IEEE BANGALORE Section Report

A.1 Executive Summary

- Section Executive Committee Member List

Dr. P Deepa Shenoy	Dr. Kaushik Basu	Balaji B G
Dr. Aloknath De	Dr. Sriraam Natarajan	Senthil Kumar
Dr. Navin Kumar	Neha Kumari	Ajit Bopardikar
Dr. Chandrakanta Kumar	Ravi Hosmani	Bindu A Thomas
Dr. Prasant Mishra	Anandi G	Dr. Annapurna Patil
Chengappa MR	Devesh Dwivedi	Dr. Ashwini Appaji
Dr. Abhishek Appaji	Soma Pandey	Divya M G
Ashok Das	Dr. Annappa B	Pruthvi Raj R
Dr. Pushpa Mala S	Dr. Muralidhara V N	Rashi Srivastava
Ashwini Holla	Ketan Keshava	Bindhumadhava B S
Kishore Kumar Sharma	Nagalekha Ramesh	
Raghavendra Prasad S G	Dr. Ramakrishnan Raman	

- Section Highlights

The Bangalore section is one of the dynamic and most vibrant sections not only in India but at the global level. Our volunteers show professionalism in the activities and tasks they perform. Volunteers of the section have been engaging and volunteering at regional and global levels. With overall membership of 12,108; the section remains in the top 3 positions globally. Leveraging the benefits of the industrial hub, a very good representation of industry is visible. At the same time, student representations and professionals from academia are equally balanced. While the global trend of membership has been almost steady, the section has seen around 8-10% growth.

The section had adopted voting for Chair-Elect, the first time through the amendment of Bylaws, it was decided to go for the voting and Dr.Alolnath De was elected as the Chair-Elect 2022. The year 2022 started with AGM where the slate committee elected 15 volunteers with Dr. P Deepa Shenoy as the chair. The chair has very rich experience in volunteering and administration. Dr. P Deepa Shenoy set many goals for the year and gave a brief of them in the very first ExCom meeting on Jan 9. 2022. The team aligned with her vision and assured her of full support for mission 2022. Some of the key achievements during the year are: Maintaining the membership growth rate; some of the initiatives started this year were - adopting a Government School by Student Branches which was taken very well by more than 20 student branches. The Scholarship program to identify students, based on Merit, Means, and Volunteering, was started and more than 150 applications were received. 25 scholarships were given to the student members of various student branches.

The section stands third in the globe with 12,108 members out of which 4,854 are professional members and 7,254 area student members. We started the year with the oral history program to interview life fellows of the Bangalore section and completed four interviews. The three flagship events of the Bangalore section were conducted successfully.

The flagship conference of the section Eighth IEEE International Conference on Electronics, Computing and Communication Technologies – CONECCT 2022 was conducted from July 8th to 10th in hybrid mode. The conference received 500+ papers from India, the USA, Singapore, Iran, Dubai, Bangladesh, and Pakistan of which 200+ high-quality papers were selected for presentation across 25 technical tracks. The conference

witnessed keynote speeches, invited lectures, and plenary talks from eminent speakers. 25 chapters/societies/councils and AGs participated in the conference and for the first time, a small grant was given as a token of appreciation to each of them based on the number of papers reviewed. The registration amount for UG / PG / Ph.D. Students were kept as low as Rs. 1,500 to encourage them to participate in research. BHTC 2022 was conducted in physical mode on October 1st and 2nd at IISc, Bangalore. The theme for this year was SDG 12 – Responsible Consumption and Production. More than 250 participants, mainly students, attended this event. Some of the themes covered by the eminent speakers are Management and Use of Natural Resources, Responsible Consumption, Circular Economy, Relevance of Gandhian Thoughts on Sustainability and Self Reliance in Current Times,and Community Problem Solving. There was a project and poster demo competition based on the theme of SDG 12. Students from various parts of the State participated in the competition. The third flagship event Bangalore Technology Conclave (BTC) was held on the 4th and 5th of November in hybrid mode. The theme of the conclave was Metaverse. Day 1 was in online mode with WIE inviting speakers from various organizations and YP managing the Training Workshop by LumosLab. Day 2 was in physical mode by various eminent speakers covering the topics of IoT and 5G, Web 3.0, AR, and Blockchain for Metaverse. The day concluded with a panel discussion on How to Make Metaverse Happen. This event was attended by more than 150 enthusiastic participants. Our sponsors Boeing, Qualcomm, Radisys, Honeywell, and Dozee helped us to conduct the events of the IEEE Bangalore Section comfortably. This year, we tried to involve the sponsors in various committees of the flagship events and also invited them as speakers.

This year the fourth flagship event, Hackathon – Go AI for Social Good was started and was conducted at C-DAC on the 11th and 12th of June 2022. A total number of 24 teams participated in the hackathon with 75 students. Access to NSM PARAM Utkarsh facility at C-DAC Bangalore was provided for the teams for model building on GPGPUs. Some of the topics covered were AI for Healthcare, Mental Health, Agriculture, and Cyberbullying on Social Media. Some of the initiatives started this year are adopting a Government Schoolby SBs which was taken very well by more than 20 student branches. The Scholarship program to identify students, based on Merit, Means, and Volunteering, was started and more than 150 applications were received. 25 scholarships were given to the student members of various student branches. The non-technical events of IEEE Bangalore to mark Environment Day on June 5th and Yoga Day on June 21st were huge successes. IEEE Bangalore Section also got Ten Awards this year at the National and International levels

- Major Events (International, National)

International Conference on Electronics, Computing and Communication Technologies, CONECCT 2022, the flagship conference of the IEEE Bangalore Section in its 8th edition was held from JULY 8-10, 2022 in Hybrid mode. The conference featured plenary talks, workshops, and invited papers by distinguished researchers and technologists as well as contributed papers from academics and industry professionals. The CONECCT 2022 served as a platform for technologists, researchers, business captains, and industry leaders across the globe to share their ideas on emerging technologies and newer solutions that can guide and lead toward a better tomorrow. The conference featured plenary talks, workshops and invited papers by distinguished researchers and technologists as well as contributed papers from academics and industry professionals. The CONECCT 2022 was a platform for technologists, researchers, business captains and industry leaders across the globe to share their ideas on emerging technologies and newer solutions that can guide and lead towards a better tomorrow. Authors were allowed to present the papers Online/in Virtual mode. CONECCT 2022 witnessed 600 global participants

The Key Takeaways were as follows:
- ✓ More than 370 papers were presented in 25 tracks.
- ✓ Creative insights were provided on the papers and were given tremendous thoughts spread through sessions.
- ✓ More than 7 plenary talks and 17 Invited talks made the event a learning arena for attendees.
- ✓ Quiz games were conducted in the middle, winners were awarded a payback of the amount.
- ✓ Every Track winners were awarded with 10000 and 5000 respectively as cash prize.

IEEE Bangalore Technology Conclave, BTC 2022, is a flagship event of the IEEE Bangalore Section, organized in collaboration with its two affinity groups - Women in Engineering (WiE) and Young Professionals (YP). It is held annually as part of the Industry Relations program of the Section; where technology leaders, innovators, entrepreneurs, and thought provokers share their passion in addressing impactful problems, and vision on futuristic technologies that will/may disrupt/impact our way of working and living. This edition of IEEE BTC was based on the theme of Metaverse with a specific focus on:

- ✓ AR/VR/XR
- ✓ IoT, 5G, Web 3.0
- ✓ AI, Blockchain

BTC 2022 was held on November 4 & 5, 2022, Day one online and 2nd day in the Chancery Pavilion, Bengaluru. The inaugural session was opened with an overview of the conference by Dr.Aloknath De. The session was concluded with a Vote of Thanks by our very charismatic IEEE Bangalore Section Chair, Dr. Deepa Shenoy.

The IEEE Bangalore Humanitarian Technology Conference, B-HTC 2022 is a flagship event of the IEEE Bangalore Section. It is held annually as part of the Humanitarian outreach program of the Section where technologists, innovators, entrepreneurs, and thought leaders share their passion in addressing the pressing problems, and share vision on futuristic technologies that will/may disrupt/impact our way of working and living. 2022 editions of IEEE B-HTC focused on the theme of SDG-12 are meant to ensure good use of resources, improve energy efficiency, create sustainable infrastructure, provide access to basic services, as well as, green and decent jobs, and ensure a better ability of life for all. The conference specifically focuses on:

1. Sustainable management and use of natural resources
2. Responsible management of chemicals and food waste
3. Substantial reduction in waste generation
4. Encourage companies to adopt sustainable practices and sustainability reporting

BHTC 2022 was held on October 1 & 2, 2022, at the National Institute of Advanced Studies, Indian Institute of Science Campus.

- Major Chapter Activities

The AI Symposium and Hackathon - Go AI for Social Good was a two-day event jointly organized by IEEE Bangalore Section and C-DAC Bangalore. The event took place on June 11th and 12th, 2022 at the C-DAC Electronic City campus, in Bangalore. The inauguration of the AI Symposium and Hackathon took place on 11th June. The Inauguration was followed by the AI Symposium.

The symposium was fully oriented toward AI/ML/DL with speakers from Industries and Academia. The Hackathon enabled innovative young minds to solve intellectual tasks using AI for problem-solving by decision-making. The Hackathon was exclusively for UG and PG students across India. It called for the submission of project proposals focusing on tackling important social, environmental, mental health, agriculture, and public health challenges that exist today using AI. The participants also had an opportunity and hands-on experience in using National Supercomputing Mission's supercomputer "PARAM Utkarsh" deployed at C-DAC Bangalore.

This event was technically co-sponsored by the following:

1. IEEE Power & Energy Society Bangalore Chapter
2. IEEE Computer Society Bangalore Chapter
3. IEEE Special Interest Group on Humanitarian Technology Bangalore Section
4. IEEE Industry Application Society
5. IEEE Technology and Engineering Management Society Bangalore Chapter
6. IEEE Women in Engineering AG Bangalore Section
7. IEEE Vehicular Technology Society
8. M. S. Ramaiah University of Applied Sciences

IEEE PES Bangalore chapter sponsored the first prize of Rs 25000/- and CS Bangalore Chapter sponsored the second prize of Rs 15000/-

The AI Symposium was scheduled for 11th June 2022 The Inaugural address was given by Sri. Bindumadhava, Senior Director, C-DAC, Bangalore followed by expert talks from distinguished speakers Dr. Prasant Misra, Senior Scientist, TCS Research, Bangalore; Dr. S. D. Sudarsan, Executive Director C-DAC Bangalore; Dr. Dinesh Babu J, Associate Professor, IIIT-Bangalore and Dr.Navin Kumar, Professor, Amrita School of Engineering, Bangalore. The MC was Dr. Abhishek Appaji and the Vote of Thanks was proposed by Dr. Kumudhini Ravindra. The symposium was attended by over 250 participants in hybrid mode.

