer Science, IIT Kharagpur

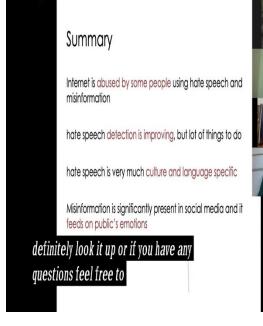
Dr. Mainack Mondal is an assistant professor of Computer Science at IIT Kharagpur. He completed his Ph.D. from Max Planck Institute for Software Systems (MPI-SWS), Germany in 2017. Prior to joining IIT Kharagpur, he was a postdoctoral researcher at the University of Chicago and Cornell Tech.

The present online social media platform is afflicted with several issues, with hate speech being at the predominant forefront. The prevalence of online hate speech has fuelled horrific real-world hate-crime. A deeper inspection into the profiles and network of hateful and non-hateful users reveals that the former is more influential, popular, and cohesive. Thus, the research explores the interesting facets of diffusion dynamics of hateful users and broadens our understanding of hate speech in the online world.









## IX. IEEE IEM SB – STACK, 2021

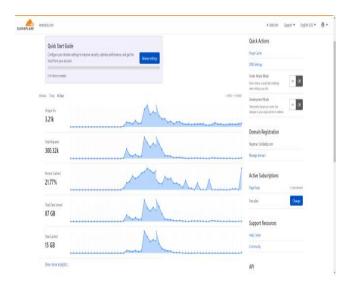
Venue: Institute of Engineering and Management, Kolkata (Virtual Mode) Date- April 30 – May 2, 2021

IEEE IEM SB has always been a leading center in the world of engineering, computing, innovation and technology. Every time it comes up with exciting opportunities and intriguing experiences for students through various webinars and competitions. In the advancing era of technology IEEE IEM SB presented an online event STACK (Science Technology and Computing Knowledge). STACK was a 3-day event (30'th April to 2'nd May 2021). It brought about an amalgamation of both technical and non-technical events, known as TRACKS. It was altogether a captivating experience that consisted of Talks, Panel discussions, Competitions, Case studies internships, and project opportunities. STACK reached out to students all around the country.

STACK was organized in association with our esteemed college IEM Kolkata and IEEE. We partnered with various other bodies within IEEE namely, IEEE Computer Society, IEEE Collabratec, IEEE Kolkata Section, IEEE Women in Engineering, IEEE SAC and other organizations- ET CASES (an initiative of Times of India) and saytrees. It was our immense pleasure to receive goodies like 150 pens, 50 webcam covers, 25 luggage tags and 5 universal cables from our collaboratec for the smooth running of the event.

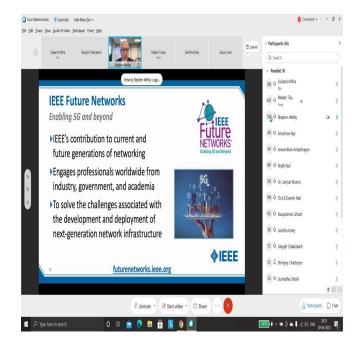
Stack had its dedicated website, updated with all the required details. It consisted of a detailed three days schedule, along with knowledge about all the keynote speakers as well as all the technical and non-technical tracks. The website also had a separate window named Quests where participants submitted their entries for the project presentation and Business case study competitions.





# DAY 1: INAUGURATION:

IEEE IEM SB which falls under region 10 came up with one of the most interesting event named STACK; It was inaugurated on Day-1 of the event it was scheduled from 5:30 PM- 7:30 PM on 30th April. It was our extreme pleasure to have onboard the IEEE President Susan Kathy Land who presided over and blessed us with her words of wisdom, afterward, we had the IEEE Executive Director Stephen Welby who honored us with his presence, and last but not the least we had IEEE Madras Section YP Chair Aravindhan Anbazhagan who graced our inauguration and boosted us up for the upcoming journey of STACK 2021. IEEE President Susan Kathy Land presided over, afterward, we welcomed the IEEE Executive Director Stephen Welby, IEEE India Council Chair Suresh Nair along with IEEE Madras Section YP Chair Aravindhan Anbazhagan, and Dr Satyajit Chakrabarti, Director of IEM Kolkata.





