IEEE Vizag Bay Section

PART A - SECTION SUMMARY

A.1 Executive Summary – (Please follow the format given below)

- Section Executive Committee Member List
  1. Dr. Lakshminarayana Sadasivuni, Chair
  2. Dr. Abraham Varughese, Vice-Chair, IEEE Vizag Bay Section
  3. Sri Md. Khwaja Muinuddin Chisti, Secretary
  4. Prof. Deepika Rani, Treasurer
  5. Dr. P. Siva Kumar, Member and IEEE Computer Society Chapter
  6. Dr. Terlapu Sudheer Kumar, Chair, IEEE Education Society
  7. Dr. V. Sandeep, Chair, Chair, IEEE PES/IAS/PELS Society Joint Chapter
  8. Dr. Varanasi Usha Bala, WIE Coordinator IEEE Vizag Bay Section
  9. Dr. Harini, SAC Coordinator, IEEE Vizag Bay Section (Attended offline)

- Section Highlights
  10,000 Rs. For automatic agriculture motor on and off through mobile app for farmers. Further, it is delivered to the farmers.
  Dr. Chisti, Secretary IEEE Vizag Bay Section innovated a device named Walking Assistant for visually impaired people. This device is donated to the blind school, Sagar nagar.
  Organized IEEE - ICISSGT conference-2022
  Organized Summer school at NIT AP
  Three more conferences in line

- Major Events (International, National)
  Organized IEEE - ICISSGT conference-2022
  Technically sponsored two IEEE Conferences IC3P and BHARAT-22

- Major Chapter Activities
  Summer school
  Online training programs

- Major Student and Affinity Group Activities
  Student section congress hosted
  Inaugurated two new SBs

- Awards
  Dr. Chisti, Secretary awarded by State Govt for his social services in NSS

A.2 Financial Report – (Please follow the format given below)

- Summary (as per submitted on NetSuite)
- Any other financial activities

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years: 12
- Summary: Organized professional membership development at various institutions and organizations that includes NSTL DRDO, NIT AP, SASI, GITAM, DITE, GITE, REC, VITAM, ADITY, DADI, Andhra University and other institutions covering entire geographic area of Vizag Section. All events L31 were filled.

Event Name: Chapter Secretaries and Treasurers Meet
Date: 17-11-2022  
No of participants: 20  
Type of event: Administrative  
Event link (for proof): https://events.vtools.ieee.org/m/329985  
Organized by: IEEE Vizag Bay Section  
**Description:** The meeting is convinced to discuss the Role of Chapter Secretaries and Treasurers in Chapter and Section activities. This is to facilitate the more active participation of the ExCom committee of each volunteer in the chapter and section activities.

Event Name: Guidelines to submit to IEEExplore : vTools Events  
Date: 28-11-2021  
No of participants: 35  
Type of event: Professional  
Event link (for proof): https://events.vtools.ieee.org/m/330001  
Organized by: IEEE Vizag Bay Section  
**Description:** ICSSGT Organizing Committee initiated to discuss the guidelines to all the authors of ICISSGT for submitting articles to IEEExplore.

Event Name: Future Plans- IEEE Vizag Bay Section  
Date: 30-12-2021  
No of participants: 40  
Type of event: Professional  
Event link (for proof): https://events.vtools.ieee.org/m/330005  
Organized by: IEEE Vizag Bay Section  
**Description:** Future Volunteers' Training - Benefits of IEEE Volunteering by a Senior IEEE Member

Event Name: IEEE PROMOTION @ INDUSTRY -1  
Date: 20-04-2022  
No of participants: 210  
Type of event: Professional Development  
Event link (for proof): https://events.vtools.ieee.org/m/330040  
Organized by: IEEE Vizag Bay Section  
**Description:** IEEE Vizag Bay Section initiated to conduct an industry professional development program. As part of it Dr Abraham and Dr. SLN requested Dr. Y Sreenivasa Rao, Director of NSTL to promote IEEE in NSTL. Delivered talk on IEEE and IEEE Vizag Bay activities and its benefits. He has kindly agreed to encourage IEEE membership to the Scientists. We also requested Dr. Y Sreenivasa Rao, Director NSTL to be our General Chair for ICISSGT-2023, to which he agreed.

Event Name: Professional Members meet -1  
Date: 19-05-2022  
No of participants: 50  
Type of event: Professional Development  
Event link (for proof): https://events.vtools.ieee.org/m/330077  
Organized by: IEEE Vizag Bay Section  
**Description:** IEEE Vizag Bay Section organized professional members to meet and discuss the benefits of IEEE and Action Plans for Organizing a conference at Aditya Engineering College.

Event Name: Meet with BHARAT conference organizers and Review  
Date: 30-05-2022  
No of participants: 20  
Type of event: Administrative  
Event link (for proof): https://events.vtools.ieee.org/m/330080  
Organized by: IEEE Vizag Bay Section  
**Description:** A review meeting with BHARAT conference organizers of GITAM. This is to appraise the IEEE format guidelines to the BHARAT conference organizers. Publication committee duties. Prof Deepika, along with Dr. SLN addressed the meeting.

Event Name: Professional Member Meet-2  
Date: 23-07-2022  
No of participants: 50  
Type of event: Professional Development  
Event link (for proof): https://events.vtools.ieee.org/m/330083  
Organized by: IEEE Vizag Bay Section  
**Description:** IEEE Vizag Bay Section organized professional members to meet and discuss the benefits of IEEE and Action Plans for Organizing a conference at GITE Engineering College.