The best team from CMR University, School of Engineering and Technology was awarded a cash prize of Rs.25,000 for their prototype done on "Sign language interpreter using ML and NLP", 2nd prize of Rs.15,000 was given to students from RV College of Engineering for "Covid-19 Smart door using Rpi", and 3rd prize of Rs.10,000 for "AI-based Automated Mobile Cataract Screening System" to the team from Amrita School of Engineering. Two consolation prizes worth Rs.5000 each were given for "Detection of Criminal

Activities/Criminal through Public CCTV by analyzing live footage" to the team from Ramaiah Institute of Technology, Bengaluru, and for "AI for Mental Health" to the team from Amrita School of Engineering, Bangalore. Certificates were awarded by Dr. S. D. Sudarsan and Dr.Aloknath De to all the participants and the winning teams.

- Awards
  We are pleased to inform you that this year IEEE Bangalore section members have won various National, Regional, and International Contests/Awards. We are proud of their achievement and wish them all the best in future endeavors.

  IEEE regional exemplary student branch award 2022
  - ✓ R.V College of Engineering
  - ✓ Siddaganga Institute of Technology
  - ✓ Central University of Karnataka
  - ✓ Visvesvaraya Univ of Engineering
  - ✓ B.M.S College of Engineering

  India council awards
  - ✓ Outstanding Volunteer (>35 Years): Chengappa M.R
  - ✓ Outstanding YP Volunteer: Yeshwanth L.M
  - ✓ Outstanding Student Volunteer: Aniketh Shenoy

  Indian Institute of Science Student Branch was awarded with
  Darrel Chong Student Activity Award 2022

  Gogte Institute of Technology WIE Student Branch Affinity Group won
  2022 R10 Women In Engineering Outstanding Student Branch Affinity Group Award

  IEEE Bangalore Section SIGHT Group won
  2022 R10 Humanitarian Technology Activities Outstanding Section Award

  IEEE Bangalore Section won 2nd Prize in **"Sections Spotlight"** organized as part of the All India Students Young Professionals Women in Engineering Life Member Congress 2022, held in Pune, Maharashtra on 7th-9th of October 2022.

  IEEE Bangalore section student volunteer Subramanya Navada K R won first place in **IEEE ITSS Logo Design Competition**.

A.2 Financial Report

The Institute of Electrical and Electronics Engineers
(IEEE- Bangalore Section)

Balance Sheet as at

Particulars	Schedule	31-Dec-22 Amount (Rs.)	31-Dec-21 Amount (Rs.)
I. SOURCES OF FUNDS			
1)Funds and Reserves			
Corpus		20,000	20,000
Committed Funds		-	-
Uncommitted Funds			
General Reserve	2	2,01,85,239	2,00,24,991
Total		2,02,05,239	2,00,44,991
II.APPLICATION OF FUNDS			
Current Assets, Loans and Advances			
(a) Fixed Deposits		2,35,92,197	1,69,55,538
(b) Cash and Banks Balances		14,38,184	42,87,594
(c) Advances and other receivables	4	11,29,753	11,64,337
Less: Current Liabilities and provisions	3	(59,54,896)	(23,62,478)
Net Current Assets			
Total		2,02,05,238	2,00,44,991
Summary of significant accounting policies	1		

The accompanying schedules are an integral part of the financial statements

In terms of our report attached
For Vasanth & Co.,
Chartered Accountants
(Firm Reg No: 008204S)

AMARNAT   Digitally signed
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NARAYANA NARAYANA
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N. Amarnath
Partner
M.No.510064

For and on behalf of board of directors
IEEE Bangalore Section

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Punjalkatte Deepa Shenoy
Chairman

ABHISHEK   Digitally signed
MAHESH   by ABHISHEK
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Abhishek Mahesh Appaji
Treasurer

CHENG   Digitally signed
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Chengappa M R
Secretary

Place: Bangalore
Date: 06.01.2023

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.
  Membership count 12,108 as on Nov 2022
  Membership count 10,198 as on Nov 2021
  Membership count 9,521 as on Dec 2020
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

  IEEE Bangalore Section Membership Development Committee (MDC) has focused on supporting and meeting the members' needs and IEEE membership recruitment and retention strategies. In 2022, MDC team worked on multiple strategies by maintaining, enhancing, and supporting IEEE members across the Student Branches, Technical Chapters, and Affinity Groups of the IEEE Bangalore Section. In addition, MDC team actively promoted IEEE membership benefits across academic institutions and industries. The team adopted a multipronged reach-out approach through; Know your IEEE webinar series across various organizations such as Wipro, AIT, Reliance Jio Infotech and NetApp; Arrear Members Connect to re-stress on various IEEE membership benefits and encouraging renewals; Senior Grade membership elevation program drive (SIMPLE) towards elevating eligible members to Senior grade; IEEE Industry Wing Evangelist reach to promote IEEE in their respective organizations; Strengthening Student Branches by establishing Student Branch Membership Development Committees, and organizing ―IEEE Hour‖ in many colleges; Mentoring & coaching graduating students to enable them to face job interviews confidently through multiple mock-interview sessions; Student to Student Webinars with fireside chats to enable students learn on various benefits of student membership, e-Sahayavani helpdesks to support membership queries.

B.2 Chapter Activities

- Total number of Chapters in the Section
  There are 29 active society chapters under IEEE Bangalore Section and 3 Affinity Groups – Women in Engineering, Young Professional and Life Member Affinity Group

- Number of active Chapters (Chapters who have reported required number of meetings during the year)
  25 Society Chapters and have reported the required number of meetings during the year 2022.

- Summary of Chapter activities

  IEEE AP - MTT Bangalore Chapter is one of the dynamic and most vibrant chapters in India and the R10 region. There are over 80 AP-MTT Professional members from industry and academia and around 50 Student members. The society conducts very highly valued current technology workshops and highly demanded workshops, technology talks, webinars, and seminars.
  The chapter has completed an eventful year during which a variety of events and activities have been carried out varying from Humanitarian Activities, Technical Talks, International Conferences, Workshops, Seminars, Faculty conclaves, etc. The year was led under the dynamic leadership of Sri Puneet Kumar Mishra and the elected Execom Members. We kick-started the year with a grand AGM held on 3rd Jan 2022 where the baton was handed over to the New Chair followed by an Execom meeting on 10th Jan to Elect more members into the execom and plan the strategies and activities for the following year. Events had a grand start with a Fire Side Chat with the IEEE President-Elect of 2022 - Dr.Saifur Rehman followed by IEEE Authorship Workshop.
  During March 2022, the chapter uniquely celebrated Women's Day by organizing a series of webinars. As a part of the women's day celebration, four webinars were conducted. The topics of the webinars are niche domains in Antenna Propagation. We also had a Fire Side Chat with the chapter Chair Puneet Kumar Mishra where topics such as opportunities for women in AP-MTT fields and their vital roles were discussed. The chapter continued having a spree of events over the year keeping the members' interests in mind.
  The Chapter was involved in a COPE Project implementation - "Computer and Do it Yourself Lab" in a Rural High School in Avathi, Devanahalli Taluk, Bangalore Rural. The Lab has 10 Desktop PCs, 1 Projector, an Internet Connection, and basic equipment to carry out the Science Lab. The facility was

inaugurated by Shri R V Nadagouda, Deputy Director, URSC/ISRO, and all the Execom Members of AP/MTT Bangalore Joint Chapter. Over the year we have seen students of the school making the best use of the equipment and facilities provided to them. Multiple training sessions for faculty and students were carried out by many Student Branches and other NGOs.

A Faculty Conclave was organized in May wherein faculties from various parts of the state were invited. The conclave aimed to encourage the faculties working in the field of Antennas, Microwave, RF, etc, and make them aware of the benefits and research opportunities in the field and the support available from IEEE. The event was presided over by eminent guests such as Dr. Goutam Chattopadhyay, Dr. S Pal, Prof K J Vinoy, etc. The event was filled with various insightful sessions and Panel Discussions. The event was free for all IEEE Members.

We have inaugurated four IEEE MTT-S Student Branch Chapters at IISc Bangalore, Reva University Bangalore, Ramaiah Institute of Technology, Bangalore, and KLE Society's Engineering College making a total of Seven Student Branches with over 50 Student members.

The chapter is co-hosting IEEE MAPCON 2022 along with IEEE MTTS and IEEE APS in December 2022. We have received over 750+ submissions worldwide. The team is working very aggressively towards the arrangements to ensure the smooth and successful completion of the conference.

IEEE ComSoc Bangalore Chapter is a leading global community of a diverse group of industry professionals with a common interest in advancing all communications technologies. To that end, the Society sponsors publications, conferences, educational programs, local activities, and technical committees. ComSoc Bangalore chapter is one of the dynamic and most vibrant chapters in India and the R10 region. The society conducts very highly valued current technology workshops and highly demanded workshops, technology talks, and seminars. The Chapter has 14 student branches.

The **IEEE Circuits and System Society Bangalore chapter** is a technically vibrant society and manages both Industry and Academia members. The CAS has taken the lead in the design and implementation of relevant & innovative programs, catering to the needs of Engineering professionals in general and IEEE members in particular. To engage high-end technical and management skills IEEE CAS Bangalore Chapter organized many webinars from industry and academia stalwarts. These webinars covered different emerging topics in the area of circuits and systems to meet the needs of students, faculty and professional members. IEEE CAS Bangalore chapter membership drive also added CAS student chapter, District coordinators and Regional coordinators in Karnataka state.

IEEE Computer Society Bangalore Chapter, recipient of the 2019 Outstanding Chapter Award from IEEE Computer Society HQ and the 2018/2021 Outstanding Large Chapter Award from IEEE Bangalore Section, is one of the most vibrant chapters within Bangalore Section and across India. The 2022 goals of the chapter were two-fold: (i) strengthen the core with a strong inclusion & diversity model (by building a strong leadership and volunteer pipeline for the chapter's sustenance; developing a working model that is both financially and operationally sustainable; growing the chapter by on-boarding members, with a target to reach to the larger geography within the state of Karnataka); and (ii) provide all-round opportunities for professional development to chapter members. As a result of these endeavors, the chapter has recorded an astounding (membership) growth of 56% compared to the previous year. The current membership count stands at 1704, of which 1286 are student members. The Chapter embarked upon a meticulously planned journey of providing significant value addition to its members through specialized professional development programs; opportunities and exposures; unique recognitions and felicitations. While the total event count (technical, non-technical, administrative) exceeds 45+ events, following are some of the key highlights of this year. The various events that the chapter and its volunteers have conducted during this year have been entered in IEEE vTools. With an aim to create a shared, connected ecosystem of computer science students and professionals in Karnataka, the Chapter has kick started the IEEE Bangalore Computer Science Week. As part of this program, four mega events have been co-located for the benefit of IEEE CS members: (i) DeepTech.AI; (ii) Systems & Software symposium; (iii) ICDDS conference; (iv) student congress. The chapter forged new relationships with PES Bengaluru and KLS Gogte Institute of Technology Belgavi with the opening of IEEE CS student branch chapters in these two respective institutes, and revitalized the engagement with Christ University Bengaluru by re-activating the existing student branch chapter. The chapter also constituted various awards to recognize individuals / teams who have made a significant contribution in the field of interest of IEEE Computer Society; either through volunteering; teaching; research; or technology innovation. They include: (i) Outstanding Student Volunteer of the Year 2022; (ii) Outstanding Student Branch Chapter of the year 2022; (iii) Outstanding Volunteer of the year 2022; (iv) Teaching Excellence Award 2022; (v) Research Excellence Award 2022; (vi) Technologist of the year 2022.

