

## **SYNAPSE**

The Newsletter of IEEE Hyderabad Section

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**Editor in Chief: Mohammed Arifuddin Sohel** 

## Annual General Body Meeting -AGM 2018

The Annual General Body Meeting(AGM) of IEEE Hyderabad Section was held on 28 January 2018 in Hotel Plaza from 10.00AM to 12.30 PM. The AGM was preceded by poster presentations by all chapters for the activities done in 2017 from 9.00 AM to 10.00 AM. Dr. M. Lakshminarayana, Chairman (2016-17) delivered the opening address and spoke on the special activities and accomplishments of the Section – covering the Section Website, activities of the Future Directions Committee, recommendations from the Sections Congress, and about technical co-sponsorship of conferences.

Mr. N. Venkatesh, Secretary, delivered the Section Report for 2017 in which he mentioned about the general membership of over 5,800 in the Section, and society membership of over 2,700, and about the large number of events carried out over the year – amounting to 178 events. He also mentioned the awards won by section volunteers, Student Branches, and Chapters which are Dr. Koduri Srinivas winning the 2017 IEEE R10 Outstanding Volunteer Award, Shaik Suraiah Thaseen winning the 2017 R10 Outstanding Student Volunteer Award, CIS Chapter winning the 2018 CIS Outstanding Chapter Award, MVSR Student Branch winning the Darrel Chong award, and Sai Thejeshwar winning the IEEE Computer Society Richard E Merwin Scholarship award.

Mr. Raghunathan, member FDC gave a report of the Future Directions Committee, and reemphasized the Section Vision and Mission. This was followed by the Section Treasurer, Mr. Sreenivas Jasti, delivering the Treasurer's report. The Chair, Dr. M. Lakshminarayana and Vice Chair Maruthi Rao, along with past Chairs Dr. Kodali and Dr. Deekshatulu, launched the revamped IEEE Hyderabad Section website. The efforts of Mr. Maruthi Rao are revamping the section website were highly appreciated.

Members participated in an open discussion on various topics. Mr. Raghunathan commented on the website being an important item and asked whether professional help can be taken in maintaining it. There was a comment from the floor that the Section should be active in adding Senior Members and Fellows to its list. Dr. Kodali complimented the Section officers and Chapter volunteers and requested that they help boost the number of technical activities conducted. He spoke about the need to address the active student community, member community, and the passive community and also conduct of skill development activities for the unemployed youth. Dr. Kodali spoke about the book created detailing the history of R10.

Dr. NV Rao announced the new slate at the Section and the various Chapters. Mr. Maruthi Rao took over as the Chair of the Section for 2018 from Dr. M Lakshminarayana. The outgoing Chair thanked all the members for their association and cooperation during his stint.

## IEEE Hyderabad Section Mission and Vision Vision

**Editor: Mousmi Ajay Chaurasia** 

To be an essential resource for the professional development in specific fields of interest of IEEE for the benefit of mankind.

#### Mission

To provide a platform for knowledge sharing, networking, and career development to the local technical community.

The Section gave the following awards to its outstanding volunteers:

- 1. Outstanding Volunteer Award NV Rao.
- Distinguished Volunteer Service Award Rajagopalan Kannan
- 3. Significant Volunteer Service Award Md. Arifuddin Sohel.
- 4. Special Award for "Outstanding Support to Section Activities" IEEE Student Branch of International Institute of Information Technology (IIIT), Hyderabad.
- 5. Upcoming Student Branch Award IEEE Student Branch of MVSR Engineering College, Hyderabad.
- Upcoming Student Branch Award IEEE Student Branch of Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad.
- 7. Vibrant Student Branch Award IEEE Student Branch of G Pulla Reddy Engineering College (GPREC), Kurnool.
- 8. Vibrant Student Branch Award IEEE Student Branch of Vignan Institute of Technology and Science, Hyderabad.
- 9. Vibrant Student Branch Award IEEE Student Branch of Sreenidhi Institute of Science and Technology, Hyderabad

Dr. Amit Kumar was welcomed on to the dais as the new Vice Chair of the Section for 2018, taking over from Mr. Maruthi Rao. A resolution for operation of Bank account by the new body was approved. The new Vice Chair Amit Kumar proposed a vote of thanks. The Members and their families in attendance proceeded to lunch.