Event Name: GUIDELINES OF AN IEEE PAPER FORMATTING  
Date: 21-04-2022  
No of participants: 45  
Type of event: Professional  
Event link (for proof): https://events.vtools.ieee.org/m/330038  
Organized by: IEEE Vizag Bay Section  
**Description:** IEEE Vizag Bay Section conducted a webinar with all the authors of IEEE conference BHARAT-22 about the formatting guidelines for IEEE Conferences. Prof N. Deepika Rani, Chair Publication Committee BHARAT-22 will deliver this talk. Dr. S. Lakshminarayana helped the authors and clarify their doubts about the Camera-Ready Paper and Copy Right Transfer at the end of the meeting.

Event Name: 2021 IEEE SPS Cycle 2 School on Networked Federated Learning: Theory, Algorithms and Applications  
Date: 28-03-2022 to 01-04-2022  
No of participants: 500  
Type of event: Technical/Professional  
Event link (for proof): https://events.vtools.ieee.org/m/297208  
Organized by: IEEE PES/PELS/IAS Jt. Chapter  
**Description:** The IEEE Finland Jt. Chapter SP/CAS is organizing this seasonal school during March 2022. The aim of the school is to provide basic skills for applying federated learning techniques. The overall theme of this seasonal school is inspired by the recent Live Project Federated Learning Over Networks for Pandemics. school site: https://ieeespcastfinland.github.io/ 

### B.2 Chapter Activities

- Total number of Chapters in the Section: 4
- Number of Chapters formed in the current year: 1
- Number of active Chapters (Chapters who have reported required number of meetings during the year): 4
- Summary of Chapter activities (Chapter wise with attachment table/information)

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date</th>
<th>No of participants</th>
<th>Type of event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN INTELLIGENT HEARING LEVEL ASSESSMENT USING EEG SIGNALS</td>
<td>07-03-2022</td>
<td>172</td>
<td>Technical</td>
<td>The first technical session was started by 11.00 AM on 07-03-2022. Dr. S. Kamalraj having vast experience on Medical Image Processing and Signal</td>
</tr>
<tr>
<td>MACHINE LEARNING APPROACHES IN BIOMEDICAL IMAGE PROCESSING</td>
<td>07-03-2022</td>
<td>172</td>
<td>Technical</td>
<td>The second technical session was started by 02.00 PM on 07-03-2022. Dr. T V V Satya Narayana having vast experience on Image Processing and Signal</td>
</tr>
<tr>
<td>IMAGE AND SIGNAL PROCESSING FUNDAMENTALS-1</td>
<td>08-03-2022</td>
<td>172</td>
<td>Technical</td>
<td>The second day technical session 1 was started by 90.30 AM on 08-03-2022. Dr. Mahesh Anand having vast experience on Image Processing and Signal Processing delivered the above topic. He explained with lot of insights about various Image Processing techniques. He opened the new area of research for the participants who are who are currently working in Signal Processing</td>
</tr>
<tr>
<td>EFFICIENT U-NET FOR TUMOR SEGMENTATION: DEMONSTRATION USING PYTHON</td>
<td>10-03-2022</td>
<td>172</td>
<td>Technical</td>
<td>The third technical session was started by 03.00 PM on 10-03-2022. Dr. Avatharam from central university having vast experience on Image Processing and Signal Processing delivered the above topic. He explained with lot of insights about brain tumour segmentation using the familiar U-NET architecture with case study.</td>
</tr>
<tr>
<td>BRAIN TUMOR CLASSIFICATION, BUILT A MODEL FOR THE IDENTIFICATION OF THE REASONS FOR HEART DISEASES</td>
<td>10-03-2022</td>
<td>172</td>
<td>Technical</td>
<td>The fourth technical session was started by 02.00 PM on 10-03-2022. Dr. Avatharam from central university having vast experience on Image Processing and Signal Processing delivered the above topic. He explained with lot of insights about brain tumour segmentation using the familiar classification techniques with case study.</td>
</tr>
<tr>
<td>OPTIMIZATION TECHNIQUES AND THEIR APPLICATIONS IN IMAGE PROCESSING</td>
<td>11-03-2022</td>
<td>172</td>
<td>Technical</td>
<td>The fifth technical session was started by 09.00 PM on 11-03-2022. Dr. T V V Satya Narayana having vast experience on Image Processing and Signal Processing delivered the above topic. He explained with lot of insights about various optimization techniques required for deep learning</td>
</tr>
<tr>
<td>ADVANCE PERSISTENT THREAT (APT)</td>
<td>19-08-2022</td>
<td>35</td>
<td>Technical</td>
<td>In a digital world, various threats are available to sensitive data. This webinar will talk about APT which is significantly more complex and more dangerous than any other cyber-attacks, along with mechanisms to defend APT</td>
</tr>
<tr>
<td>Research Avenues in Software Reengineering</td>
<td>29-08-2022</td>
<td>55</td>
<td>Technical</td>
<td>The speaker addressed the participants about the &quot;CHOOSE TO CHALLENGE # My Place My Identity&quot; which emphasised on the importance of the self identify through confidence. The various factors about the place of stay, duration of stay and the difference we make at the place for more duration were also discussed.</td>
</tr>
<tr>
<td>Why Women should lead the Technology March</td>
<td>11-04-2022</td>
<td>31</td>
<td>Professional</td>
<td>Dr. Prasanna Nambari addressed the participants about the importance of technology and its impact on the societal growth. Especially Women's</td>
</tr>
</tbody>
</table>
Event Name: Breaking the Bias
Date: 03-09-2022
No of participants: 40
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/tego/event/manage/330050
Organized by: IEEE Vizag Bay Section-WIE
Description: Dr Mini Ulanat addressed the audience about the Difference of Gender and the associated problems in and around the world. Breaking the bias is the

Event Name: Volunteering Skills- Women In Engineering
Date: 16-08-2022
No of participants: 30
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330063
Organized by: IEEE Vizag Bay Section-WIE
Description: Dr Jennifer Castillo addressed the audience about the importance of volunteering by Women and for Women empowerment. She emphasised on different ways to enhance the volunteering skills such as networking, participating in the talks hosted by our local iee student branch group and other iee student branches where there is no bar about college or a place.