IEEE PELS Bangalore Chapter has been earnestly committed in various activities involving both Industries and academics. Society is actively involved with Students and helps their overall development as well as helps them build a career in the field of Electrical and Electronics. The chapter has worked with parent IEEE PELS SOCIETY, and will host the ECCE 2025 in Bangalore. Also, IEEE PELS Bangalore Chapter will host InTeLEC 2024, The membership statistics shows there is 100% increment in the membership which is 116 members as on December 2021 and 262 as on October 2022.The Chapter has also received BEST CHAPTER AWARDS came with USD1000 in From IEEE PELS in 2021. And has also received USD 750 as financial support towards the organisation of various technical and outreach activities. The reports of the Activities undertaken by the Chapter for the year 2022 are given below:

The activities of the year started with Annual General Meet on 6/01/22, where new ExCom take office and roadmaps for the year was discussed. Society further conducted many events individually and also in collaboration with its student chapters, the events included, a workshop on IoT on 28/02/2022, Modern Power Distribution to commemorate Women's Day 2022, and Dibakar Das Memorial Lecture on 8/3/22. IEEE PELS NHCE Student Branch Chapter successfully Organised a Distinguished lecture by Dr.Tobias Geyer, ABB Medium on 16/03/2022. on Department of Electrical and Electronics Engineering & Mechanical Engineering, Nitte Meenakshi Institute of Technology, Bangalore organized an Awareness talk on Solar energy and Hosting of Solar Energy Yatra by Dr. Chetan S. Solanki a professor from IIT Bombay, Brand Ambassador of Solar Energy Govt of MP, is popularly known as The Solar Man of India on 28th March 2022. On 20th April 2022 IEEE PELS Bangalore Chapters successfully hosted a Distinguished Lecture in IISC, Bangalore by Dr. Sanjib Kumar Panda, IEEE PELS Membership chair, National University of Singapore. IEEE PELS of Amrita School of Engineering, Bengaluru hosted An webinar on "DISTRIBUTED GENERATION" on 16th May 2022. by, Dr. K.C. Sindhu Thampatty. Later, in June on account of "PELS DAY" IEEE PELS Bangalore chapter and Student Branch chapter conducted several events, one of which is Talks on insights of Robotics by A. A Nippun Kumar, assistant professor, department of computer science and engineering, Amrita School of Engineering on 17/06/2022 from IEEE PELS, Amrita School of Engineering. In the same month, Two new student branch chapters were inaugurated. BMSCE IEEE PELS AND IES Joint Student Branch chapter and VVCE IEEE PELS student branch chapter were inaugurated on the 23rd and 25th of June respectively. On 25/07/22 VVCE IEEE, PELS Student Branch chapter conducted a state-level project exhibition, in which, students from various colleges from all-over Karnataka participated. In the month of August, BMSCE IEEE PELS AND IES conducted several events one of which is a workshop on Solar Diya, on 16/08/22. On 15/09/22 IEEE PELS of Amrita School of Engineering Organised a competition-TECH POLY which was hosted on occasion of ENGINEERS DAY. IEEE PELS NHCE Student Branch Chapter, conducted an online event called PRAUDYOGEEK-2.0, from19/09/22 to 20/102022. There were two Industrial Visit organised by BMSCE IEEE PELS AND IES, to BHORUKA POWER PLANT-MADHAV MANTRI MINI HYDEL Station on 10/11/22 and to TD POWER SYSTEM LIMITED, Nelamangala on 11/11/22. 4 EXECOM members attended the chapter chair meeting held in Hyderabad headed by Dr.Sanjeev Kumar Panda, IEEE PELS MEMBERCHIP CHAIR and IEEE PELS Indian Liasion officer Dr.Sriva from IIT , Bhuvaneshwar. These were few glimpses of the events conducted under the chapter.

IEEE Education Society Bangalore Chapter is the recipient of the 2021 Chapter Achievement Award. This year we conducted various activities for the benefit of faculty and students. The first program was organized in the month of March 2022. We conducted four-week FDP for faculty members "Implementation of Service-Learning in Engineering Education" The program was scheduled on 5th, 14th, 21st, and 28th of March. One hundred and six members registered and participated. The speaker was Dr.RohitKandakatla. He has completed his Ph.D. in Engineering Education from Purdue University and is currently serving as the Director for Strategy, Operations, and Human Resource Development at KG Reddy College of Engineering and Technology. He also has an adjunct faculty appointment with the Centre for Engineering Education Research at KLE Technological University. The second program was organized in the month of May/June-2022. This was FDP on "Infusing Problem & Project Based Learning (P2BL) in Teaching and Curriculum as Envisioned in National Education Policy-2020" The program was scheduled on 14th May, 21st May, 28th May, 4th June and 11th June 2022. Forty-two members participated in this FDP. The speaker was Dr.Deepak L Waiker, Chair of the IEEE Education Society Singapore Chapter. The third event was on September 16th. We conducted one distinguished talk "Enhancing STEM Students' Engagement and Learning Outcomes with Innovative Pedagogy" Dr. Nalin Sharda, B.Tech. Ph.D. IIT Delhi Life Senior Member IEEE, Distinguished Lecturer IEEE Education Society. More than one hundred participants registered and participated in the distinguished

talk. The fourth event on 17th October distinguished the talk "Leveraging the Megatrends "Digitalization for Sustainability in Industry 4.0" by Dr.Milan Kumar. Dr. Milan Kumar is an experienced CIO and CDO. He is a Global IT Leader, Technology & TEDx Speaker, International Author, Educator and Startups Mentor as well as a member of the Forbes Technology Council and part of Evanta Gartner CIO Governance Body. IEEE Education Society Bangalore Chapter donated ten robotic kits to Gudibande (Chickballapur Dt.) Govt.High School children for improving quality STEM education. IEEE Education Society volunteers visit the school twice in a month and conduct Robotics hands-on workshops to impart state-of-the-art tech education at a young age. We also participated in the Bangalore Section CONECCT-2022 conference and received 12 papers.

IEEE Bangalore Section Sensors Council Chapter is a vibrant chapter conducting activities related to Sensors, Sensor signal Processing and allied topics. The flagship events like the conduction of Track - Smart Sensors, Systems and Their Applications at IEEE CONECCT – 2022 and women for sensors event, many events have been hosted in collaboration with other society chapters in this year.

Signal Processing Society Bangalore Chapter, is the world's premier professional society for signal processing scientists and professionals since 1948. Signal processing is the enabling technology for the generation, transformation, and interpretation of information. SPS serves its members through high quality publications, conferences, technical and educational activities, and leadership opportunities. Its goal is to keep members abreast of the latest information and to serve the public at large. Members have opportunities to be involved in boards and committees, and at the local level members are actively immersed in regional chapters, working on issues and projects that shape what's next in signal processing. IEEE Signal processing society Bangalore chapter has been actively working towards member growth and benefits. The chapter organized various events like distinguished lectures, webinars, workshops, symposium and dedicated tracks in Bangalore section flagship conferences. IEEE SPS Bangalore chapter Membership count phenomenally increased to 857 as compared to 348 in the previous year.

IEEE RAS Chapter Bangalore Chapter's objective is to disseminate knowledge through varied activities to create a positive aura in the Robotics and Automation domain which has been a forefront domain to serve the humanity in various fields. The Chapter made attempts to accelerate towards formation of more student chapters in different colleges and at the same time enable the connection among the student chapters. We have added one new student chapter in the year 2022. The student chapters conducted workshops and hackathons that were disseminated to all student chapters across colleges and cities. The Chapter faculty members actively helped CONECCT 2022 by reviewing papers and also participating in the conference as session chairs. There were 3 executive committee meetings conducted along with an all hands-on meet of all student chapters. There is a scope for continuous improvements year on year. This year based on our earlier planning, we missed on technical talks. However we will introduce the awards to encourage a healthy competitiveness and work across student chapters which we missed last year. IEEE RAS Student Chapters from Atria section started off with initial technical workshops and activities this year. IEEE RAS Student chapters from Amrita School of Engineering, RV College of Engineering, PES University, MIT Mysore has been actively pursuing different programs while the student chapters from other institute has to be brought in line with all of them. The student chapters have been posting some of the trainings on YouTube with a separate channel for their respective chapter and is been well appreciated from some of the student communities.

IEEE GRSS is a focus-group society for geoscience and remote sensing. This is a global organization which supports professional community activities supporting research, innovation, entrepreneurship, and career growth, in general, in the vertical of geoscience and remote sensing. The Bangalore Section has been launched in 2012 by Prof. B. S. Daya Sagar, Indian Statistical Institute. He and Prof. Saroj Meher serve as advisors to IEEE GRSS Bangalore Section, Dr. JayaSreevalsan Nair, Dr.Shyam Lal, Dr.Nagajothi Kannan and Mr. Gurudatta serve as the slate members for running the chapter.

IEEE CIS, conducted the Following activities to enhance the technical knowledge in the areas of computational intelligence, machine learning, artificial intelligence, soft computing for professionals, faculty and students of engineering courses by giving preference to IEEE members with some benefits to IEEE CIS members. These activities have motivated the professional, faculty and student community to become membership and has in turn helped the growth of technical professionals in the areas of IEEE CIS. Contents as follows:
   ✓ Vocational Course on "Computational Intelligence: A Computing Paradigm For An Intelligent Future"

- ✓ Find()-Tresure Hunt
- ✓ Vocational Course on "Practical Aspects of Computational Intelligence"
- ✓ Webinar on "Making projects work with open-source"
- ✓ Technical Lecture on Healthcare Technology – Beyond Machines, Perspective and Prospective
- ✓ Technical Lecture on Enabling Machine human interaction at the Edge using ROOF Computing (IEEE P1931.1)
- ✓ Technical Lecture on 5G be Good for Industry 5.0?
- ✓ Virtual Lab on Python Essentials of Data Science
- ✓ Virtual Lab on Artificial Intelligence and Machine Learning
- ✓ High School outreach program
- ✓ Project Showcase
- ✓ Design Thinking for Digital Transformation solutions powered by AI&ML-VVCE
- ✓ Workshop on assistive device development