# IEEE Hyderabad Section in collaboration with IEEE India Council organizing PANEL OF CONFERENCE ORGANISERS (mini POCO-2018)

An IEEE conference has high quality technical lectures, tutorials, speakers and eager participants. The organiser of such events needs to understand the IEEE Conferences Policy and know all the helping channels within **IEEE** to meet expectations IEEE Conference attendees and produce desired output a conference. In order to organise an IEEE Conference and want to get trained on important issues of taking up a quality event, this workshop is the right place. IEEE Hyderabad Section in collaboration with IEEE India Council invites conference organizers to know about the core of organizing a successful IEEE conference. Theme of 2018 mini POCO workshop is "Conferences in the changing world" on 20th May 2018 at Hotel Palm Beach, Vishakhapatnam,

This event is comprised of seminars, focused sessions with plenty of opportunities for participants to exchange ideas, success stories and challenges with other IEEE Conference co-organizers. Apart from know how sessions on IEEE Conferences, this one-day workshop will offer Networking opportunity with the experienced Conference Leaders and opportunity to take part in round table discussions. After this workshop, it is aimed that an attendee will take back basic IEEE Conference Business Framework.

This workshop is meant for the IEEE Members, Volunteers, Academicians and Industrialists who are interested to organize IEEE Conferences or want to understand about IEEE Conferences management and quality. Mini POCOs and earlier editions (2012,2013,2015) of Conference Organizers workshops have received great response and attendees from several nations have already benefitted through this platform.

Website: https://e36.hubilo.com/

Contact: Dr Amit Kumar (Vice Chair - IEEE Hyderabad Section)

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Display of mini POCO-2018

## IEEE R-10 Executive Committee members felicitated by IEEE Hyderabad Section

During International conference on Convergence of Technology (I2CT), 6-8 April, 2018 (Technically cosponsored by IEEE Bombay Section), on behalf of IEEE Hyderabad Section, Vice Chair Amit Kumar presented token of remembrance to Dr Lance Fung (Chair of IEEE Technical Program Integrity Initiative), Dr Seikh Fattah (Member, 2018 IEEE Humanitarian Activity Committee (HAC), and Dr Hussain Mahdi (IEEE Region 10 Young Professionals South-East Asia Coordinator at IEEE Region 10).



Dr. Amit Kumar felicitating Dr. Hussain Mahdi



Dr. Amit Kumar felicitating Dr. Lance Fung



Dr. Amit Kumar felicitating Dr. S. Fattah

IEEE Computational Intelligence Society/Geoscience and Remote Sensing Society Chapter Activities

The IEEE CIS/GRSS Society had an impressive start of the year 2018, where it started with an expert talk by distinguished engineer at NVIDIA, USA. IEEE CIS/GRSS organized ten events in three months which includes DLP, workshop, technical talk, social evening and field visit. The details of the events are as follows.

An Expert Talk on Autonomous Car – A new Driver for Resiliency and Testability at University of Hyderabad and MJCET, Hyderabad

IEEE CIS/GRSS Jt. Chapter has organized an Expert Talk on "Autonomous Car-- A New Driver for Resiliency and Testability" at two locations: University of Hyderabad(UoH) & MJCET Hyderabad on 07-01-2018. Total 30 & 35 participants attended this event at UoH & MJCET respectively. Out of those, 18 were the IEEE members. Dr. Nirmal R. Saxena is the Fellow member of IEEE and currently a distinguished engineer at NVIDIA and is responsible for high-performance and automotive resilient computing.

Autonomous or self-driving car initiative is creating a new center stage for resilient computing and design for testability. This is very apparent from reading the ISO26262 specification, which is about the functional safety for automotive equipment applicable throughout the lifecycle of all automotive electronic and electrical safety-related systems. One of the key use case for self-driving car is neural-network based deep learning. Reliability models that explore the dynamic trade-offs between resiliency and performance requirements for deep learning are examined. During his talk, he focused on gradient descent algorithm, NVIDIA Volta GPU, Entropy for precise results and all parameters need to be considered during implementation of autonomous car.



Dr. Nirmal R. Saxena delivering expert talk at MJCET



L-R: Dr. Arifuddin Sohel , Dr. Nirmal R. Saxena , Dr. M. Naresh , Dr. Mousmi Ajay Chaurasia and Dr. Atul Negi felicitating the speaker



Group photo with UoH organizers

DLP on Statistical Information Theory and Geometry for Geometry for SAR Image Analysis by Prof.