#### DAY 2:

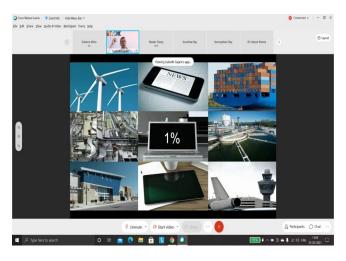
After a heartwarming inauguration Day, 2 had started with an air of enthusiasm and interactive season of Mr. Subodh Gajare followed by eminent speakers like Nagesh Setty, Mr. Hossam Ali, Dr. Mousiki Kar, Col Amit Verma.

### **DEMYSTIFYING AI/ML:**

The Webinar on 'Demystifying AI/ML - an industry deep drive' was scheduled from 10.30 AM – 12:30 PM on day 2 of STACK (1'st May). It was conducted by Mr. Subodh Gajare, AI/ML expert at Cisco R&D. He has been working at Cisco for over 15 years.

The attendees had a wonderful session regarding AI, ML, and other emerging trends. It was very interactive. The doubt clearing sessions were held in between with the completion of various topics under discussion. People were almost devoured of their doubts that if AI and ML rule the world in the future would it means a shortage of jobs. We were also given a brief introduction regarding cloud computing, data analytics, and how each of these falls under one such big umbrella.

The session ended with everybody keen and inclined towards learning all these emerging fields in the technological world.

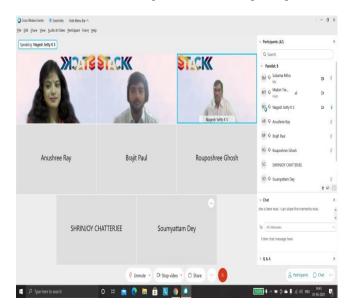


## IoT TECHNICAL TRACK:

The webinar on the **IoT Technical Track** was held from 2:30 pm up to 3:30 pm. We were enlightened with knowledge by eminent **Nagesh Setty** who is the founder and CEO at JLU Technologies (Industrial IOT Company). He is associated with Rugged BOARD Company as a Techno-Commercial Marketing Cum Trainer to Setup Rugged BOARD Coe's in Engineering Colleges. A strong legal professional from NTTF.

He greeted the attendees with warmth, followed by an introduction. He threw light on the fact that it is nothing but a list of technology services that are used to run a single application. He explained what is IoT technology and moved on to layers of IoT technology. It was a fortune for everyone who wanted to learn about IoT. He also discussed the opportunities in this field. Having such participation and an experienced speaker generated positive feedback for the webinar.

By the end of the webinar, we had a question-answer session followed by a rapid-fire round where the honorable speaker answered all the curious questions from the participants.



## **KICKSTART IN CYBERSECURITY:**

The webinar on the **Kick Start in Cybersecurity** was scheduled from 5:00 PM to 6:00 PM. This was discussed by the very eminent **Mr. Hossam Ali** who is the current Chair of IEEE Student Activities Committee. He has 8 years of hands-on experience in delivering ICT infrastructure and security projects. He was the winner of IEEE MGA Leadership Award.

He started by greeting the attendees and then gave an introduction. He threw light on the topic what is cyber security. He also discussed Security Architect, Ethical Hackers, Security Analysts, Forensic Analysts, and job opportunities. Having such participation and an experienced speaker generated positive feedback for the webinar.

By the end of the webinar, we had a question-answer session followed by a rapid-fire round where the honorable speaker answered all the curious questions from the participants.



#### **BENEFITS OF IEEE:**

The Webinar on the **Benefits of IEEE**; was scheduled from 6:00 pm-7:00 pm on Day 2 of STACK. It radiated knowledge about the benefits and advantages provided by IEEE. This was discussed by the very eminent Keynote Speaker **Dr. Mousiki Kar**, Chair of IEEE Electron Devices Society, Kolkata Chapter, and an Associate Professor, Dept. of Electronics and Telecommunication Engineering HIT Kolkata. She provided the attendees with complete exposure to the plethora of opportunities that IEEE provides and how one can make the best use of it to accelerate in his career. She talked about IEEE Spectrum, Collabratech, Sight, Reach, and IEEE Stem Portal among various other great platforms provided by IEEE.