IEEE Electronics Packaging Society (EPS) Bangalore, This year we had a mixed events with both virtual mode and in person mode events. The first talk for the session was given by Dr. Juhi Garg "*Use of RF absorbers for ensuring EMC design of high-speed systems*" on **21st Dec 2021**, sheis a Senior Tech. Lead in the EMC design team at Cisco Systems, Bangalore.The talk presented the various attributes of absorbers that make them appropriate for a particular situation and helps the designer choose the correct Absorber   On 2ndFeb, 2022, the chapter conducted its first execom meeting. The chapter execom changed this year and the meeting aimed at handing over responsibilities and explaining roles from the previous to the new members. The roles of treasurer passed from Nikita Ambasana to Anant Devi, Secretary from Arkaprovo Das to Yoginder Negi, Vice Chair from Rohit Dev Gupta to Juhi Garg and Chair from Anil Lingambudi to Nikita. This is also the first time in the history of the chapter since 2004 that two positions of importance are being held by women. The strategy for the upcoming events in 2022 was also discussed and a list of speakers was identified to be contacted. Prof. Rohit Sharma from IIT Ropar was roped in for the second technical talk on 1st April 2022. The talk was on "Understanding the impact of surface roughness on the performance of next generation Cu interconnects". The goal of this talk was to address the roughness related effects on performance of on chip and chip-to-chip Cu interconnects. After over two years, the 1st in-person event was organized on 2nd June 2022 as half day workshop on "Electrical Aspects of System Design: Challenges and Solutions" from 4 - 8 pm in Koramangala, Bangalore. The workshop had three technical talks from industry experts. The first talk was on "Challenges of a high-speed PCB designer" by Mr. S.L.N. Murthy. The second talk was on "Power delivery for notebook processors" by ArunthathiChandrabose. The third talk was "EMC System simulation, current state, and challenges" by Dr. Bibhu Nayak Beside these events we had a joint workshop organized with Semi-Conductor Laboratory (SCL) Mohali India and IEEE EPS Bangalore on 15th July 2022– "One Day Workshop on Innovation in IC Packaging India's Perspective & Approach" in Chandigarh. IEEE-EPS helped in marketing the event. We had another joint workshop organized with India Electronics and Semiconductor Association (IESA) Bangalore - "1st international workshop on advanced electronics packaging" in 1st and 2nd Dec 2022. Several members of IEEE-EPS were involved in the workshop organization and execution. The members of IEEE-EPS Bangalore (Nikita, Arun and Dipanjan) are also on the organizing committee and technical program committee for EDAPS 2022 (Dec 12-14, 2022) (https://edaps.org/). They managed to solicit a large participation and sponsorship from the Bangalore electronic packaging community and have been instrumental in the organizing and execution of the conference.

The **TEMS Bangalore society AGM** (Annual General Body Meeting) was conducted on 22.01.22, Lots of discussion on upcoming events was discussed, Budget discussion and many other information to improvise the performance of the team was updated. The past char handed over the society to the present chair. The Excom meeting was conducted on 05.02.22 the team discussed the yearly planning and how to execute the events. The yearly planner was concerned and all team members provided their insights on how to improve student engagement activities, technology utilization etc.

Technical seminar on Design Thinking TEMS in collaboration with SJCIT conducted a Physical event on 26.02.22 for BE students on Design Thinking and the TEMS chair-elect 2022, Mr.

Javed took the session and interacted with the students about 100+ students participated in the event.

Design Thinking Workshop main objectives: a) To immerse students into the world of innovation as a systematic process of tackling relevant business and/or social problems. b) To provide a social and thinking space for the recognition of innovation challenges and the design of creative solutions. An innovation new ventures, value propositions, new products or services. c) Using a practical hands-on approach, this workshop will support students in the sketching, conception and early development of an innovation challenge, which is a critical input for the innovation course. Examples of innovation challenges/projects.

What and why of IEEE TEMS TEMS Bangalore society organized an online session on the theme What and why of IEEE TEMS On 05.03.22, Our speaker President of TEMS global Mr. RavikiranAnnaswamy spoke and interaction opportunities and also why TEMs should be opted for and discussed the benefits of TEMS.

Womens Day Celebration TEMS Bangalore society in collaboration with WIE Bangalore organized an online session on the theme Interdisciplinarity & diverse perspectives: Unlocking Technology Potential by speaker Ms. Pooja Kadambi on 08.03.22. It was a great interactive session and all about 80+ participants attended the webinar on WebEx online platform. Fireside chat: what the industry is looking for in new-age Recruits? Technology Manager's perspective-Women's day celebration TEMS Bangalore society organized an online Fireside chat In collaboration with WIE Bangalore and Amrita School of Engineering Bangalore on the topic of what the industry is looking for in new-age Recruits. Technology Manager's perspective-Women's day celebration on 11.3.22 Speaker Ms. Rajeshwari Sundararajan, senior Director- of program delivery, Epsilon, and Ms. Jyothy Shetty, Engineer Director, Microfocus gave the distinguished lecture on the theme. It was a great interactive session and all about 50 participants attended the webinar on the WEbex platform.

Innovation & Design Thinking in Industries The webinar on innovation and Design thinking was conducted by TEMS Bangalore in collaboration with SJBIT. Speaker Chair of TEMS India Mr. Arun Tankasali, Co-founder, CTONearex Technologies PVT Ltd on 16.03.22 this webinar was specially conducted for 1 yr BE students to give awareness on the future technologies and also to understand the technical world. the webinar had 150+ student members who were part of the event.

TEMS Meetup TEMS members had a meetup discussion physically with TEMS global President Mr. RavikiranAnnaswamy on 20.03.22. The team discussed membership values and also how to increase the membership numbers. Strategies were formed and panning was made. Introduction to Python and LaTeX Programming TEMs Bangalore conducted the program in collaboration with BMSCE, and IUCEE for UG, PG, and Ph.D. During 23.3.22 - 05.4.22 timeline students were given 2 weeks value-added informative workshop and learning outcomes were satisfactory.

How to plan for startup and Legal & Ethical steps TEMS Bangalore society organized an offline session on 27.4.22 MR Yatheendranath, CEO DhiiHiiLabs took a physical session on planning and strategies for startups and solo how to plan and execute/ face the legal and ethical steps in collaboration with REVA University. About 200+ students participated In the event.

How to plan for startup and Legal & Ethical steps TEMS Bangalore society organized an offline session on 2.5.22 by MR Yatheendranath, CEO DhiiHiiLabs took a physical session on planning and strategies for startups and solo how to plan and Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information execute/ face the legal and ethical steps in collaboration with NIT Kurukshetra. About 100+ students participated in the event. AI Symposium and Hackathon on Go AI for Social Good The AI symposium /48 hrs hackathon was conducted on 11.7.22-12-7-22 by TEMS in collaboration with the IEEE Bangalore section, WIE, Sight, computer society, IAS, PES, and VTS society in a big way with several prizes to the winners. TEMs will also be a sponsor for prizes in the event. Call for papers for CONECCT and TEMS having an individual track paper submission will be encouraged and Dr. Javeed led the TEMS track in Conecct 2022.

B.3 Professional and Continuing Education Activities

IEEE Bangalore Section EE Summer School: Department of Electrical Engineering, Indian Institute of Science (IISc), Bangalore, in collaboration with the IEEE Bangalore section and its chapters such as IEEE Power Electronics (PELS), Power Engineering (PES), Computer Society (CS), Industry Applications (IAS), Signal Processing (SP), Young Professional (YP) Bangalore Chapter and IISc PES student chapter, organized the EE summer school 2022 for undergraduate students and young working professionals with backgrounds in EE/ECE/CS/EEE from 4-8 July 2022. This weeklong summer school was hosted in IISc, Bangalore. The objective of the EE Summer School was to encourage brilliant young minds to build careers in areas of Electrical Engineering including Signal Processing, Machine Learning, Artificial Intelligence, Power Electronics, Power Systems, Renewable Integration, High Voltage Engineering, and Control Systems. It featured talks and demonstrations by IISc faculty, research students, and industry professionals to introduce the attendees to the area of interest and let them know about the applications, current challenges, and emerging trends. It also showcased their talent by participating in various activities like quizzes, hackathons, etc. This summer school was attended by 125+ UG students from top engineering colleges from all over the country.

Expert Lecture Series as part of Professional Activities: The SpaceTech expert lecture series was conducted on 12 May 2022. SpaceTech refers to the application of engineering principles to the design, development, manufacture, and operation of devices and systems for space travel and exploration.The space industry has many challenges, which are both technical and regulatory. The following set of speakers went over these challenges and discussed some of the initial solutions to address them: (i) Prof. R. Venkatesha Prasad (TU Delft); (ii) Dr. P. Balamurali (TCS Research); (iii) Rahul Rawat (Digantara)

The Educational Activities Committee IEEE Educational Activities programs are designed to meet the changing needs of engineering students and professionals. These include:
- ✓ Development and delivery of continuing professional education products and activities
- ✓ Programs for UG and PG programs
- ✓ Coordination of pre-university programs
- ✓ Develop guidelines for accreditation bodies and the monitoring of Educational activities and University programs
- ✓ Recognition of individuals and organizations for major contributions to engineering and technical education through Awards including scholarships and fellowships for graduate engineering students
- ✓ The highlight of the events have been the internship programs, the special lectures
- ✓ during IEEE Education Week, and the Level 1 workshop series on Paper writing for students

B.4 Students Activities

- IEEE Bangalore Section has 138 Student Branches
- 6 Number of Student Branches were formed in the year, 2022
- Section level student activities (student congress, paper and other contests, awards etc)
  BC Meet -1 (SAC/WIE/YP/SIGHT Meeting) Took place on 6th Mar 2022 at GSSS Institute of Engineering & Technology for Women, Mysore. The eventful meeting is a part of training the chairs and counselors regarding the procedures to be followed to run an IEEE student branch. It's also a platform to understand and exchange new methods to explore humanity with the technology motto of the team.
  The event started with a welcome speech by Dr.Parameshachari, (Chair IEEE Mysore Subsection). Prof Deepa Shenoy (Chair, IEEE Bangalore Section) gave a remark speech, exploring the need for such conversation in post covid times. She also talked about the norms of new problems student branches face and how to tackle them as a team. With more than 100 participants, the session took an astonishing start with insightful sessions on SAC Activity Plan (2022 Roadmap) by the Student Activity Coordination Team (Raghavendra Prasad SG, Ravi Hosamani, Annappa, Parameshachari), An insight on Financial Compliance and Treasury by Dr. Abhishek Appaji (Treasurer IEEE Bangalore section), Followed by talks on IEEE Membership development by Navin Kumar (Vice Chair – Membership Activities), Young professionals and its role by Mr. Ketan Keshav and Women In Engineering by Ms. Kumudini. These Sessions provided deep insights into organizing events as well as sharing knowledge through the channel of IEEE. A felicitation was made to the past chair Mr.Bindhumadhava (Chair 2021 IEEE Bangalore section) Recognizing the contribution of those who worked with the most efficiency and attachment towards the team even at difficult times of Covid, by Prof.Deepa Shenoy and the team. In the meantime, new SSRs and Leads were introduced. The new nodes and new vibes took words to bring new colors to the section. The hosting institution GSSIETW Principal was felicitated with Appreciation Memento for

their outstanding cooperation and support in making the session stand out as best. Back after a quick lunch. The section volunteers organized quizzes and fun events for all participants. Following the joy mode, a session on BHTC, HAC Funding, and Design Thinking was taken by Jayakrishnan Divakaran. To clear doubts and for clarifications, an elaborative Q&A session took place where Execom members answered all questions asked by students and counselors. Mr. Annappa proceeded to vote thanks for this gracious session.