Alejandro C. Frery, Brazil

IEEE GRSS DLP event on Statistical Information Theory and Geometry for SAR Image Analysis by Prof. Alejandro C. Frery, Brazil organized at three different locations: University of Hyderabad (UoH), National Remote Sensing Centre (NRSC) and Mahindra Ecole Centrale (MEC) on 8<sup>th</sup> & 9<sup>th</sup> February 2018.

Statistics, either implicitly or explicitly, plays a prominent role across several branches of Remote Sensing (RS). This is mostly due to the fact that RS deals with often incomplete and mostly imprecise data. But statistics aspires to more than being a mere tool for circumventing those unavoidable observational limitations. Statistics is able to

provide a complete framework for tackling many relevant RS problems, from a sound mathematical description to tractable computational solutions. This wealth of knowledge is of particular importance when dealing with Synthetic Aperture Radar - SAR images. This kind of imaging produces data with a noise-like pattern, called speckle, which can be well described as a non-Gaussian non-additive contamination to the underlying desired information.

In this talk, a unified framework for a diversity of problems involving SAR imagery (despeckling filters, classification, segmentation, change detection and edge identification). He explained the ability of SAR to penetrate cloud cover makes it particularly valuable in frequently cloudy areas such as the tropics. Image data serve to map and monitor the use of the land, and are of gaining importance for forestry and agriculture. Using Information-Theoretic tools within a Statistical framework, all different problems can be posed and solved as a single one: testing the hypothesis that two or more samples are outcomes of the same distribution.



Prof. Alejandro C. Frery delivery talk at UoH



Group Photo with NRSC organizers

## Field Visit at Hardware Plant of ZEN Technologies, Shamshabad, Hyderabad

IEEE CIS/GRSS Hyderabad section organised a field trip to Zen Technologies on 17<sup>th</sup> March 2018 for students. Total 30 students participated in the trip from IEEE GRIET SB, and IEEE VITS SB. Zen Technologies develops state-of-the-art training simulators for weapons and allied defence equipment . Zen has an expertise in designing ,developing and manufacturing various types of simulators .The students were first taken to the TacSim,BMPII driving simulators,Zen CTSR,Zen Tank T-90 where zen small arms training simulator ,advanced weapons ,driving simulators were practically explained by the retired army officers. A very informative and PC-based visual simulation has been explained.

The different parts and specifications like instructor station, console rack , motion control unit , commander and gunner IO box were explained. Next the students went through the smart target system, a multi functional master control where infantry weapons training simulations were demonstrated. An innovative and real time experience was with the Zen MMG Sim. An interactive indoor training aid to train MMG detachment numbers in techniques of engagement of various targets, fire control and tactical employment of the weapon system.



Group Photo with Zen Technologies personnels

In the end we had a live demonstration of patented hand grenade simulator that helps trainees develop a high degree of mind-body coordination, essential for effectively firing hand grenades and preventing accidents.

It is a non-fragmenting and reusable hand grenade. Zen is at the forefront of applying new technologies and developing new products. It is actively involved in indigenization of technologies, which is beneficial to Indian Security Forces. Now Zen is the leader offering Firearms, Tank, Driving, Mining and Unmanned Aerial Vehicle (UAV) simulators. The entire trip was highly interesting and educative as the students got a first hands on experience on the practical applications of weaponry and army.



Presenting a token of appreciation to Zen Technologies personnel

2-day Tutorial on Machine Learning and Evolutionary
Optimization - Foundations, Recent Trends and Future
Challenges at JNTUHCE, Kukatpally, Hyderabad

IEEE CIS/GRSS Jt. Chapter in collaboration with Dept. of CSE, JNTUH College of Engineering, Hyderabad has organized 2-day Tutorial on Machine Learning and Evolutionary Optimization - Foundations, Recent Trends and Future Challenges at JNTUHCE Hyderabad on 24-25 March 2018 from 9:30am to 4:30pm. Around 90 participants were benefitted with this event. Out of those, 20 were the IEEE members. Dr. Swagatam Das, Associate professor, ISI Kolkata was the speaker for this event. He has very strong profile and profound association with IEEE worldwide. He has 12000+ Google Scholar citations and an H-index of 54 till date. He has been associated with the international program committees and organizing committees of several regular international conferences including IEEE CEC, IEEE SSCI, SEAL, GECCO, and SEMCCO.