Event Name: Women in the field of Nano Science and Nano Technology
Date: 30-08-2022
No of participants: 35
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330067
Organized by: IEEE Vizag Bay Section-WIE
Description: Nityavathy madam addressed the participants about the importance of Nano Technology and its role in changing the innovative world. She emphasised the importance of women volunteering in the area of Nano Technology. She elaborated on the various research topics of Nano technology and explained in detail about her contributions towards Nano technology in real world applications.

Event Name: Fundamentals of Smart Grid Technologies
Date: 14 May 2022
No of participants: 34
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/329736
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: The IEEE PELS/IAS/PELS Joint Chapter, IEEE Vizag Bay Section is celebrated IEEE PES Day 2022 on 14 May 2022. Dr Haroon Rashid, Chair, IEEE Young Professionals Malaysia, Regional Representative (Asia Pacific), IEEE PES Young Professionals has delivered a talk on "Fundamentals of Smart Grid Technologies"

Event Name: Discontinuous Decoupled SVPWM Schemes for a Four-Level Open-End Winding Induction Motor Drive with Waveform Symmetries
Date: 21-05-2022
No of participants: 25
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/329740
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: IEEE PELS/IAS/PES Jr. Chapter, Vizag Bay Section, India has organized a technical talk on “Discontinuous Decoupled SVPWM Schemes for a Four-Level Open-End Winding Induction Motor Drive with Waveform Symmetries”

Event Name: IEEE Summer School 2022
Date: 05-09 July 2022
No of participants: 80
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/329922
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: IEEE VIZAG BAY SECTION & NIT ANDHRA PRADESH JOINTLY ORGANIZED “SUMMER SCHOOL” during 05th – 09th July 2022 at NIT Andhra Pradesh campus. Hands on training on technologies like Image Processing, 3D printing, Pytho coding, interview skills, … are covered.

Event Name: Smart Node LoRa Gateway-COMSOC Membership Development and Retention Program
Date: 02-11-2021
No of participants: 90
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego/event/manage/329997
Organized by: IEEE ComSoc/SPS Jr. Chapter
Description: The speaker gave a detailed information about LoRa node. Participants also worked on a real time project. The program has hands-on experience. The LoRa gateway (Transceiver) kit will be made available to the participants to carry out the project after submitting a proposal to the Chapter. Users also had a basic understanding of meshing and its implications on the solver and accuracy of the results. all Participant doubts are clarified

Event Name: Smart Node LoRa Gateway-COMSOC Membership Development and Retention
Date: 27-11-2021
No of participants: 65
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego/event/manage/330016
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: The second workshop of “Smart Node LoRa Gateway-COMSOC Membership Development and Retention Program” completed through physical mode on 27th November 2021 JNTUK UCEV IEEE Student Branch, University College of Engineering, Vizianagaram organized by IEEE COMSOC/SPS Joint Chapter of Vizag Bay Section

Event Name: Smart Node LoRa Gateway-COMSOC Membership Development and Retention
Date: 02-09-2022
No of participants: 90
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego/event/manage/330018
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: The speaker gave a detailed information about LoRa node. Participants also worked on a real time project. The program has hands-on experience. The LoRa gateway (Transceiver) kit will be made available to the participants to carry out the project after submitting a proposal to the Chapter. Users also had a basic understanding of meshing and its implications on the solver and accuracy of the results. all Participant doubts are clarified

Event Name: Smart Node LoRa Gateway-COMSOC Membership Development and Retention
Date: 09-09-2022
No of participants: 60
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego/event/manage/330023
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: The speaker gave a detailed information about LoRa node. Participants also worked on a real time project. The program has hands-on experience. The LoRa gateway (Transceiver) kit will be made available to the participants to carry out the project after submitting a proposal to the Chapter. Users also had a basic understanding of meshing and its implications on the solver and accuracy of the results. all Participant doubts are
The lifestyle of modern society has changed significantly with the emergence of artificial intelligence (AI), machine learning (ML), and deep learning (DL) technologies in recent years. Artificial intelligence is a multidimensional technology with various components such as advanced algorithms, ML and DL. In this presentation, he is going to explain the recent trends on the above all.

**Event Name:** Cryptanalysis of DES Crypto  
**Date:** 22-12-2021  
**No of participants:** 65  
**Type of event:** Technical  
**Organized by:** IEEE CS Chapter  
**Event link (for proof):** [https://events.vtools.ieee.org/m/296145](https://events.vtools.ieee.org/m/296145)  
**Description:** Differential cryptanalysis is a method which analyses the effect of particular differences in plaintext pairs on the differences of the resultant cipher text pairs. These differences can be used to assign probabilities to the possible keys and to locate the most probable key. In this presentation, he will see how these differences can be analyzed and exploited.

