# **IEEE Student Branch NSSCE**

# **EVENTS**

# **XPERION**





Xperion was the dreamship event of IEEE SB NSSCE hosted by 9 technical societies in the Student Branch powered by IEEE Students. The 4 Day, 3 Night event was primarily focused on the advancement of the theory and practice of engineering in the development, design, manufacture and application of electrical systems, apparatus, services, health, and safety issues, creation of voluntary engineering standards and recommended practices and the professional development of its membership. It exhibited technical talks, sessions, 4 parallel hackathons with workshops, 2 Parallel Industrial Visits, along with 3 Cultural events, including the traditional art forms that are fading away.

#### **LEARNIUM**





JULY-DEC 2020

Learnium is a series of student oriented handson Continuous Training Sessions organised by IEEE SB NSS College of Engineering Palakkad. Learnium offers training sessions in selected topics 3-4 hours a week.



Learnium is a series of student-oriented Continuous Training Sessions aimed at providing an effective platform for every Engineering Student. The series is comprised of 4 episodes, in various domains of Engineering along with a Career-oriented session. The sessions were handled by professionals in the domain, who were also a part of the alumni of NSS College of Engineering.

E1: Making a Power Move
E2: Hands-on OTT Backend

E3: Hands-on Virtual Instrumentation.

#### **MAGAZINE LAUNCH**



IEEE Students Branch NSS College of Engineering released the first-ever technical Magazine of the year. It is a book of unforgettable memories & things that should not be forgotten. Read at ieeesbnssce.org/magazine

#### **MALABAR HUB MEET 2018**

IEEE Malabar Hub hosted its premier event Malabar Hub Meet'18 on 27-29th July 2018 at NSS College of Engineering, Palakkad with about 200 participants and 40 volunteers

MHM'18 began its endeavour on the 27th of July and rose to 3 days successfully till 29th of July 2018.



The inaugural ceremony of MHM'18 commenced at 4:00 PM on 27th July with a prayer followed by 'IEEE Code of Ethics' by Mr Arun K R (Chairman, IEEE SB NSSCE). The welcome speech was delivered by Dr Leesha Paul (Branch Counsellor, IEEE SB NSSCE). Dr SudhaT (Principal, NSSCE) delivered the presidential address which was followed by the lamp lighting ceremony. Dr Gopakumar A (Chairman IEEE Malabar Subsection), who was the chief guest of the day, then officially declared the event inaugurated through his inaugural address. Dr Anzar SM (VSAC, IEEE Malabar Hub) and Dr Vasanthi V (IAS Chapter Advisor, IEEE SB NSSCE) then addressed the gathering. Dr Anzar SM pointed out the vivacity shaped among the students of Malabar Hub and appreciated each and every volunteer who worked hard to gather this huge crowd. The vote of thanks was then delivered by Mr Muhammed Faiz K (Student Representative, IEEE Malabar Hub).

The inaugural ceremony was followed by a technical talk session by Mr Harikumar K P, Assistant executive engineer, KSEB Kalammasery. Being an experienced hand of around 20 years as an electrical engineer in the fields of transmission, distribution and communication in KSEB, he enriched our participants by imparting his knowledge in IoT and home automation systems.

The second began with the workshops which continued to the final day. Various workshops namely, Text Mining, Alexa, Engine Overhauling and Crack the interview, were arranged for the participants. The event was wrapped after a closing ceremony on 29th July 2018.