Dr. Swagatam Das begins the session with optimization techniques from Swarm to Evolutionary and covered from foundations to implementations of the same. He talked about automatic clustering, image based clustering and kernel based clustering with differential evolution.



Dr. Swagatm Das delivering his talk on Deep learning

On the second day, he focused on all aspects of deep learning in neural networks. He demonstrated the MATLAB experiments on DNN and discussed the irregularities caused during training the system. Apart from technical session, Dr. Swagatam Das motivated and steered the participants on "Quality Research and getting published". It was an enlightening session for all research scholars towards pursuing a quality research. Over all feedback of the event was rated more than 4 in the scale of 5. In total 20 participants consented to join CIS membership and rest non-IEEE members have shown interest to join basic IEEE membership.



Group Photo with JNTUH Organisers

IEEE Circuits and Systems/Electron Devices
Chapter Activities

CASS Third Membership Development workshop on Internet of Things at IEEE SB, JITS, Warangal

The CAS/EDS Chapter of IEEE Hyderabad Section organised Third CASS membership development workshop on Internet of Things at IEEE Student Branch, Jayamukhi Institute of Technological Sciences, Warangal on 17 and 18 February 2018. The workshop was funded under the CASS outreach program and supported by JITS, Warangal. There were 68 participants in the workshop and all 68 were IEEE members. In order to promote CAS/EDS membership among students, the registration fees were waived for IEEE student members who joined CAS/EDS chapter. A very positive outcome of the workshop was that 32 of the 68 participants took society membership to attend this event. The remaining 36 had basic IEEE membership. The participants represented eight student branches spread across the states of Telangana and Andhra Pradesh and the arrangement of accommodation for 28 outstation participants was done in Guest house of NIT Warangal.



Dr. Arif Sohel delivering his talk on IoT applications

As the workshop was a totally hands-on, the practical session with nine experiments ranging from preliminary IoT experiment to advanced once like waste management, home automation and toll gate were conducted. A team of seven teaching assistants from IEEE student branch of MJCET who are trained by Dr. Arif Sohel, visited JITS Warangal one day in advance and completed installations and tested all the kits for successful operation to avoid technical issues during the workshop. The first day of the workshop had an interesting lecture on introduction to IoT by Dr. Arif Sohel, Chair, IEEE CAS/EDS chapter in the morning session and a talk on Energy harvesting for IoT applications in the afternoon session. Five experiments were completed on day one in which students were introduced to Node MCU board, Blynk mobile app and Thingspeak IoT cloud. On the second day of the workshop, Mr. Suresh, V.S., Co founder of Startoon Labs who had ten plus years of industry experience gave a talk on Industrial applications of IoT in the morning session and Enabling a technology startup in IoT domain in the afternoon session. He gave a first hand explanation of the gap between industry and academia and proposed various feasible strategies to fill the same. He also beautifully mapped the engineering curriculum with the various core electronic domains in which plenty of job opportunities exist. The students were highly impressed with the presence of an industry professional amidst them and it resulted in a very fruitful offline discussion. On the experimental side, the students performed waste management using IoT and were able to send out tweets on the twitter platform when the waste bins are full using ultrasonic sensors.



Mr. Chakradhar, Dr. Arif, Dr. Rangaiah, Mr. Suresh and Mrs. Sandhya Rani releasing the IoT kit

Prof Rangaiah, an octogenarian and a dedicated IEEE volunteer who is also the Branch Counselor of IEEE Student Branch of JITS was present during the Valedictory session and gave away the certificates and IoT kits to the participating teams. Mr. A. Chakradhar, Member, IEEE CAS/EDS Execom and facilitator of the workshop announced that a formal petition to start CAS chapter in JITS was launched during this workshop, thus achieving its desired outcome of membership development. The participants from eight different colleges presented their feedback in the closing session and expressed keen interest to start IEEE CAS chapter in respective Student branch and requested the IEEE CAS/EDS Chapter to conduct similar programs at their student branches also. Dr. Arif Sohel, expressed his

profound thanks to management of JITS for supporting the workshop by hosting and sponsoring the local hospitality.