INSPIRACAO - SESSION 01 - The session kick-started with an inspirational story of Prof. Shruti Swaroop addressing all the participants on how she grew up with utmost confidence and self-esteem. The Speaker emphasized mainly how to overcome barriers in life to become a successful person. She mainly focused on the important aspects of how to unblock your success. The event was successfully held with 50+ participants, in which there was a wonderful interactive session with Prof. Shruti Swaroop's mom. She also spoke about how each one of us can become successful, how we can overcome ourselves by being judged by others, and also how to root ourselves in the success tree which blocks our way. She also spoke about how we are distracted by social media and the usage of mobiles which is playing a major role in blocking our success. She gave a wonderful solution to overcome these success blockers so that each one of us can climb our success ladders in our life. She also answered all the queries asked by the participants which gave a great insight into how one must see themselves to reach their goals and dreams. She also focused mainly on the important aspects that each of us has to start working on and prioritizing things that make us fulfill our ambitions in life.

SESSION 02 A Q&A session started with 50+ participants with Dipika Trehan briefing about the vision behind corporate- diva, which is bridging the gap between the female and male stakeholders in decision-making in the corporate world with the dominance of the male stakeholders. She explained the objectives of corporate diva which is meant for upscaling and is a support need platform for everyone, women especially. Being the founder of the Health Of Women Forum, she stated the mission of H.O.W which is self-prioritization by women. She elaborated on the motto of H.O.W., " Making a woman fall in love again....this time, with HERSELF! " By quoting the importance of self-love. She then guided the participants on having a leadership mindset.

Towards the end of the session, she gave some insights about setting up financial goals, differentiating between needs and wants, the path to a successful startup, feminism, and many more corporate women-centric topics. Sharper Pitches -Resume building and soft skill development workshop

Event Details:
1. The session was held on 17th June 2022, having 50+ students as the target audience
2. To enhance writing skills, in the student community.
3. To enhance the creative aspects of making a good resume.
4. Exploring minor and major mistakes in building a good resume.
5. Provide insights about good presentation and associated skill set for resume building.
6. Hands-on session for resume building.
7. Networking between different SB student members across Karnataka.

UiPath for RPA
Event Details: Imparting knowledge about upcoming technologies among the students. It was mentored under an Industry expert from UI Path Keerthi Hegde. The event had 2 sessions and aimed at Introducing RPA to students and its current scope in the industry. To connect Industry leaders with students. The event succeeded in providing Hands-on experience with trending technologies. It also provided insights into automation. The session was held on 30th July 2022, having 50+ students as the target audience

Key Takeaways:
The participants were happy with Hands-on learning with UiPath experts in offline mode. The one-on-one interaction helped in understanding in-depth concepts and technology architecture.

VOICE OUT - 2 Staged Debate Competition
Event Details:
Debate has been considered one of the powerful platforms to showcase vocabulary, modulation, and speech skills, it provides an open platform to express our thoughts and also allows us to bring ideas into action. The Voice Out is one such platform for degree students to share their thoughts with the world. The preliminary stage featured pick and speech where participants were chosen with unique techno-social topics and amused the audience with their unique narration. The top 10 performers from this round will be participating in the debate round. The verbal dangal is on the way!

Key Takeaways:

The registered participants were asked to spin the wheel to choose a topic either technical or non-technical; they were expected to speak on that topic for about 3 minutes. A running clock starts from the time they start to monitor their speech and have control of their speech accordingly. The judges were asked to evaluate the following points: clarity of problem statement, language usage, relativity and facts presentation, and modulation & overall impact.

The debate round would have the following theme "Development but at the cost of nature? (Wrt Bengaluru Rains) On one hand, we wouldn't have had the blooming tech industry if not for Whitefield, Bengaluru is the Silicon City of India because of these global, national, and regional tech companies. But on the other hand, we saw that development has come at the cost of nature.
What is right? What is wrong?"

FINANCE FOR YOU: BEGINNER TO PRO

Event Details: The webinar was organized by the IEEE Bangalore section on the account of IEEE day. The speaker for the session was Abdul Khader, he is a mechanical engineer and a founding member of market feed, a fintech start-up incubated by YCombinator. The speaker is an angel investor, digital marketer, and trader for 3 years and he is also into options trading. He has also mentored more than 5000 people in options trading. Our key speaker Abdul Khader M gave onSep 17, 2022 Key Takeaways: The participants also got information about the market, how it works and the trends in the market, real estate and how it works in the current situation, and different options about commodities. He also talked about different investment options in the stock market. We also got a basic idea about the advantages, and disadvantages of investing in the stock market and shares in the market and different investments and about funding. We got a clear idea that the stock market is the best option for investment. If we diversify the money in different investment options in the right place at the correct time we can get good money out of it and successfully can make money work for us is what we understood about finance. The session ended with a Q&A session where all the doubts of the participants were cleared. We know that money is a basic necessity of life as well as a very important aspect of life. Everyone must have good knowledge about finance before they start earning. We should make sure we invest 25-30% of the money we earn. This webinar gave me good knowledge about finance and investments. It was a very informative session and was an opportunity to learn everything about marketing and finance.

- 66 Number of active Student Branches (Student Branches who have reported required number of meetings during the year)

- Summary of Student Branch activities (Student Branch wise with attachment table/information)

Student branch name	EVENT NAME	DATE
BMS Institute of Technology	DO YOU KNOW YOUR MOBILE	04/10/2022
Dayananda Sagar University-Bangalore	Hackathon	07/10/2022
Mangalore University	Motivational & Expert talk on "Leveraging Technology for a Better Tomorrow- Through Innovation"	07/10/2022
P E S College Of Engineering	Programs on sorting	05/10/2022
P E S College Of Engineering	Poster designing competition	07/10/2022
Vidya Vardhaka College of Engineering	Try Engineering Lesson at local School	11/10/2022
Vidya Vardhaka College of Engineering	IEEE Day Quiz and Industry Visit	12/10/2022
Vidya Vikas Institute Of Engineering & Technology	Python workshop	07/10/2022

Vidya Vikas Institute Of Engineering & Technology	Design challenge	14/10/2022
Atria Institute of Technology	Just 30 seconds	04/10/2022
Atria Institute of Technology	Kahoot quiz on cryptography and cyber security	12/10/2022
Atria Institute of Technology	Shark tank	07/10/2022
Atria Institute of Technology	Connect to reconnect	08/10/2022
Atria Institute of Technology	IEEE day celebrations	11/10/2022
Atria Institute of Technology	Let's design	10/10/2022
Sri Jayachamarajendra College of Engrg	BUG BOUNTY	03/10/2022
Sri Jayachamarajendra College of Engrg	LaTeX workshop	04/10/2022
Gogte Inst Of Tech	IEEE DAY CELEBRATION	03/10/2022
Siddaganga Inst of Tech	Machine learning webinar	10/8/2022
Vivekananda College of Engineering and Technology	IEEE Week	10/15/2022
AMC Engineering College	Visual Design and Lens making Workshop	10/8/2022
Jyothy Institute of Technology	Circuit Debugging	10/13/2022
Jyothy Institute of Technology	Eyantra Workshop	10/10/2022
Jyothy Institute of Technology	Family Feud	10/13/2022
Jyothy Institute of Technology	Workshop on IOT	10/10/2022
Jyothy Institute of Technology	Quiz and crosswords	10/10/2022
Jyothy Institute of Technology	Mini Cricket	10/15/2022
Jyothy Institute of Technology	Badminton	10/15/2022
Jyothy Institute of Technology	Out of the box thinking ted talk	10/13/2022
Jyothy Institute of Technology	Treasure Hunt	10/11/2022
BNM Institute of Technology	Ingenuity 3.0	10/11/2022
BNM Institute of Technology	Debate	10/11/2022
BNM Institute of Technology	Treasure Hunt	10/15/2022
BNM Institute of Technology	Shark Tank	10/15/2022
Sri Jayachamarajendra College of Engrg	Photography Contest	10/5/2022

Sri Jayachamarajendra College of Engrg	Poster making competition	10/6/2022
New Horizon College of Engineering	CSR Activity by WIE AG IEEE, NHCE	10/10/2022
Bangalore Inst of Tech	Board of Creativity	10/14/2022
Bangalore Inst of Tech	Stand up comedy	10/14/2022
Bangalore Inst of Tech	E FACTORY	10/14/2022
New Horizon College of Engineering	Take de bait	10/13/2022
AMC Engineering College	Introduction to freelancing	10/15/2022
New Horizon College of Engineering	INAUGRATION OF RAS	10/11/2022
New Horizon College of Engineering	Creativity in Engineering Workshop	10/11/2022
New Horizon College of Engineering	Treasurequipo	10/13/2022
New Horizon College of Engineering	RangIEEEn	10/14/2022
Atria Institute of Technology	Free certification course on machine learning	10/13/2022
New Horizon College of Engineering	Scientific Cosplay	10/12/2022
Sri Jayachamarajendra College of Engrg	IEEE DAY 2022 CELEBRATIONS	10/12/2022
Gogte Inst Of Tech	Study Tour to Venudhwani 90.4 FM Station	10/10/2022
Gogte Inst Of Tech	Science and Engineering Experimental lab	10/11/2022
National Inst of Engineering-Mysore	Clash of Minds	10/12/2022
National Inst of Engineering-Mysore	NISBXtreme	10/13/2022
National Inst of Engineering-Mysore	Constructing Tomorrow from Today's Technology	10/13/2022
Siddaganga Inst of Tech	Social activity on account of IEEE day	10/9/2022
National Inst of Engineering-Mysore	IEEE Day Celebrations ☐	10/14/2022
Indian Institute of Information Technology-Dharwad	Tech talk	10/18/2022
Cambridge Institute of Technology-Bengaluru	Voice Up (Debate Competition)	10/19/2022
Cambridge Institute of Technology-Bengaluru	Interdepartmental Logo design Competition	10/19/2022
Cambridge Institute of Technology-Bengaluru	Ideathon	10/19/2022
Visvesvaraya Univ College of Engrg	IEEE Day Celebration	10/12/2022