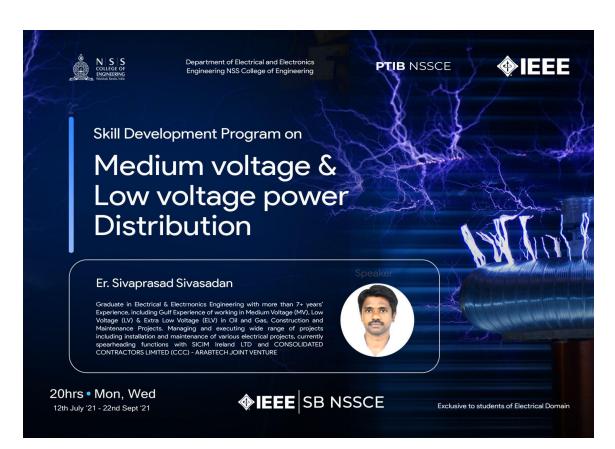
#### THUS SPOKE ENGINEERS

IEEE SIGHT group NSSCE in collaboration with APJ Abdul kalam technological university presented an exclusive 4-day webinar "THUS SPOKE ENGINEERS" for plus 2 graduates from 28 July 2020 to 31 July 2020. Each day was a 3 hr session which was broadcasted live on YouTube where each speaker enlightened the engineering aspirants regarding their respective branches. All recordings are updated in the Thus Spoke Engineers Playlist in the official youtube channel, click <a href="https://example.com/here">here</a> to watch online.



### SKILL DEVELOPMENT PROGRAMME

IEEE SB NSSCE in association with the Placement Cell of NSSCE conducted a set of Skill Development Session under Departments of Electrical and Electronics Engineering, and Department of Instrumentation and Control Engineering to have a comprehensive industrial exposure in the two domains. The 15 and 25-hour sessions, which lasted for 45 days was exclusively handled by Er. Sivaprasad, who is an experienced Engineer, in the respective subdomains.





#### **ENCRYPTA 1.0**



Encrypta € 1.0 is the first-ever coding code in the journey of IEEE SB NSSCE. The event was scheduled as a part of the IEEE day celebration. Wide publicity was given for the event inside and outside the campus. The main objective of the programme was to improve the coding skills of the students and spread the spark of IEEE day. The event was conducted in 2 days with 3 phases. The preliminary phase was Ekachakra, the second phase Panchachakra, and the final phase Chakravyuha. Phase 1 was conducted on 11th October 2018 in DLH Hall at 4 pm. Many students participated in this phase of which 13 students were selected for the next phase. In the Ekachakra, students were given 3 questions for 15 minutes, the students who got the correct output were selected for the Panchachakra. Phase 2 were held on 12th October at 1 pm, in this 5 questions were given for 45 minutes. The students who cleared this round were selected for the final round. Phase 3 Chakravyuha was conducted on the same day with 6 students at 4 pm. In this students were given 2 questions for 10 minutes and finally, Akarsh Ashok of S3 Computer Science Department won the title " THE ENCRYPTER ".The winners of the competition were given

amazon gift cards. It was a successful event and it revealed the intelligent coding skills of students. A review meeting was held after the whole program with the executive members. The program was evaluated as a successful program by the executive committee.

#### **ENCRYPTA 2.0**



The flagship coding event of IEEE SB NSSCE, Encrypta<2.0>, the national-level coding contest was conducted in the year 2019 with greater support from students of all walks of life. The event was anchored under the aegis of CS SBC NSSCE.

The coding competition comprised of three phases as follows:

- Ekachakra: The Phase I of Encrypta<2.0> in which more than 170 participants across the country tested their coding skills. The event was held on 14th of September as an Online coding contest.
- Panchachakra: The second phase was exclusively for the top thirty teams who cleared the first round 'Ekachakra'. Phase II was hosted in NSS College of Engineering Palakkad on 28th Sept 2019. The winners tested their final skills in the Phase III round,
- Chakravyuha: The third and final phase of the coding contest witnessed an intense battle between the contestants which opened a totally new horizon to the participants.

Phase II and Phase III of the Encrypta<2.0> was held at NSS College of Engineering, Palakkad on 28 Sept 2019. The duration of the competition in Phase II was three hours. The top five winners of this stage moved to the last and final Phase III. The competitors faced strenuous coding exercises and this was really an eye-opener and experience for the competitors.

The top three winners were

- 1) Jane MJ & Abhilash N
- 2) Adharsh M
- 3) Ajai Nair



The first prize was Rs.10000, the second was Rs.5000 and the third prize was Rs.2000. The valedictory function was decorated by two guests from the industry. Dr Sreekanth Madhavan, CEO Kabani Tech and Ms Anju EPS, Wipro addressed the gathering and distributed the prizes. Prof Vijitha S and Asst Prof. Nimitha Muraleedharan felicitated on the occasion.