Participants from JBREC, Hyderabad receiving certificates and IoT kits from the dignitaries



Group photo of all participants and organisers

#### Panel Discussion on Career Opportunities in Core Electronic Sector at Osmania University

The IEEE EDS/CAS joint chapter of Hyderabad section organised a panel discussion on career opportunities in Core electronics sector on 17 March 2018 at ECE Department, Osmania University from 3.00PM to 5.00PM. Eminent industry professional with expertise in the areas VLSI Design, IOT, Communications and Embedded Systems were invited as panelists. The event started with Dr. P. Chandrasekhar, Head, ECED, Osmania University giving the welcome address. Dr. Mohammed Arifuddin Sohel, presenting the activities of IEEE EDS/CAS Chapter and elucidated about the motive of this panel discussion, which is to attempt to bridge the industry academia gap.

The firs speaker, Mr. N. Venkatesh, Vice President, Redpine Signals, discussed the interview process of the core electronics companies and the importance of having clarity of fundamentals. He mentioned that a quick self learning ability and a proactive attitude are mandatory requirements of core area. He encouraged the students to learn new things every month. To start with the students can take an online course on Python/PERL/TCL which are important scripting languages used in the industry.

Mr. Govind Krishnan, Director, Microsemi talked about the growth in semiconductor design market which is expected to be 10% per year for next 5 years as predicted by IESA. He mentioned that skilled engineers are in great demand and currently if the industry requirement is for 10 electronic engineers they are able to hire only 6 due to lack of skilled engineers. He mentioned that VLSI Industry can be broadly classified into ASIC and FPGA design, wherein it is a very challenging job to build a ICs with no scope of mistakes. The job requires skills like verilog, VHDL, knowledge of protocols etc. He listed the following skills that the hardware design industry would look for in a potential Electronic engineer – Logic design fundamentals (from reference book -Morris Mano), Scripting languages(Python, TCL, C Shell – any one), C and C++ for verification, Exposure to Hardware so as to translate verilog to

hardware, problem solving skills in which the approach of the candidate is monitored and finally application of learning in the form of projects. He encouraged the students to do something and continue doing it till one achieves excellence and becomes perfect in it.

Hectrical and Electronics Engineers, Inc.

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(L-R) – Dr. Arif Sohel, Mr. Joginder, Mr. Venkatesh, Mr. Govind Krishnan, Dr. Kashyapa Balemarthy, Mr. S.V. Rao

Dr. Kasyapa Balemarthy, Scientist, OFS Optics who is a communication engineering expert gave a powerpoint presentation on the career options after graduation and addressed the big question of choosing between Core and Non-Core jobs. He suggests that one should self-introspect what one wants, is it money, Power, Status, Passion. He listed a few companies that recruit in core electronics area. He concluded by encouraging the students not to follow the herds mentality and succumb to peer pressure.

Mr. S.V. Rao, Director, AMD who also has a good teaching experience as an engineering faculty highlighted that students are currently studying for percentage and not for concept. This is increasing the gap between industry and academia. Companies look for people who can identify problems and also propose solutions. Also that the hiring pattern of industries is now changing and they want to spend minimum time in training so that the employee becomes billable very soon. So the current students have to project themselves to be industry ready by acquiring industry required skills during student life itself.

Mr. Joginder, CEO of Vajra Infratech pvt. Ltd mentioned that in the last decade 9 out of 10 engineers would do IT and settle in US but the times are now changing and outsourcing is not that lucrative business any more. Due to this scenario one should not just look for getting employed but also to start their own business. Become a job giver rather than a job seeker was the clear message from Joginder.

The panel discussion was very well attended by about 150 students from around 8 colleges of which about 70 were IEEE members. The students gave a very good feedback and have recommended that a full day session be conducted in this regard so that they will be better prepared for the future. A very interesting question and answer session followed the panel discussion.



Section of y g"cudience during the panel discussion

#### **IEEE Women in Engineering (WIE) Activities**

## Women's Day celebration at CVR college of Engineering, Hyderabad

IEEE WIE AG celebrated IEEE Hyderabad Section WIE Affinity Group Event in connection with "International Women's Day" at CVR college of Engineering on 14<sup>th</sup> March 2018. The Chief Guest for the event is Dr. Rajashree Bothale from NRSC, Hyderabad, Dr. Nayanathara K S, Principal, CVRCE and Guest of Honor Dr. Sonali Khedkar from Art of Living, Hyderabad, Mrs Rani Narisetty, Technology Manager, American Bank (Guest of Honor), Bala Latha Mallavarapu, IAS Academy (Guest of Honor), Poojitha Vasagiri Secretary WIE Hyderabad Section graced the occasion and given motivation to all the faculty and the students.