Visvesvaraya Univ College of Engrg	TinkerCad Workshop	10/6/2022
Visvesvaraya Univ College of Engrg	Poster Presentation Workshop	10/14/2022
Nitte Meenakshi Inst Of Tech	Click Fraud detection Using Machine Learning	10/8/2022
Nitte Meenakshi Inst Of Tech	International Seminar on Challenges and Opportunities in Research publication	10/17/2022
Visvesvaraya Univ College of Engrg	Webinar on IEEE Xtreme	10/19/2022
RYMEC-Bellary	Webinar : Career Development and Networking with Professional society association	10/14/2022
Mangalore University	Brainstorming session	10/13/2022
Jain College of Engineering - Belagavi	IEEE DAY Celebration 2022	10/20/2022
Amrita School of Engineering Bangalore	CLOAKS event	10/6/2022
Amrita School of Engineering Bangalore	Set Your Sights	10/20/2022
Siddaganga Inst of Tech	Career Guidance Session	10/3/2022
Vidya Vikas Institute Of Engineering & Technology	Workshop on web design	10/12/2022
Vivekananda College of Engineering and Technology	Webinar on IPR and Patent Laws	08/10/2022
SVIT IEEE SB STB11371	International IEEE Day Celebration 14-10-2022	14/10/2022
NISB	Technical Meme Making Competition	06/10/2022
National Institute of Engineering IEEE Student Branch (NISB)		11/10/2022
National Institute of Engineering IEEE Student Branch (NISB)		14/10/2022
Sri Siddhartha Institute of Technology	IEEE Day - 2022 Space on Wheels expo and Tech-Talk by ISRO scientist	14/10/2022
Ieee student branch nhce	Inauguration	12/10/2022
Rashtreeya Vidyalaya College of Engineering	Facilities available through I-STEM portal for the researchers and institutions of the country	14/10/2022
Rashtreeya Vidyalaya College of Engineering	Inauguration of IEEE Sensors Council Student Chapter	28/09/2022
Nitte Meenakshi Inst Of Tech	Click Fraud detection Using Machine Learning	08/10/2022
Presidency University Bangalore	Skill development sessions on- Natural Language Processing	11/10/2022
Presidency University Bangalore	IEEE Day Celebration	12/10/2022

B.5 Affinity Group Activities

- Young Professionals

  IEEE Young Professionals Affinity Group Bangalore comprises IEEE members from academia and industry with domain expertise in a myriad number of technical and non-technical fields. We are a diverse group of members, spanning right from early-career young professionals and final year students to senior members of the IEEE. The Affinity Group's main objective is to add value to its member base by organizing events, webinars, YP tracks at conferences and many more inclusive events.
  Just like every year, 2022 started off with the transfer of Executive Committee roles to the new committee during the Annual General Meeting of the YP Affinity Group held during February 2022. The new committee embarked on a journey to organize technical and professional events for the benefit of all its members with a prime focus on greater collaboration with sister affinity groups, technical societies of IEEE as well as student branches of IEEE Bangalore Section and beyond.

- Due to the diverse member base, webinars, technical sessions across different technical domains were organized. Members of the Executive Committee of IEEE YP AG Bangalore facilitated these sessions by delivering these webinars and workshops at various student branches across India. In March 2022, they has a session WIE are the FUTURE, BREAK N FIX; panel discussion on breaking the gender bias in the present society. On March 17, there was a seminar on "PRODUCT DEVELOPMENT: Identify, Invent and Implement" at Amrita School of Engineering by Kishore Kumar, Sr. Software Engineer, BOSCH Global. IEEE Bangalore Section YP collaborated with IEEE AP-MTT Bangalore Chapter, for the initiative of IEEE COPE – Committee on Promoting Equality. Chair, Dr. Debdeep. Sarkar's, article titled "Engaging Young Minds to Research and Publishing: Takeaway Points From Recent Interactive Events [Young Professionals]," was published in IEEE Antennas and Propagation Magazine, vol. 64, no. 4, pp. 163-166, Aug. 2022, doi: 10.1109/MAP.2022.3178898. During the month or April 2022, YP organized a session on VLSI – Industry & Career. In the month of June YP organized a worshop on Incubation and Startup Workshop; the objective of the workshop was to provide stakeholders with knowledge, tools, and instruments that can be used to develop a successful pitch to the business ideas that are socially acceptable, financially viable, legally possible, and self-sustaining in the long-term. In line with the Govt. of India's call for Aatmanirbhar Bharat in motivating young entrepreneurs by providing a platform for ideation and brainstorming. Incubation and startup workshop – Alliance University, in association with IEEE YGAG, Bangalore section was conducted on 17th June 2022. A week long workshop titled "Frontiers in Computing and its Applications" was held from June 20-24 which was the outcome of the R10 YP Student YP Joint Activity Fund received from R10. YPSIC 2022 was held on 26-27 June 2022 - YP Student Industry Connect, organized by IEEE Young Professionals Affinity Group (Bangalore Section) in association with IEEE Student Branch of Atria Institute of Technology and IEEE Bangalore Section. In 2022, YP Track - **Advanced Technology for Pioneering Applications** was hosted at the flagship conference of IEEE Bangalore Section, IEEE CONECCT in July. IEEE Young Professionals Affinity Group Bangalore Section in association with IEEE Bangalore Section SAC and IEEE NHCE SB planned and executed an event at New Horizon College of engineering on Member development and retention and membership benefits session for Young Professional. In addition to this, IEEE Young Professionals Affinity Group Bangalore was part of the IEEE Bangalore Section's flagship event IEEE Bangalore Technology Conclave (BTC), 2022 on the theme of Metaverse. IEEE Young Professionals Bangalore Section successfully wrapped up the year and aims at bringing in more such events next year.

- Women In Engineering (WIE)

  The **IEEE WIE Bangalore Affinity Group** solemnly committed itself to various activities involving academics and industry. Over the year 2022, the Affinity Group was actively involved with students and its professional members. Our IEEE WIE Bangalore AG is one of the largest professional organizations in IEEE dedicated to promoting women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering. Just like its parent organization, WIE Bangalore was established to promote the achievements of women professionals in fields of interest to IEEE in 2010. With over 3070 members, IEEE Bangalore AG is one of the largest WIE Affinity Groups across the globe. Over the years, since its inception, WIE Bangalore AG has:
  - ✓ Organized events to encourage young engineers/students and facilitate them to work on research areas of their interest.

- ✓ Organized technical and special events to encourage innovative ideas for enabling people in different walks of life
- ✓ Conducted IEEE Flagship Technical conferences along with the IEEE Bangalore Section and other IEEE OUs
- ✓ Celebrated International Women's Day, Engineers Day, and other days of National and International relevance.
- ✓ Collaborated with other institutions such as Anita Borg, to conduct Technical or Original Research Tracks for conferences such as Grace Hopper Celebration India.
- ✓ Conducted Events of special relevance for Ada Lovelace day and World Disability Day.
- ✓ Created WiE Technical talk series, webinar series, hands-on Workshop, and certifications
- ✓ Conducted Hackathons and Quizzes for its members.
- ✓ Supported IEEE WIE affinity student groups across the section and three subsections within Karnataka
- ✓ IEEE WIE Bangalore Section AG has been successfully conducting several conferences, workshops, and events over many years.

Several initiatives and events were undertaken throughout the year to achieve the #Mission 2022. The events were conducted by the Affinity group independently and in collaboration with its various WIE SB AGs. The number of events undertaken was over sixty. Our membership increased from 2800 in 2021 to 3077 in 2022 (as of 11th November 2022). Our events were attended by many members and non-members. We had special events conducted along with the Special Interest Group for Humanitarian Technologies (SIGHT) for the economically weaker sections of society.

- Life Member Affinity Group
  The formation of the LMAG of the Bangalore Section was approved by IEEE during 2019. There are around 22 LMAG members and most of them are very active. They often suggest section ExCom on some of the Do's and Don't's. They also engage their colleagues arranging seminars. Section invite them on most of the events.

B.6 Awards & Recognition Activities

- Award constituted by the Section
  - ✓ **IEEE Bangalore Section Medal of Honor** - Ramakrishna Kappagantu
  - ✓ **IEEE Bangalore Outstanding Large Chapter Affinity Group 2022** - Bangalore Section Affinity Group (WIE) We00119
  - ✓ **IEEE Bangalore Outstanding Large Student Branch Counselor 2022** Abhishek Deshmukh
  - ✓ **IEEE Bangalore Outstanding Medium Student Branch Counsellor 2022** Dr. Mahesh A
  - ✓ **IEEE Bangalore Outstanding Small Student Branch Counsellor 2022** Dr.Kanduri Sairam
  - ✓ **IEEE Bangalore Outstanding Student Branch Website 2022** NITK Surathkal
  - ✓ **IEEE Bangalore Outstanding Volunteer 2022** Raghavendra Prasad S G & Ketan K
  - ✓ **IEEE Bangalore Outstanding WIE Volunteer 2022** Nikita B
  - ✓ **IEEE Bangalore Outstanding Young Professional Volunteer 2022** Kishore Kumar Sharma
  - ✓ **IEEE Bangalore-Most Promising Student Branch** New Horizon College of Engineering -
  - ✓ **IEEE Bangalore-Outstanding Large Student Branch 2022** BMSCE IEEE SB
  - ✓ **IEEE Bangalore-Outstanding Medium Chapter_Affinity Group 2022** Ch10805 - Bangalore Section Chapter
  - ✓ **IEEE Bangalore-Outstanding Medium Student Branch 2022** Ramaiah Institute Of Technology
  - ✓ & Rashtreeya Vidyalaya College of Engineering- Stb11651
  - ✓ **IEEE Bangalore-Outstanding Small Student Branch 2022** IEEE Student Branch Central University Of Karnataka
  - ✓ **IEEE Bangalore Outstanding Student Volunteer 2022** Srinidhi S, Revanth Mouli C, Dikshita S Aladakatti, Aniketh Shenoy, Pruthvi Raj R
  - ✓ **IEEE Bangalore Outstanding ECIM Student - Volunteer 2022** Subramanya Navada K R

- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year

IEEE regional exemplary student branch award 2022
- ✓ R.V College of Engineering
- ✓ Siddaganga Institute of Technology
- ✓ Central University of Karnataka
- ✓ Visvesvaraya Univ of Engineering
- ✓ B.M.S College of Engineering

India council awards
- ✓ Outstanding Volunteer (>35 Years): Chengappa M.R
- ✓ Outstanding YP Volunteer: Yeshwanth L.M
- ✓ Outstanding Student Volunteer: Aniketh Shenoy

Indian Institute of Science Student Branch was awarded with
Darrel Chong Student Activity Award 2022

Gogte Institute of Technology WIE Student Branch Affinity Group won
2022 R10 Women In Engineering Outstanding Student Branch Affinity Group Award

IEEE Bangalore Section SIGHT Group won
2022 R10 Humanitarian Technology Activities Outstanding Section Award

IEEE Bangalore Section won 2nd Prize in **"Sections Spotlight"** organized as part of the All India Students Young Professionals Women in Engineering Life Member Congress 2022, held in Pune, Maharashtra on 7th-9th of October 2022.

IEEE Bangalore section student volunteer Subramanya Navada K R won first place in **IEEE ITSS Logo Design Competition**.

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)
  The IEEE Bangalore Section Newsletter is a quarterly that was started in January 2020. IEEE Bangalore Section encourages its members to submit content in the following formats: personal experiences in STEM, articles, announcements of upcoming events along with news items.

  The purpose of the newsletter is to communicate with its member's announcements – Short, topical, and news-oriented including the Bangalore Section Conferences along with Affinity group and society reports and other relevant information that would benefit its members. The newsletter also publishes important awards and recognitions received by its members, chapters, and societies. Creativity and technical curiosity are encouraged through the publication of Major Articles which include an in-depth discussion of current topics. All articles are reviewed and edited for appropriateness and relevance before being published.