# **Webinar on Competitive Coding**

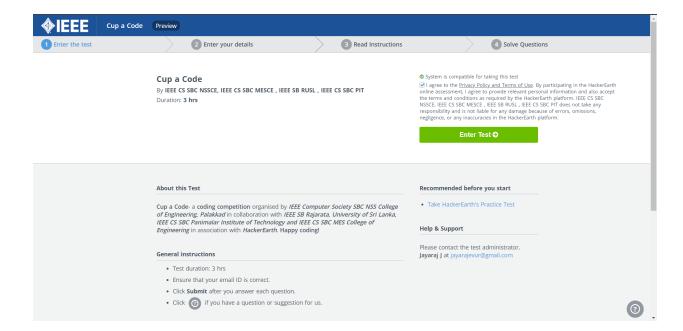
The Computer Society Chapter of IEEE SB NSSCE in association with Coding Blocks conducted a Webinar on 'Competitive Coding'. The total strength of 90 participants attended the webinar from various sections. The session was headed by Mr Apaar Kamal, the mentor at Coding Blocks. As a person in the present field of coding, he was able to show all the necessary lessons and also some of the advanced levels. The session mainly included Segment Tree hence covering the basics of Data Structures, divide and conquer approach, theoretical time complexities etc. The practical and efficient solutions were also shown. Moreover, the different applications of the segment tree both in practical uses and its

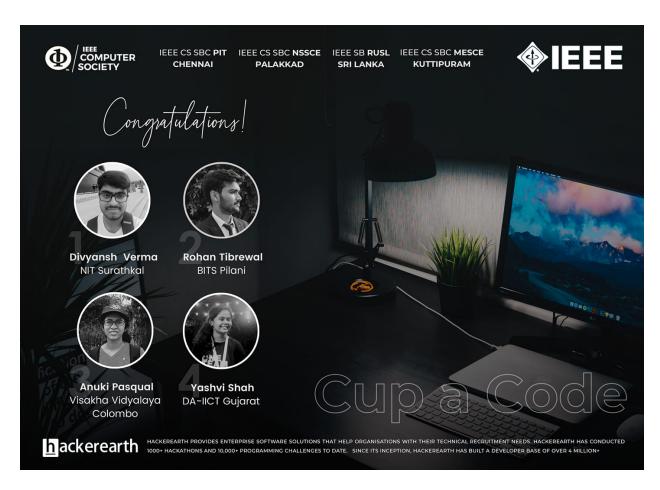
implications were shown. Hand-drawn examples were also shown so that the participants would be able to understand more.



## Cup a Code

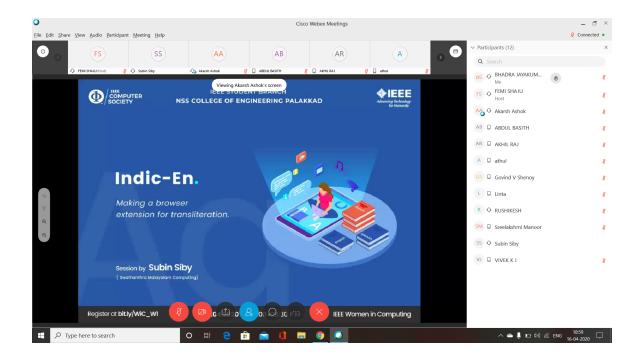
IEEE CS SBC NSSCE conducted a global coding competition- Cup a Code in collaboration with IEEE CS SBC MESCE Kuttipuram, IEEE SB RUSL Sri Lanka, IEEE CS SBC PIT Chennai. The competition was conducted online in association with "HackerEarth". It was a 3-hour coding contest where participants were allowed to choose between any given timespan. The event provided participant's to try their hand at many kinds of coding problems and submit their solution in the language of their own choice. A wide variety of programming languages has been made available for the participants to choose from.