**Event Name:** Soft Computing and Swarm Intelligence in Network Perimeter Security  
**Date:** 21-12-2021  
**No of participants:** 60  
**Type of event:** Technical  
**Organized by:** IEEE CS Chapter  
**Event link (for proof):** [https://events.vtools.ieee.org/m/296010](https://events.vtools.ieee.org/m/296010)  
**Description:** Intrusion detection has become a main part of network security due to the huge number of attacks which affects the computers. This is due to the extensive growth of internet connectivity and accessibility to information systems worldwide. To deal with this problem, in this presentation he is going to explain with case studies.

**Event Name:** Current trends in Artificial Intelligence  
**Date:** 20-12-2021  
**No of participants:** 92  
**Type of event:** Technical  
**Organized by:** IEEE CS Chapter  
**Event link (for proof):** [https://events.vtools.ieee.org/m/295834](https://events.vtools.ieee.org/m/295834)  
**Description:** Artificial intelligence (AI) has taken on many new shapes and use cases as experts learn more about what's possible with big data and smart algorithms. Today's AI market, then, consists of a mixture of tried-and-true smart technologies with new optimizations and advanced AI that is slowly transforming the way we do work and live daily life. He is going to explain the current AI trends with some Case studies.

**Event Name:** IMAGE AND SIGNAL PROCESSING FUNDAMENTALS-2  
**Date:** 09-03-2022  
**No of participants:** 172  
**Type of event:** Technical  
**Organized by:** IEEE CS, Vizag Bay Section  
**Event link (for proof):** [https://events.vtools.ieee.org/m/330176](https://events.vtools.ieee.org/m/330176)  
**Description:** Understanding Spatial Domain Vs Frequency Domain Features

**Event Name:** ROLE OF IEEE IN RESEARCH CAREER  
**Date:** 12-03-2022  
**No of participants:** 172  
**Type of event:** Technical  
**Organized by:** IEEE CS, Vizag Bay Section  
**Event link (for proof):** [https://events.vtools.ieee.org/m/330181](https://events.vtools.ieee.org/m/330181)  
**Description:** The sixth day technical session 1 was started by 09.00 PM on 12-03-2022. Dr. Lakshmi Narayana having vast experience on Image Processing and Signal Processing delivered the above topic. He explained with lot of insights about role of IEEE in publishing their work for the research scholars. He explained the various opportunities available in IEEE for the publication support in journals and conferences.

**Event Name:** IEEE MEMBERSHIP BENEFITS  
**Date:** 12-03-2022  
**No of participants:** 172  
**Type of event:** Technical  
**Organized by:** IEEE CS, Vizag Bay Section  
**Event link (for proof):** [https://events.vtools.ieee.org/m/330181](https://events.vtools.ieee.org/m/330181)  
**Description:** The sixth day technical session 2 was started by 10.00 AM on 12-03-2022. Dr. D. Harini, Student Activities Committee Chair of IEEE Vizag Bay Section having vast experience on IEEE delivered the talk about membership benefits of IEEE. She explained with lot of insights about benefits of IEEE membership in publishing their work for the research scholars. She explained the various opportunities available in IEEE members for the publication support in journals and conferences.

**Event Name:** SOFT SKILLS FOR SUCCESS  
**Date:** 24-08-2022  
**No of participants:** 60  
**Type of event:** Technical  
**Organized by:** IEEE CS, Vizag Bay Section  
**Event link (for proof):** [https://events.vtools.ieee.org/m/327863](https://events.vtools.ieee.org/m/327863)  
**Description:** Soft skills are more critical than ever as organizations struggle to find meaningful ways to remain competitive and be productive. It's just not enough to be highly trained in technical skills, without developing the softer, interpersonal and relationship-building skills that help people to communicate and collaborate effectively.

**Event Name:** Digital Transformation in Business  
**Date:** 13-08-2022  
**No of participants:** 50  
**Type of event:** Technical  
**Organized by:** IEEE CS, Vizag Bay Section  
**Event link (for proof):** [https://events.vtools.ieee.org/m/327865](https://events.vtools.ieee.org/m/327865)  
**Description:** Requirements gathering of software projects – SAP R3 (MM, SD, FICO, CS), Cloud based process automation (AWS), BI reporting, RDA (UiPath), RPA

**Event Name:** Mindul to Mindfull  
**Date:** 02-09-2022  
**No of participants:** 27  
**Type of event:** Professional  
**Organized by:** IEEE Vizag Bay Section-WIE  
**Event link (for proof):** [https://events.vtools.ieee.org/m/330071](https://events.vtools.ieee.org/m/330071)  
**Description:** Uma Alluri the speaker elaborated on the importance of self reliance and self esteem for an individual. She encouraged all the participants to express their interest in volunteering and learning to attain self reliance. She quoted few real world examples and tips to home oneself in becoming more confident and torch bearer.
Expenditure is met from section incentive.

One Week Online Training Program

distinguished lecture programs with attachment table / information

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

B.3 Professional and Continuing Education Activities

Event Name: IEEE PELS DAY Celebrations 2022
Date: 20-06-2022
No of participants: 10
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/329921
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: The IEEE PELS/IAS/PES Joint Chapter, IEEE Vizag Bay Section is celebrated IEEE PELS Day 2022 on 20 June 2022. Authors presentations for “Best Research Publication Award - PELS Category” at section level

Event Name: IEEE Summer School 2022
Date: 05 -09 July 2022
No of participants: 80
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/329922
Organized by: IEEE PES/PELS/IAS Jr. Chapter
Description: IEEE VIZAG BAY SECTION & NIT ANDHRA PRADESH JOINTLY ORGANIZED “SUMMER SCHOOL” during 05th – 09th July 2022 at NIT Andhra Pradesh campus. Hands on training on technologies like Image Processing, 3D printing, Pytho coding, interview skills, … are covered.