It was a fortune for any technology enthusiast to witness the webinar and grab the opportunity to hear about the IEEE family. Having such participation and an experienced speaker garnered positive feedback for the webinar. By the end of the webinar, we had a question-answer session where the honourable speaker answered all the curious questions from the participants in detail and also shared pictures of various events organized by her as a Coordinator at IEEE EDS Centre of Excellence, HITK.



**LIFE LESSONS FROM THE ARMY:** 

The Webinar on the **Life Lessons from the Army**; was scheduled from 7:00 pm-9:00 pm on Day 2 of

STACK. It elucidated the art of discipline, leadership, and critical thinking. This was discussed by the very eminent Keynote Speaker Col Amit Verma, South Asia Head Security at Varun Beverages and Biz Resilience. Col, Verma served in the Kumaon Regiment for nearly 2 decades of his life.

He shared with the attendees, his life experiences which filled them with delight. He gave us ideas on the art of intelligence, strategic decision-making, and spontaneity. He also talked about the opportunities available for techies in the army. It was a fortune for anyone looking for self-improvement and a spirit of motivation and dedication. Having such participation and an experienced speaker garnered positive feedback for the webinar. By the end of the webinar, we had a question-answer session followed by a rapid-fire round where the honorable speaker answered all the curious questions from the participants.

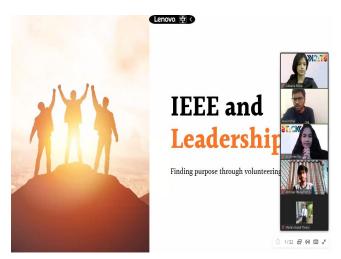


## DAY 3:

After all the enriching seasons by our inspiring speakers, we were looking forward to Day 3 to experience the best. We had Mr. Aravindhan Anbazhagan, Mr. Subhashis Banerjee, Sushmita Mitra, Sudeshna Choudhury, Sneha Chakraborty, Simran Khosla for Day 3.

## **IEEE & THE LEADERSHIP IT INCULCATES:**

This was the final day of our event STACK; the day was started with a non-technical track titled IEEE & THE LEADERSHIP IT INCULCATES the session was IEEE Madras Section YP conducted bv Chair Mr. Aravindhan Anbazhagan and was scheduled from 1:00 PM-2:00 PM. Besides that, he is also the Editor of chief, YP Impact blog, and IEEE MGA Young Professionals Committee. His lecture was quite prominent as well as he adopted a very interesting technique of switching platforms and activities to engage the listeners. In the very beginning he started with the question "Is leadership a noun or a verb" and then elaborated on leadership and walked us through his presentation describing the importance of IEEE in inculcating leadership skills, he also spoke about time management skills and explained the importance of connections. He also helped to build connections among the STACK participants through the LinkedIn platform. The session was indeed a very interactive one.



# MACHINE LEARNING TRACK:

The Webinar on 'ML for medical image analysis' was scheduled from 2:00 PM - 3:00 PM on day 3 of STACK. It was conducted by **Mr. Subhashis Banerjee**, from Uppsala University, Sweden. He has been working on the implementation of "ML for medical image analysis".

Mr. Subhashis started from the grass-root level where he gave us a brief introduction regarding medical images, how they are taken, and then a brief idea regarding how we can use ML in this process. Then we had a doubt clearing session. Followed by the opportunity for all the attendees to get a chance to work on a project at Uppsala University under the guidance of sir.