# Webinar Session On Indic- En: Making a Browser Extension For Transliteration





The IEEE Student Branch of NSS College of Engineering in association with Women in Computing of the Computer Society Chapter conducted a Webinar session on "Indic-En: Making a Browser Extension for Transliteration". The session was handled by Mr Subin Siby, an active Development Volunteer of Swathanthra Malayalam Computing (SMC), which is a free software collective engaged in the development, localization, standardization and popularization of various Free and Open Source Softwares in the Malayalam language.

#### **AKIASSC 19**



IEEE IA/IE/PELS Jt. Chapter Kerala and IEEE IAS SBC NSSCE organized the first edition of All Kerala Industry Applications Society Student Conclave 2019 (AKIASSC'19) from 8th to 10th February 2019. The event was held at NSS College of Engineering Palakkad, Kerala. The core aim of conducting AKIASSC is to foster technological innovation and excellence for the benefit of humanity. There were 130 delegates from 23 various engineering colleges all over Kerala and Tamilnadu.

The AKIASSC'19 offered a platform to innovate the minds of the budding engineers through various programs such as informative meetings, technical talks, motivational talks and interactive sessions with foremost industrial experts. The event provided the students with information such as the benefits of being an IAS student member, volunteer and leadership roles in the chapter activities, avail travel opportunities, IAS Annual meetings, and Awards etc. The participants got the best opportunity to network with IEEE Senior members & experts in the Industrial field, to be mentored by them in their field of interest and explore internships through personal contacts. The various activities and workshops during the event helped students to improve their technical knowledge, managerial skills as well as personal skills. This provided a professional development source for the students.

Exposure to the real-life industrial world is one of the key elements emphasized in the event outcome. AKIASSC'19 provided students with industrial visits to enable them to understand the practical and real-life aspects of the knowledge they have earned in classrooms. Students had the opportunity to see the large-scale industrial processes and equipment as well as real-life engineering practices. The best volunteers and student branch Chapters awards were also distributed during the event.

## **Section Distinguished Lecture Programme on Machine Learning**

IEEE IAS Student Branch Chapter NSS College of Engineering Palakkad and IEEE Kerala section on collaboration with ELACSTA jointly organised an SDLP (Section Distinguished Lecture Program) on Machine Learning by Dr Deepak Mishra From IIST Trivandram. The session gave a brief understanding of various classification algorithms for machine learning and the implementation of deep neural networks.



IEEE IMS DLP on Advanced Reliability, Availability and Safety Design tools for Industrial Applications



IEEE Instrumentation and Measurements Society Student Branch Chapter NSS College of Engineering organized its first Distinguished Lecture Program on 27th September 2020 on the topic Advanced Reliability, Availability and Safety Design tools for Industrial Applications. Dr. Marco Mugniani was the Distinguished Lecturer for the session. Prof.Marco Mugnaini Assistant Professor at the University of Siena (Manager of the electronics training lab.), University of Siena, Italy, and the award recipient for the best National Ph.D. thesis in the maintenance context from CNIM (National Italian Center for Maintenance). He is the author and co-author of more than 90 papers in International peer-reviewed journals and conferences and of 5 national and international patents.

The virtual Distinguished Lecture Program was streamed live on youtube on the Student Branch's Official Youtube Channel mainly focused on educating students, across the globe regarding the most recent scientific and technological trends in Instrumentation and Control Engineering.

Watch the DLP at IMS SBC NSSCE DLP

#### ROBOSANTIZIER

As part of the Robo Santiizer challenge hosted by IEEE PES Kerala Chapter, a Robo Santizier was successfully built and implemented in the Muvattupuzha Police Station by Mr Abhinav Rajeev on behalf of IEEE PES SBC NSS College of Engineering. Watch more

#### **IEEE PES DLP ON SCADA**



Da oru single para content, nihalimthiaz632000@gmail.com

**HOW I MADE IT** 



How I made it was a series of experience sharing sessions organised by IEEE Robotics and Automation Society of NSS College of Engineering. It comprised of 9 episodes, of interactive experience sharing between Engineers, who successfully put forward and developed a product. The whole playlist of How I Made it, is published on the youtube channel. Click here to watch

#### MINUTIAE





Minutiae was a grand two-week long event conducted by Wie AG NSSCE in association with various societies of IEEE SB NSSCE to celebrate International Wie Day. It was packed with sophisticated webinars taken by experts from the industry and various offline competitions.