Event Name: Patentability of software innovations
Date: 18-11-2021
No of participants: 65
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330221
Organized by: SAC, Vizag Bay Section
Description: Many applications being developed by our young engineers, but not known how to claim them. Speaker narrated the ways the ideas can be patented and the importance of it.

Event Name: 3MT Competition
Date: 01-04-2022
No of participants:21
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330253
Organized by: SAC, Vizag Bay Section
Description: This a three minute presentation competition of the given theme. The theme is IT in our lives. The competition consists of two rounds. First round, the idea should be submitted as abstract to SAC. Secondly, the shortlisted students should give a 3 minute presentation before the panel members. A total of 21 abstracts received. Among them 11 proposal got shortlisted for the presentation.

Event Name: SSC 2022
Date: 03-04-2022
No of participants:115
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330272
Organized by: SAC, Vizag Bay Section
Description: Student Section Congress 2022. A total of 115 participants has participated in this event. professor Ravi Saripalle addressed the gathering by his motivation speech on " Inspiring Young Minds". And the students participated in various events like Poster presentation, Hardware Expo, technical treasure hunt and cultural events.

Event Name: Promotions and Planning for IEEE Xtreame 16.0
Date: 24-09-2022
No of participants:14
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330280
Organized by: SAC, Vizag Bay Section
Description: Promoting and planning for IEEE Xtreame 16.0 with SN members. Introduced student ambassadors Mr Harsha V and Ms Soumya to the team. This made to register huge number of participants and made IEEE vizag bay section to stand in the third position.

Event Name: Mocktest Xtreme 2022 Inagural
Date: 25-09-2022
No of participants:60
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330285
Organized by: SAC, Vizag Bay Section
Description: Prof lakshmi Narayan, Chair addressed the gathering by welcoming them to the event. Dr Harini, SAC addressed the importance of IEEE Xtreame competition and Dr P Shiva Kumar given a glimpse of rules to participate in the aforementioned competition and launched the link for mock test.

Event Name: Mocktest Xtreme 2022 IEEE Xtreame 16.0
Date: 25-09-2022
No of participants: 120
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330286
Organized by: SAC, Vizag Bay Section
Description: A total of 28 teams participated in this contest from various sections of India. The test is hosed on the platform Hackerrank. The top three participants were given merit certificates.

Event Name: IEEE Xtreame 15.0 Success story
Date: 17-10-2022  No of participants:46  Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330289
Organized by: SAC, Vizag Bay Section  Description: To be on the top in IEEEExtreme is a dream. A team in India got 12th rank globally in IEEEExtreme 15.0 in 2021. IEEE Vizag Bay Section is happy to announce that this team along with the proctor are willing to share their hard work/Success plan with the IEEEExtreme 16.0 candidates.

Event Name: 2021 IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT – 2021)  Date: 13th and 14th Nov, 2021  No of participants: 40  Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/329999
Organized by: IEEE Vizag Bay Section  Description: IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT – 2021) was inaugurated today at Hotel Meghalaya Visakhapatnam. Theme of the conference is “Unknown to known: Technology as a tool and known to unknown : Humanity as focus. This conference is organized by IEEE Vizag Bay Section. Prof Saifur Rahman, IEEE President Elect 2022, IEEE President 2023, Founding director of the Advanced Research, Institute at Virginia Tech was the chief guest addressed the participants.

Event Name: IEEE IC3P International Conference technically sponsored by IEEE Vizag Bay Section  Date: 7th and 8th Dec, 2021  No of participants:110  Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330015
Organized by: IEEE Vizag Bay Section
Description: The conference is organized in total nine sessions in which 61 papers presentation.

Event Name: IEEE International Conference BHARAT -22 technically sponsored IEEE Vizag Bay Section  Date: 07-04-2022  No of participants: 120  Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330032
Organized by: IEEE Vizag Bay Section  Description: Technically Sponsored IEEE conference BHARAT 22 at GITAM Deemed to be University. 35 technical papers accepted from 250 papers submitted. The papers are published in IEEExplore.

B.4 Students Activities

- Total number of Student Branches in the Section
- Number of Student Branches formed in the current year
- Section level student activities (student congress, paper and other contests, awards etc)

Event Name: SB Counselors meeting for the preparations of SSC 2022  Date: 24-03-2022  No of participants:12  Type of event: Admin
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330264
Organized by: SAC, Vizag Bay Section  Description: A meeting with SB counselors for the preparation and budget for the upcoming SSC 2022.

Event Name: Meeting with SN members and Volunteers for the preparation of SSC Team  Date: 27-03-2022  No of participants:22  Type of event: Admin
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330270
Organized by: SAC, Vizag Bay Section  Description: Meeting with SN members and Volunteers to discuss about the promotions and responsibilities for the upcoming SSC 2022.

Event Name: Meeting with SN members 2022  Date: 02-09-2022  No of participants:12  Type of event: Admin
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330275
Organized by: SAC, Vizag Bay Section  Description: Meeting with newly elected SN members for the role of positions and responsibilities.

Event Name: Patentability of software innovations  Date: 18-11-2021  No of participants:65  Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330221
Organized by: SAC, Vizag Bay Section  Description: Many applications being developed by our young engineers, but not known how to claim them. Speaker narrated the ways the ideas can be patented and the importance of it.