  So far, three issues of the newsletter have been published corresponding to each quarter of 2022. The review and design of the fourth quarter issue are in progress and will be released at the Section AGM. **HOPE - Holistic Open Platform for Editorial**. This time converted to its digital form, the new editions of the newsletter had few extensive add-ons.

  Edition 1: http://sites.google.com/view/ieee
  Edition 2: https://bit.ly/HOPE_Aug_Edition
  Edition 3: https://bit.ly/IEEEBLRHOPE3

- Home Page of the Section (give the URL and how often it is updated)
  https://ieeebangalore.org/
  The IEEE Bangalore Section is updated on monthly basis.

- Other means of contacts with Section members including social media
  Information on all the events mentioned above may be found in the following Social media handles of the IEEE Bangalore Section:

YouTube - https://www.youtube.com/channel/UCP5O7GrQaAgAPjvNIRhuiyQ
Facebook - https://www.facebook.com/IEEEBangaloreSection/
Instagram - https://instagram.com/ieeebangalore?igshid=1w0pfl5351wag
LinkedIn - https://www.linkedin.com/company/ieee-bangalore-section
Twitter - https://twitter.com/ieee_section?s=0

B.8 Industry Relations

- Membership growth and retention

There has been a steady rise in the professional members this year and industry contribution is equal at par with academia. Many industries were contacted and provided with the advantages of being professional members of IEEE. On such approach, many came forward with a scheme to sponsor many of their employees to become professional members. We will continue this attempt and concept to approach the industry.

- Activities for/with industrial members

The Industry Committee of the IEEE Bangalore Section organized the following activities in 2023.
CXO Forum: Organized in conjunction with the IEEE Bangalore Section Awards Ceremony on 20th March 2022, the CXO forum discussed and debated the topic of "Corporates and Professional Network (IEEE): Avenues of Working Together". The panel featured eminent names in the Indian Industry Ecosystem:
   ✓ Dr.Aloknath De (Executive Consulting Director & ex-CTO, Samsung India | Adjunct
   ✓ Professor, IISc Bangalore)
   ✓ LathaChembrakalam (Vice President, Head of Technical Center India, Continental)
   ✓ PonniKrishnmoorthy (Global Head of Telco Cloud, Nokia)
   ✓ Nitesh Varshney (Vice President - Global Engineering and Managing Director,
   ✓ Radisys India)
   ✓ Dr. Gopal Pingali (Managing Director, Global Hybrid Cloud Leader, Accenture)
The panel put forward a few interesting ideas to strengthen the collaboration between IEEE and Industry Professionals such as hands-on student learning to faculty development programs; consolidation of conferences to sustainability-driven community programs; serving smaller towns to secure global leadership positions; strengthening membership benefits to define impact metrics; and many more.

Bangalore Technology Conclave 2022: Organized by IEEE Bangalore Section, in collaboration with Women in Engineering (WiE) and Young Professionals (YP) affinity groups. BTC is a flagship annual event of the Industry Relations Program of the Section; where technology leaders, innovators, entrepreneurs, and thought leaders address the pressing problems and share their vision on futuristic technologies that will/may disrupt/impact our way of working and living. https://btc-2022.ieeebangalore.org/. This edition of IEEE BTC will focus on the theme of METAVERSE, with specific tracks on AR/VR, IOT, Blockchain, and 5G

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
IEEE Bangalore Section strongly believes in educating the children, youth and adults helps to break generational cycles of illiteracy and poverty; and in line with the UN SDG 4 (Sustainable Development Goal 4) which aims to provide children and young people with quality and easily accessible education plus other learning opportunities. One of its targets is to achieve universal literacy and numeracy. A major component in acquiring knowledge and valuable skills in the learning environment. IEEE Bangalore Section has come up with a new program of **"Each IEEE Student Branch adopting a Govt. School for the year 2022"**; and after adopting a minimum of 3 events to be conducted within Oct 2022.

Activities to be conducted by IEEE Student Branch:

- ✓ Select a Government school near your student branch. (with in 5 Km range. In rural places upto 15 Km).
- ✓ Discuss with the school authorities, activities which can be planned keeping a good outcome in mind.
  - o Training the teachers to improve quality of teaching.
  - o Training of students to develop various skills, leadership, etc.
  - o Job oriented activities as part of co-curricular activities
  - o Any other educational activity.
- ✓ Using IEEE resources will help awareness, membership development.
- ✓ At least 3 activities to be conducted, reports to be uploaded in IEEE vTools.
- ✓ A total amount of Rs. 4500 /- upto Rs 6,000/- will be sponsored from section (Bills in the name of IEEE SB) for buying materials for model making, conducting event, etc.,
- ✓ The amount will be included in the student branch section support for 2022 by verifying vTools activity report and the bills.

- • SIGHT Activities

  Awareness: SIGHT performs outreach activities so that IEEE Volunteers will know how to use their technical knowledge and skill for social good. • Encourage & training :Technical Training to up-skill knowledge especially students branches to be part of SIGHT group activities by providing resources and opportunities for the volunteers to have skills to bring about change in society . • Outreach activities: IEEE Volunteers will know how to use their technical knowledge and skill for social good. • Project Funding Program: SIGHT awards funding for projects that utilise technology to address local challenges in SDG domains. • Partnering with NGOs and communities and co-create impactful solutions. • Main Goal "How Technology can be used as foundational components for solving humanitarian issues in sustainable developments.
  IEEE Bangalore SIGHT Bangalore Chapter has been collaborating with key stakeholders and NGOs:
- ✓ Assistive Technology Solution/Training by Margadarshi NGO
- ✓ Mobility Aids measurement & fitment Program,
- ✓ Capacity Building training for parents of children with cerebral palsy and multiple disabilities
- ✓ https://www.margadarshionline.org/
- ✓ Outreach activities (Training/Technology Enabled Solution) to reach out to high school/undergraduate students from rural backgrounds
- ✓ IEEE Volunteers will know how to use their technical knowledge and skill for social good.

IEEE SIGHT Day held at IISC Bangalore in association with IEEE IISC student branch along with IEEE HKN Honor Society

- ✓ Inaugural Address: Prof LM Patnaik
- ✓ Presidential Address: Dr. P. Deepa Shenoy
- ✓ Updates on IEEE SIGHT Bangalore Chapter Initiatives: Mrs. Anandi Giridharan
- ✓ Insights on IISC Student Branch Initiatives: Ms Anantha and Prof. T. Srinivas
- ✓ Panel Discussion on "Advancing Technology for Humanity" moderated by Mr. Jayakrishnan Divakaran
- ✓ Panelist:
- ✓ Mr. Suresh Kumar: Head of India Urban Data Exchange and Data Spaces, IISC
- ✓ Mr. George Sebastian: Head of eiLabs, Enable India
- ✓ Mr. Supriyo Das, former VP Engineering, Wipro Technologies
- ✓ Lab visit to The Centre for Nano Science and Engineering (CeNSE)
- ✓ IEEE Bangalore SIGHT Team also participated in the weeklong global event across geographies.

B.10 Community Activities

- • IEEE Social activities (Family day, IEEE day, Engineers Week)
  Sunday Walk & Breakfast with an IEEE Fellow
  Event Description: On 10th April 2022, the Amrita School of Engineering IEEE Student Branch hosted the IEEE Bangalore section event "Sunday Walk & Breakfast with An IEEE Fellow" from 7 am to 8:30 am in Amrita Vishwa Vidyapeetham, Bengaluru. Dr.GopalPingali was the speaker at the event. The Session started with an introduction about Dr.GopalPingali who is MD & Global Hybrid Cloud Leader at Accenture, Bengaluru. On 3rd December 2021, the IEEE Computer Society announced Gopal Pingali as IEEE Fellow - for contributions to hybrid cloud computing and real-time multimedia systems.

The session was very interactive and various questions were asked to Dr.Pingali. He addressed the questions very enthusiastically. The questions included his research and many more like how he balanced his personal and professional life, how he upgraded himself with technology for 20 decades, how was his journey with IEEE, etc. Students drew inspiration from him and how they can explore everything without restricting themselves to a specific domain. The Speaker also shared his real-life experiences and interacted with students on an individual basis to help them clarify their doubts. He also shared his Experiences as an IEEE student member with fellow members. The outcome of the event was good. Students were delighted after having this session. He also handed over the badges to the participants with his autograph. The event ended with a networking session in the breakfast room. The event had 40 participants of which 10 IEEE student members and 8 IEEE professional members.

IEEE Day 2022 Celebration
IEEE Bangalore Section celebrated IEEE Day for the year 2022 which was hosted on the premises of UVCE, K R Circle. Date - 12th October 2022 with 130 no. of Participants. It began with a welcome speech from the Chairperson of IEEE Bangalore Section, Dr. P Deepa Shenoy ma'am. Awards received by the IEEE Bangalore Section for the year 2022 were announced. This was followed by an informative session from the speaker for the day Abhishek Appaji, R&D Engineer, BMSCE. The day included cake cutting which was later distributed among the attendees. It concluded with an interactive quiz session and other activities which made the session more interesting.

IEEE Bangalore section released an App on the occasion of IEEE Day to store and view the details of all the IEEE Day events of all student branches under the Bangalore section and its subsections
What's new?
1. Get Section notifications regarding IEEE Day 2022
2. Register and connect to events happening across the section.
3. Host your IEEE day event and share it.
4. Get directions to the event place, connect to the coordinator and many more
Link: https://bit.ly/IEEEDay22BangloreSection1

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
  IEEE Bangalore Section has come up with a proposal for awarding scholarships to economically backward talented IEEE student members. Through this initiative, the Section provided a scholarship amount of Rs. 10,000/- to 20 worthy students based on the below criteria.
  Eligibility Criteria
    ✓ Students should be studying in the 2nd or 3rd year of Engineering.
    ✓ Student should be currently IEEE Member (Year – 2022)
    ✓ Family income less than Rs. 5 Lakh per annum.
    ✓ Student's performance from 10th, 12th (PU) and results up to the previous semester should be good (Min. 60 % score or CGPA >=6.0).
    ✓ Students should be good volunteers.

This initiative helped students in responding to their financial crisis, it has been a gesture of section towards social cause and novel support to its student community. The section is proud and happy to initiate these Nobel activities. Below are the students who received the section student grant for the year 2022.

VTP'22: In order to increase volunteering skills, SAC has planned for week Volunteer Training Program for Student Branch Office bearers and other IEEE Bangalore Section and Subsection Student Volunteers. This is an Online Event and hence all the volunteers can complete this training with ease. The Volunteer Training Program will be approximately 8 Modules and each module will take 1 hour to complete. These modules must be completed within 2 or 3 weeks, after the completion of these modules, there will be Vtools training for the rest of 1 or 2 weeks. The training program began on 21/7/2022 with an amazing orientation ceremony for all the registered upcoming future volunteers of the section. The session began with an ice-breaking session by Ms. Rubbing G, Membership development Co-lead of SAC 2022 followed by the importance and need for such a volunteering program by Mr. Adwaith, Technical Committee Lead of SAC 2022 then the session was taken over by

the SAC Chair Mr. Raghavendra S G enlightening the participants with his motivational and kind words. The session was concluded by Mr. Srinidhi, Membership Development Lead of SAC 2022.