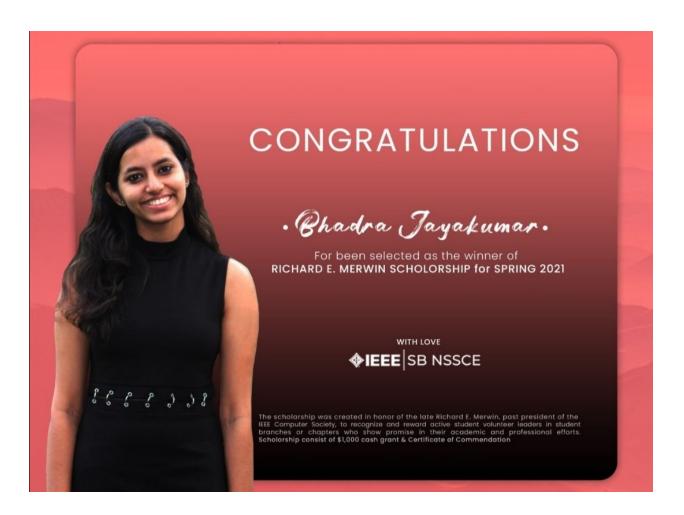
#### **WIESDOM**



WiEsdom is a long term initiative by WiE AG NSSCE in which we conduct week-long hands-on online sessions exclusively for women in the most in-demand technologies like photoshop, web designing, Matlab and many more. Each session is handled by the experts in respective fields in the simplest manner at its maximum effectiveness.

#### **ACHIEVEMENTS**

# Richard E. Merwin Student Scholarship



Bhadra Jayakumar of 2018-22 Batch bagged the Richard E. Merwin Student Scholarship 2021. It is intended to recognize and reward active student leaders in Student Branches or chapters who show promise in their academic and professional efforts.

## **Regional Exemplary Student Branch**



**IEEE Student Branch NSS College of Engineering** societies and students received lots of awards and recognitions in the year 2020 including the prestigious **Regional Exemplary Student Branch** of Region 10 (Asia Pacific).

IEEE IAS SBC NSSCE received the Outstanding Small Chapter Award in the year 2020. IEEE IMS SBC NSSCE conducted the second IEEE IMS Distinguished Lecture Programme - India Council, which was the first in Kerala Section in 2020. IEEE VTS SBC NSSCE is the first IEEE Vehicular Transportation Society Student Branch Chapter - Region 10 Asia Pacific. The year 2020 proved to be very successful and eventful for IEEE SB NSSCE.

## **MDI Project**



The MDI project, that was conducted under the leadership of our PES chairman Mr Abhinav Rajeev at the tribal colony of ishwaramannu was a great achievement for the SB this year. The project, which was named 'Lights for Working Hands ' was aimed to electrify 5 houses of the colony. The crew consisted of 25 members, who were divided into five groups. Each selected house was given three 9W bulbs, 11W tube light and 14W fans. Beyond the explorations in the technical field, the project that brought light to the lives of those families also delivered the team, the satisfaction of social commitment. The MDI project thus stands out in the success path of the SB so far, for the very same reason.





## **HAC Project**



The IEEE SB NSSCE in association with Power and Energy Society (PES) was given the opportunity to do the IEEE PES Humanitarian Activities Committee Project (HAC project) "Renewable and sustainable empowerment for the needy". This was proposed by a team of five student members- Ms Sreelakshmi S Aji, Ms Thanusha J, Ms Annmary Joseph and the Current Vice-Chairman of our IEEE SB Chapter, Mr Abhiraj V S. The team won the IEEE PES HAC competition on 10<sup>th</sup> October 2018 and was one among the three internationally selected project. The project was successfully commenced on the 30<sup>th</sup> of March 2019. With the full support from the Chapter Advisor, Assistant Professor Mrs Nimitha Muraleedharan and from our mentor, the current Chairman of our IEEE SB Chapter, Mr Abhinav R, the project was a success.