Event Name: 3MT Competition  Date: 01-04-2022  No of participants:21  Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330253
Organized by: SAC, Vizag Bay Section  Description: This a three minute presentation competition of the given theme. The theme is IT in our lives. The competition consists of two rounds. First round, the idea should be submitted as abstract to SAC. Secondly, the shortlisted students should give a 3 minute presentation before the panel members. A total of 21 abstracts received. Among them 11 proposal got shortlisted for the presentation.
Event Name: SSC 2022  
Date: 03-04-2022  
No of participants: 115  
Type of event: Technical  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330272  
Organized by: SAC, Vizag Bay  
Section Description: Student Section Congress 2022. A total of 115 participants has participated in this event. professor Ravi Saripalle addressed the gathering by his motivation speech on "Inspiring Young Minds". And the students participated in various events like Poster presentation, Hardware Expo, technical treasure hunt and cultural events.

Event Name: Student Branch Inaugural - Aditya Engineering College, Surampalem.  
Date: 19-05-2022  
No of participants: 120  
Type of event: Professional  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330274  
Organized by: SAC, Vizag Bay  
Section Description: Student branch has been inaugurated in Aditya Engineering College, Surampalem. Prof lakshmi Narayana, Chair inaugurated and addressed the gathering with his opening remarks. Dr D N D harini, SAC spoke about the IEEE membership benefits. Dr Sandeep, PES chair has given a technical session. Dr P Siva Kumar Excom member has graced the occasion too.

Event Name: Promotions and Planning for IEEEXtreme 16.0  
Date: 24-09-2022  
No of participants: 14  
Type of event: Technical  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330280  
Organized by: SAC, Vizag Bay  
Section Description: Promoting and planning for IEEEXtreme 16.0 with SN members. Introduced student ambassadors Mr Harsha V and Ms Soumya to the team. This made to register huge number of participants and made IEEE vizag bay section to stand in the third position.

Event Name: Mocktest Xtreme 2022 Inaugural  
Date: 25-09-2022  
No of participants: 60  
Type of event: Technical  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330285  
Organized by: SAC, Vizag Bay  
Section Description: Prof lakshmi Narayan, Chair addressed the gathering by welcoming them to the event. Dr Harini, SAC addressed the importance of IEEExtreme competition and Dr P Shiva Kumar given a glimpse of rules to participate in the aforementioned competition and launched the link for mock test.

Event Name: Mocktest Xtreme 2022 IEEExtreme 16.0  
Date: 25-09-2022  
No of participants: 120  
Type of event: Technical  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330286  
Organized by: SAC, Vizag Bay  
Section Description: A total of 28 teams participated in this contest from various sections of India. The test is hosted on the platform HackerRank. The top three participants were given merit certificates.

Event Name: IEEExtreme 15.0 Success story  
Date: 17-10-2022  
No of participants: 46  
Type of event: Technical  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/manage/330289  
Organized by: SAC, Vizag Bay  
Section Description: IEEE Vizag Bay Section is happy to announce that this team along with the proctor are willing to share their hard work/success plan with the IEEExtreme 16.0 candidates.

- Number of active Student Branches (Student Branches who have reported the required number of meetings during the year): 20
- Summary of Student Branch activities (Student Branch wise with attachment table/information): 350plus activities

B.5 Affinity Group Activities

- Young Professional (YP): 0
- Women In Engineering (WIE): 12

Event Name: Why Women should lead the Technology March  
Date: 11-04-2022  
No of participants: 31  
Type of event: Professional  
Event link (for proof): https://events.vtools.ieee.org/tego/event/edit/245750  
Organized by: IEEE Vizag Bay Section-WIE  
Description: Dr.Prasanna Nambiar addressed the participants about the importance of technology and its impact on the societal growth. Especially Women's

Event Name: CHOOSE TO CHALLENGE # My Place My Identity  
Date: 03-08-2022  
No of participants: 31  
Type of event: Professional  
Event link (for proof): https://events.vtools.ieee.org/tego_/event/edit/245750#  
Organized by: IEEE Vizag Bay Section-WIE  
Description: The speaker addressed the participants about the "CHOOSE TO CHALLENGE # My Place My Identity" which emphasised on the importance of the self identify through confidence. The various factors about the place of stay, duration of stay and the difference we make at the place for more duration were also discussed.
Event Name: Volunteering Skills- Women In Engineering
Date: 16-08-2022
No of participants: 30
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330063
Organized by: IEEE Vizag Bay Section-WIE
Description: Dr. Siva Kumar addressed the gathering with the benefits of IEEE and the Women in Engineering group and funding opportunities with IEEE. Dr. G. Sree Lakshmi, WIE Chair, IEEE Hyderabad, gave a talk on methods in signal processing that covered the research topics in the area of biomedical signal processing such as EEG, ECG, audio signal processing, NLP, etc. The talk ended with a vote of thanks by Dr. Usha Bala

Event Name: Women in the field of Nano Science and Nano Technology
Date: 30-08-2022
No of participants: 35
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330067
Organized by: IEEE Vizag Bay Section-WIE
Description: Uma Alluri the speaker elaborated on the importance of self-reliance and self-esteem for an individual. She encouraged all the participants to express their interest in volunteering and learning to attain self-reliance. She quoted a few real-world examples and tips to hone oneself in becoming more confident and a torch bearer.