IEEE always have been bent over elevating new advancements in technology globally. In this event, STACK, IEEE decided to hold a webinar on applications of Machine learning in medical field, one of the leading trends, led by Dr Subhashis Banerjee from Uppsala University, Sweden. He later gave each of the attendees an opportunity to work under a project based on ML under the direct guidance of him. The attendees were asked to send their resume via a google form through which he will be choosing the candidates, who have had the proper pre requisites, will later be a part of such an amazing project

#### **IEEE PANEL DISCUSSION:**

This panel discussion marked the very last session of our event STACK. This panel discussion was on **WOMEN ACROSS GENERATIONAL WORKSTYLES** it focused on how women through ages were bearing the torch on education and enlightenment, how women evolved from being housewives to rule the world. The session was scheduled from 6:00 PM-7:00 PM but with a lot of interaction, the session was extended to an hour more. This

conducted by four special session was women Sushmita Mitra-IEEE Kolkata namely section Chair, Sudeshna Choudhury-IEEE Women in Engineering Kolkata section, Sneha Chakraborty-Founder of Let's bee and last but not the least Khosla-Nutritionist. These superwomen discussed their journey and taught us many vital lessons on how to face the world, they also enlightened us about IEEE Women in Engineering.



# TREE CERTIFICATE

A tree certificate was presented to all the speakers as a token of gratitude. It was in collaboration with "Say Tree" to increase the awareness of agroforestry all over India. It was a very thoughtful present as a sapling would be planted after the name of the speaker followed by providing all the details regarding the sapling coordinates, the farmer details, and e-certificates after the plantation. The farmers in collaboration with "Say Tree" would also audit and monitor these saplings for two years.



**CLOSING CEREMONY:** 

After three days of roller coaster ride, all the attendees of STACK gathered to discuss and speak up about the event and finally bid goodbye.



# **COMPETITIONS:**

STACK organized two fascinating competitions namely: Business Study (sponsored by ET CASES an initiative of Times of India) Project Presentation. In the Case Study, participants were given a business case - "IKEA IN INDIA: MARKET ENTRY STRATEGY" and asked to produce the best solution to a given set of questions in groups or individually. Their presentations were judged by Nagendra V Chowdary, head ET CASES. The presentation session was notably interactive and engaging throughout with a tough fight among the contestants. Eventually, the winning team was declared which consisted of Sumedha Ghosh. Diptashree Paul, and Raj Bose Roy followed by the runner-up team- Saranya Kumar, Srijita Sarkar, Tiyash Mukherjee, and Venkatesh Banerjee. In the Project Competition, the contestants had to make a presentation with a voiceover on any one of the technical TRACKS of STACK that are, ML, IOT, Cybersecurity, and Robotics. The panel of judges comprised Somak Bhattacharya (Assistant Professor, Electronics Engineering, IIT-BHU) and Amlan Chakrabarti (Professor and Director, AK Choudhury School of IT, CU). Sricheta Parui emerged as the winner followed by Deborsi Basu as the runner-up. Both the competitions allotted exciting prize money of Rs.1500/- for the winners and Rs.1000/- for the runners-up.



**ORGANISERS** 

The entire event was organized virtually on the Cisco WebEx platform. Few technical glitches were faced but the IEEE IEM SB committee managed to work efficiently despite all adversities, as a unit, making STACK a magnificent success and an event to remember. This would have been impossible without the constant support of the volunteers and all the members of the IEEE IEM Student Branch. In association with Computer Society Kolkata Section.



XII. IEEE IEM SB – LA VIE EN

Venue: Institute of Engineering and Management, Kolkata (Virtual Mode) Date- December, 2020

La vie en 2020 had been organized by IEEE IEM SB to uphold our precious little moments and cherish them in a new way. It was held in the month of December 2020. Participants could submit their videos entries from 24<sup>th</sup> of December till mid of January 2021.

The unique event gave a touch of competitive excitement to our monotonous life in our home. In this competition participants were supposed to make a video of maximum three minutes of their lock down experiences of 2020. Participation fees was only Rs50/- and it was absolutely free event for IEEE members. We also had exciting cash prize worth Rs.1000/-.

Life can only be understood backwards; but it must be lived forwards. This is exactly what we came up with wonderful presentations of all the participants. Without reflection, we go blindly on our way, creating more unintended consequences, and failing to achieve anything useful. La vie en 2020 had been crazy and absolute fun. For the shake competition we are declaring our winners: Anushree Ray, from IEM Kolkata and two runner ups are Riddhi Saraya, from Hem Sheela model school and Divyaa Lakshmi, from BITS Pilani campus, in La vie en 2020.