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- IEEE Bangalore Section through this IEEE SIGHT Bangalore Chapter has been engaging with some of the NGOs to reach out to the underserved communities:

    • Collaboration with Margadarshi to Power to differently abled by
    Assistive Technology Solution/Training by collaborating with Margadarshi NGO
    Mobility Aids measurement & fitment Program,
    Capacity Building training for parents of children with cerebral palsy and multiple disabilities

    • Collaborating with EnABLE India working on the ground and impacting thousands of Persons with disability.

C.4 Support extended to Sub-sections & Society Chapters within the Section

The IEEE Bangalore Section has 3 Subsections; 29 Society Chapter including 3 Affinity Groups – Women in engineering, Young Professionals, and Life Members Affinity Group. Section is always supportive of sub-section, chapters and OUs. Many joint event also conducted and many volunteers, office bearers of section visited subsections and delivered talk, lecture, explained about best practices in volunteering, etc. Here's is sneak peek into the events of subsection in 2022 –

The AGM of **IEEE Mangalore Subsection** was held on January 16, 2022, through online mode. Pushparaj Shetty, Chair of IEEE MSS 2021 welcomed the gathering. The MOM of the AGM 2021 was approved. Mohit P Tahiliani, Secretary, IEEE MSS 2021 presented a detailed annual report of the activities conducted by IEEE MSS in the year 2021 including 2021 IEEE DISCOVER, education activities, competitions, I2CONECCT, Mangalore Technology Series, Membership Development, and Subcommittee Activities. Venugopala P S, Treasurer, IEEE MSS 2021 presented the detailed financial report for the year 2021. Keith Fernandes, as the chair of student activities, presented the report of various student branch activities under IEEE MSS. He gave the list of activities conducted under each student branch. He gave the details of new student branches initiated in the year 2021 and also the SBs which are having no student members at the end of the year. U C Niranjan, Chair, IEEE MSS 2020 was felicitated. Vasudeva read the brief biodata of Niranjan U C. The entire team of IEEE MSS thanked him for his services to IEEE MSS. The NMAM Institute of Technology, Nitte, was appreciated for Organising the 2021 IEEE DISCOVER successfully and was applauded for making the publication of proceedings possible. U. C Niranjan announced the IEEE MSS Awards 2021; and Puspharaj Shetty thanked Sujatha D N, Raghavendra Prasad, and Ravi Hosamani for being the judges for the student branch evaluation. Bindumadhava B, Past Chair, IEEE Bangalore Section presented the slate for 2022: Poornalatha G. (Chair), Mohit P. Tahiliani (Chair Elect), Pallavi Mane (Vice Chair), Vasudeva Acharya (Secretary), Bhawana Rudra (Joint Secretary) and Venugopala P S (Treasurer). IEEE MSS conveyed their best wishes to the incoming office bearers. Dr.Pushparaj thanked all the team members along with office bearers of the IEEE Execom 2021 for their support and handed over the responsibility to Poornalatha G. Poornalatha G, incoming Chair of IEEE MSS addressed the members present during the AGM and presented a brief report about her plans for the year 2022. She sought cooperation from all the office bearers and members for taking IEEE MSS to greater heights. Ashwini Holla V R of IEEE MSS thanked everyone present during the AGM for their excellent support and encouragement of the activities conducted by IEEE MSS.

IEEE Mysore Subsection is one of the 3 subsections of the IEEE Bangalore Section. The aim is to conduct various student and professional activities like invited talks, student internships, workshops, and Flagship conferences. The IEEE Mysore subsection consists of Mysore, Mandya, Hassan, Chamarajanagar, and Kodagu districts. It has 26 Engineering Colleges with 14 IEEE Student Branches and more than 1000 IEEE members. IEEE Mysore Subsection was inaugurated by Ms. Susan K Land, IEEE President USA 2021 on 21st December 2020. And Dr. Bindu A. Thomas is the founder Chair and Dr.Parameshachari B D is the founder Chair-Elect of the subsection. The goal of the IEEE Mysore subsection is to conduct various flagship events, outcome-based programs, and various technical activities. IEEE Mysore Subsection in association with the IEEE Bangalore Section, IEEE Information Theory Society (ITS) Bangalore Chapter, and IEEE Circuits and Systems (CAS) Society Bangalore Chapter organized a webinar on "Machine Learning Models for COVID-19 Diagnosis" on the 19th of January 2022. The webinar was conducted by Dr. Yu-Dong Zhang, Chair of knowledge discovery and Machine Learning at the University o,f Leicester, United Kingdom, and Moderated by Dr.Parameshachari B D,

Chair IEEE Mysore Subsection, Prof. & Head, Dept. of TCE GSSSIETW, Mysuru. The webinar was graced by Dr. P Deepa Shenoy, Chair, IEEE Bangalore Section and Professor, UVCE, Bengaluru. Dr. Jalaja S, Chair, IEEE Circuits and Systems (CAS) Society Bangalore, Professor BIT, Bengaluru, Dr. Bindu A Thomas, 2021 Chair, IEEE MysoreSubsection and Office Bearers of IEEE Mysore Subsection and IEEE Bangalore Section and participants from all over India from different universities.

IEEE North Karnataka Subsection (IEEE-NKSS) was formed in July 2020 – R0011902, The key objective was to network professionals in this region and to share the technological developments. This would be achieved through linking industries and institutes of North Karnataka. North Karnataka has 35 Engineering Colleges spread in nine districts, viz. Bidar, Kalburgi, Yadgiri, Raichur, Vijayapura, Bagalkot, Belagavi, Dharwad and Gadag. There are eighteen active IEEE student branches out of twenty six. Total membership base of 500+. Other engineering colleges are coming forward to start IEEE student branches. This will increase the IEEE member and student member base in this region. Major industries in NK region are Sugar, Cement, Agro based product firms, Small scale & Home based. All engineering colleges and student branches in NK are connected with most of these industries through internships, projects and research activities. IEEE membership will help build cordial professional networking to create strong connectivity. Amongst these 18 student branches are active with total membership base of 500+. The role of IEEE Bangalore section in formation of NKSS is commendable, especially Mr. Puneet Misra and Mr. Bindumadhava, past chairs IEEE Bangalore Section, IEEE-NKSS has been active since its inception and has organized/sponsored many events across north Karnataka. IEEE-NKSS was formally inaugurated on 14th September 2020. Since then, it has been very functional in organizing workshops and seminars for both teaching fraternity as well as the students. IEEE-NKSS has encouraged many professionals to be the part of the IEEE fraternity by motivating the faculties and students of this region through membership drives. IEEE-NKSS has motivated in triggering many local chapters to be active part of IEEE from this region. Sub section ExCom meetings were held every month in which some key decisions were made.

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

Some of the highlights or strong points along with best practice are as follows:
- ✓ A strong team with passion of volunteering and contributing towards society.
- ✓ Mix of experienced and new to volunteering service
- ✓ Mix of industry and academia professionals
- ✓ Strong encouragement towards developing leadership

Best practices:
- ✓ Subgroup with different assignments and responsibilities
- ✓ Engage experienced industry experts
- ✓ Identify and encourage to apply for senior membership. Workshop (SIMPLE) to let them know the process
- ✓ Identify and encourage the senior member to apply for Fellow, Workshop (FINE)
- ✓ Student-focused activities
- ✓ Free or discounted registration for student members for many events
- ✓ Encourage and promote students for conference volunteering

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

Most of the events/activities will continue as the success rate has been very high. However where possible, slight variations can be made. Some of the flagship events are planned as given.

CONECCT 2022 – The 9th edition of the section's flagship conference will continue and we will encourage all chapters/AG to participate. The date is decided to be 14-16 July 2023. The mode of the conference is yet to be finalized. Most probably, we might have hybrid mode. Already, 20 chapters/AGs have expressed their willingness to participate and lead a track in CONECCT 2023.

The third edition of B-HTC 2023 will be held at JSS Medical College, Mysuru [JSS Academy of Higher Education and Research] Karnataka, India, on 24 - 25 March 2023. We are delighted to announce that the IEEE Bangalore Section and the IEEE Mysuru Subsection are co-hosting this prestigious conference. The conference aims at promoting research and development on "Sustainable Development Goal 3: Good health and well-being" to ensure a healthy life and promote well-being for all ages. B-HTC 2023 will have plenary talks, keynote addresses by eminent experts, research paper presentations, events for Young Professionals, sessions on entrepreneurship and innovation, Industry exhibits, and industry and health facility visits.

Bangalore Technology Conclave (BTC) 2023 – This event is planned to be scheduled in November on the theme of Responsible AI: Robust Technology, Impactful Business.
IEEE Bangalore Section has introduced Students Travel Grant for TEIR-1 IEEE Conferences (viz. GLOBECOM, ICC, ICASSP, APS/URSI, IMS, IECON, ECCE, APEC, EMBC, ECTC, EPEPS, ICRA, IROS, ICCE, etc.); under which we provide a Maximum Travel support of INR 50,000/6months is available under this scheme.
This scheme is open only for:
- ✓ IEEE Bangalore Section Student Members
- ✓ One Travel Grant/6months
- ✓ First Author of the accepted paper should be IEEE Bangalore Section Student Member

D.2   Goals and Future Plans

Empowering all ExCom members by delegating responsibility to lead and work in team. Goal is to bring some improvement in all areas, for example, membership count, fund/grant from HQ, government interface/connect, etc. Chair also suggested to strengthen ExCom members. We are all highly skilled and experienced, let us deliver monthly seminar/workshop to some of the student branches, chair informed. The meeting would be action oriented and quarterly review to investigate, what is set and what is achieved

- ✓ Mission mode Membership drive – to achieve close to 15000 Members with over 50% of professional categories
- ✓ Increasing student memberships
- ✓ Industry engagement and involvement
- ✓ Joint activities and reach out to sections beyond India
- ✓ Compulsory Visit by ExCom members to outside (rural colleges)
- ✓ Engagement with NGOs
- ✓ Engage more with society chapters
- ✓ Societal work – providing technology solution to underdeveloped (at least one area).

D.3   Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

Chapters and student branches should always be active. They need to feel empowered and regularly involved. Every ExCom member should visit an SB once a month to give a discussion and interact with the management, chairs, and office holders. They will be inspired and motivated by such visits. We should travel to isolated locations. We should connect and communicate frequently. Keeping track of membership each month and deliberately concentrating on it in March and August. We also need to have a synergy between all the society chapters and the section has to empower them to grow, eventually which would help the section to get more members. IEEE Bangalore Section has close synergy with the Society Chapters and Affinity groups under it and would encourage them to establish more student branch chapters in Karnataka.

D.4   Business Plan for Sustainable Growth and Financial Stability.

IEEE Bangalore Section plans to have financial and technical co-sponsorships with the locals IEEE conferences in the jurisdiction of IEEE Bangalore Section. Bangalore being a technology hub, IEEE Bangalore Section would also actively seek Sponsorships from the industry and organizations for the flagship and other conferences.

PHOTOGRAPHS