Event Name: Research and Innovation for Women Empowerment and Sustainable Development
Date: 22-09-2022
No of participants: 17
Type of event: Professional
Event link (for proof): https://events.vtools.ieee.org/m/330073
Organized by: IEEE Vizag Bay Section-WIE
Description: Prof Celia Shehnaz boosted the audience by enlightening them with the women empowerment events and contributions worldwide. She gave tips for the participants to volunteer themselves in self-motivation through volunteering, improving the volunteer networking. She has taken inputs from the young IEEE student volunteers in order to enhance their volunteering capabilities and the benefits they can attain through volunteering.

Event Name: Women in Power Engineering
Date: 10-10-2022
No of participants: 71
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/347183
Organized by: IEEE Vizag Bay Section-WIE
Description: Dr. Chisti welcomed the gathering. Dr. Usha bala, WIE coordinator, gave insight on the benefits of being an IEEE member and IEEE WIE member, and Dr. V. Sandeep, HoD EE, NIT-AP, has given an excellent talk on women in power engineering. Talk motivated all the women participants on their role on the technology front.

Event Name: Computer intelligence – Role of women researcher & present status
Date: 14-11-2022
No of participants: 50
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/347185
Organized by: IEEE Vizag Bay Section-WIE
Description: The benefits of IEEE, and member WIE were presented by Dr. Chisti and followed by the actual word application with computer intelligence, how it impacts human life in the future, and the importance of women researchers and their role discussed. The talk was interactive, and the discussions on research topics are highlights of the talk.

Event Name: Methods of Signal Processing
Date: 21-11-2022
No of participants: 65
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/347188
Organized by: IEEE Vizag Bay Section-WIE
Description: Dr. P. Siva Kumar addressed the gathering with the benefits of IEEE and the Women in Engineering group and funding opportunities with IEEE. Dr. G. Sree Lakshmi, WIE Chair, IEEE Hyderabad, gave a talk on methods in signal processing that covered the research topics in the area of biomedical signal processing such as EEG, ECG, audio signal processing, NLP, etc. The talk ended with a vote of thanks by Dr. Usha Bala

Event Name: Pre--Post Pandemic (PPP) challenges in Women at workspace
Date: 14-12-2022
No of participants: 35
Type of event: Technical
Event link (for proof): https://events.vtools.ieee.org/m/347189
Organized by: IEEE Vizag Bay Section-WIE
Description: It was an excellent day, it started with a talk by Prof G. Sree Lakshmi, WIE Chair, IEEE Hyd Section, and then followed by a talk by Prof Sushmita Mishra, Machine Intelligence Unit, Indian Statistical Institute, Kolkata, on ML applications. This has given many research problems to the students who have attended. Then followed by Debate Competition was conducted with the theme on “Pre Post-Pandemic Challenges in Women at Workspace.” At the last, a talk by Mrs. Ilin Dinabahram, English Language, and Literature has
highlighted the out of box thinking that helps in powering women and A talk by Prof P K Sen, Emeritus Professor gave an excellent opportunity to the participants to know about India culture and future role of the Engineers.

- Life Member (LM): 0

**B.6 Awards & Recognition Activities**

- Award constituted by the Section: 1

  **Event Name:** IEEE PELS DAY Celebrations 2022  
  **Date:** 20-06-2022  
  **No of participants:** 10  
  **Type of event:** Technical  
  **Event link (for proof):** https://events.vtools.ieee.org/m/329921  
  **Organized by:** IEEE PES/PELS/IAS Jt. Chapter  
  **Description:** The IEEE PELS/IAS/PELS Joint Chapter, IEEE Vizag Bay Section is celebrated IEEE PELS Day 2022 on 20 June 2022. Authors presentations for "Best Research Publication Award - PELS Category" at section level

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

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

- Newsletter (name and number of issues in the year)- 0
- Home Page of the Section (give the URL and how often it is updated)  
  "Our website : [https://r10.ieee.org/vizagbay/](https://r10.ieee.org/vizagbay/)"  
  "Our Selected Event Videos: [https://r10.ieee.org/vizagbay/event-videos/](https://r10.ieee.org/vizagbay/event-videos/)"  
- Other means of contacts with Section members including social media

**B.8 Industry Relations**

- Membership growth and retention
  
  **Event Name:** IEEE PROMOTION @ INDUSTRY -1  
  **Date:** 20-04-2022  
  **No of participants:** 210  
  **Type of event:** Professional Development  
  **Event link (for proof):** https://events.vtools.ieee.org/m/330040  
  **Organized by:** IEEE Vizag Bay Section  
  **Description:** IEEE Vizag Bay Section Initiated to conduct an industry professional development program. As apart of it Dr Abraham and Dr. SLN requested Dr Y Sreenivasa Rao, Director of NSTL to promote IEEE in NSTL. Delivered talk on IEEE and IEEE Vizag Bay activities and its benefits. He has kindly agreed to encourage IEEE membership to the Scientists. We also requested Dr. Y Sreenivasa Rao, Director NSTL to be our General Chair for ICISSGT-2023, to which he agreed.

- Activities for/with industrial members
  
  Visited industry with student members (Dream Chip- Visakhapatnam)

**B.9 Humanitarian Technology Activities**

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
- SIGHT Activities

  For automatic agriculture motor on and off through mobile app for farmers. Further, it is delivered to the farmers. Section sponsored 10,000/- to students Dr. Chisti, Secretary IEEE Vizag Bay Section innovated a device named Walking Assistant for visually impaired people. This device is donated to the blind school, Sagarnagar.
B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)

**Event Name:** IEEE Day Celebrations - Meet the Members  
**Date:** 04-10-2022  
**No of participants:** 25  
**Type of event:** Professional  
**Event link (for proof):** https://events.vtools.ieee.org/m/330115  
**Organized by:** IEEE Vizag Bay Section  
**Description:** IEEE Vizag Bay Section celebrated IEEE Day on 4th Oct, 2022 with interactive session with the IEEE Vizag Section Executive committee, Chapter Excom members, and members.  
Participated in Beach cleaning activities

**PART C - OTHERS**

**C.1 Special Events**

- Organized events at rural school, WIE events encouraging women students.  
**Event Name:** Pre--Post Pandemic (PPP) challenges in Women at workspace  
**Date:** 14-12-2022  
**No of participants:** 35  
**Type of event:** Technical  
**Event link (for proof):** https://events.vtools.ieee.org/m/347189  
**Organized by:** IEEE Vizag Bay Section-WIE  
**Description:** It was an excellent day, it started with a talk by Prof G Sree Lakshmi, WIE Chair, IEEE Hyd Section, and then followed by A talk by Prof Sushmita Mishra, Machine Intelligence Unit, Indian Statistical Institute, Kolkata, on ML applications. This has given many research problems to the students who have attended. Then followed by Debate Competition was conducted with the theme on “Pre Post-Pandemic Challenges in Women at Workspace.” At the last, a talk by Mrs. Ilin Dinah Abraham, English Language, and Literature has highlighted the out of box thinking that helps in powering women and A talk by Prof P K Sen, Emeritus Professor gave an excellent opportunity to the participants to know about India culture and future role of the Engineers.

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

- Nature of relationship and details of any formal agreement signed: 0  
- Details of joint activities  
- Benefit to IEEE members (for example discounts, access to technical information etc.)  
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

**C.3 Collaboration with other IEEE Sections**

- Organized Section chairs and chapter chair meets for knowing the problems in pandemics and how o face them  
- Winter school with fin land section SPS chapter

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

- Support extended for organising technical, educational and professional activities  
- Joint activities for membership development  
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section
Support to Chapters from Section from Incentive:

- Summer school is organized by PES/PELS/IAS and section supported financially to meet the excess expenditure
- One Week Online Training Program” on Comprehensive Problem-Solving Using Python Programming was organized by Edu Soc Chapter. The excess expenditure is met from section incentive
- Three students were nominated to participate in AISWYWLC22 from Section incentive PES/PELS/IAS has conducted best paper award and these awards are met from Section incentive

Support to SBs

- Supported many SBs for organizing their Member Development Programmes. One of the Section Exe Com members is deputed to participate and promote in IEEE
- Evaluation, adjudication of SBs events in their IEEE Events
- IEEExtreme event promotion by many of our Section Exec Committee Members Organized IEEExtreme mock test and top three students were rewarded.

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

- Continuous professional members meets

C.6 Problems anticipated and suggestions for solutions, if any

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans
2024 International Conference on Social and Sustainable Innovations in Technology and Engineering (SASI-ITE) - #58663 which is scheduled to begin on 4-Jan-24 has been approved by all conference sponsors.
2023- IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT – 2023)
2023- International Conference on Advanced & Global Engineering Challenges (AGEC-2023) 9th&10th June 2023 [IEEE Conference ID: # 57922 ]
Theme: "Next Generation Technology for Sustainable Development". Organized by Aditya Engineering College(A)

D.2 Goals and Future Plans
Organize invited talks/workshops/events to impart new innovations and their use, benefits to the humanity. Improve the IEEE Membership by organizing events in remote institutions, where student branches do not exist. remote schools and enhance technical knowledge with the practical approach. Organize skill development events.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.
Encouraging student and professional members funding and recognition for their contribution to societal projects. Induction programs for the first year admitted students in various fields of education.
Support researchers, by connecting industry personal for applications, guidance and validate the results. Visit more remote schools and enhance technical knowledge with the practical approach. Organize skill development events. Visiting Industries for their support in terms of technical as well financially in organizing conference and events.

SEC Meeting

ICISSGT Conferences
ICISSGT Conferences

Summer school @ NIT
Raghu College holds 2-day int’l conference

Visakhapatnam: AP State Council of Higher Education Chairman Prof. K Hemachandra Reddy said the society is a platform for innovation. He inaugurated a two-day international conference ‘Computing, Communication and Power Technology’, jointly organized by Raghu College of Engineering and Raghu Institute of Technology.

Indian universities should play key role in R&D: NSTL Director

‘R&D is pushing technological frontiers’

STAFF REPORTER
VISHAKHAPATNAM
Director of Naval Science & Technological Laboratory (NSTL) V. Sreeramala Rao said that Research and Development (R&D) is the crucial factor pushing the world’s technological frontiers, and said Indian universities should play a key role in the advancement of research and innovation. He was speaking during the inaugural session of the International Conference on Breakthrough in Heuristics and Reciprocation of Advanced Technologies (BIIAT) jointly organised by GITAM Deemed to be University’s RCE Department and IEEE Vizag Bay Section. Addressing the gathering, Dr. Sreeramala Rao said that the Government of India launched a new scheme for development of semiconductors and display manufacturing ecosystem with 176,000 core, which will position India as a global hub for Hi-tech production and attract large chipmakers. Accenture Technology Solutions Managing Director G.S. Rao said that COVID-19 forced the companies to rapidly operate in new ways and IT is being tested as never before. He said that most of the companies were investing more on technology upgradation and innovations. GITAM President M. Sribharath and GITAM Academic Pro Vice-Chancellor Prof. Jayakumar Vairat were present.