L-R Ms. Bala Latha Mallavarapu IAS, Ms. Rani Narisetty, American Bank, Dr. Nayanathara K S Principal CVRCE, Dr. Rajashree Bothale Scientist NRSE, Dr. G. Sree Lakshmi chairperson WIE AG, Poojitha Vasagiri, Secretary WIE

Dr. Rajashree Bothale addressed the gathering about her experience in research and how to grow ourself with the technology. Dr. Nayanathara K S addressed about the great Women who are there in the world and in our country in engineering field. Dr. Sonali Khedkar had given her experience about how to balance our life with our tensions and pressure, which is called as Art of Living. Dr. Rani Narisetty addressed about how fast we should grow with the new technology and how to focus on one particular field. Then the last most important and the highlighted guest is Bala Latha Mallavarapu who is physically disabled still got rank twice in IAS and who is running IAS Academy for poor and physically disabled people. Her address for the gathering is so pleasant and motivating which was impressed by everyone. Finally, the event was grand success with 400 plus students and 50 plus faculty participants. We also had one poster presentation by Srinidi College of Engineering student branch WIE students representing their WIE events in 2017.



Faculty and the Student participants of the Event

## Women's Day celebration at VNR Vignan Jyothi college of Engineering, Hyderabad

Each year, March 8th – and the week in which it falls – provides an opportunity to take stock of our progress towards gender equality and to honour the contributions women have made and are making around the world. This International Women's Day, we came together in solidarity to celebrate our progress and to resist the patriarchal, communal and regressive forces that are operating with utter impunity in our country.

Naari Shakthi is an awareness talk conducted by IEEE Women and Engineering. VNR Student Force on the occasion of International Women's day. In the present era menstruation is often not discussed openly and the silence of it in young girls is keeping them ignorant of the biological process going on in their body. Proper guidance and knowledge lack among many young girls on their physiological process, communal misbeliefs and hygienic practices to be followed. Suffering is the root cause of Revolution, with this intention of making young girls aware of the Menstrual hygiene, Prevention from Anaemia and Prevention from Sexual Harassment , VNRVJIET has conducted an awareness talk in collaboration with DHI Foundation and SHE Team Hyderabad that gave insights for many young girls in the college regarding the menstrual hygienic methods and tips and also filled them with the courage and strength to fight against sexual harassment by the new methods of SHE Team.

An interactive session by Mrs. Himabala (Founder of DHI Foundation) gave a brief about the puberty and menstrual hygiene, the tips to prevent anaemia, how the psychological imbalances can be maintained, and also regarding the social stigma that girls have in speaking about menstruation which may leave bad effects on their reproductive health. The talk also gives a clarity over few communal practices and the scientific reasons behind them which are being misunderstood and followed blindly as communal beliefs. The session made the people to remove the taboo of expressing the problems regarding their menstrual health and the stress they take during the period. It also included a survey on Menstruation and Sexual abuse.



A Memento presentation by Dr. Padma Sai Mam to Himabala (Founder of DHI)



A memento presentation by Dr. Padma Sai to Representative of SHE Team

Talk by a representative by SHE team member gave insights of atrocities against women in Hyderabad and the actions taken by them. Waiting for a protection force is secondary but the courage to fight against the abuse is required on moment i.e., self-defense how to protect themselves through various means. The talk also included the means of reporting harassments by reaching out to them through helplines and social media, and the actions to protect the victim. Few laws that protects the girls and the rights were also discussed and the assurance of keeping the information of victim confidential is also been added. Doubts of the young girls in reaching SHE team and their actions against atrocities are clarified at the end of the session by interacting with the speaker.



Group photo with participants

## ART BEATS organized by Vignana Bharathi Institute of Technology, Hyderabad

IEEE VBIT SB, WIE AG organized an event "ART BEATS" on 7-8 March 2018. The purpose of this event was to enlighten students regarding women centric issues and provide them with a platform to showcase their creativity in the form of art and craft. The theme of the event revolved around women empowerment related issues. The competitions, namely Pot painting, poster painting, clay modeling, lantern making, best out of waste" were conducted, and the second day of event, International Women's day were celebrated and three eminent speakers addressed the students regarding the challenges faced by women.

The first session was conducted by Mrs. Percis Bobdoom, a nutritionist enlightened on various women health issues and emphasized the importance of a proper diet and supplements for women. Students had shown various documentaries highlighting the role of women and their importance in our everyday life. The second session was held by Mrs Nirmala Mondal who is a talent transformer and performance enhancer and worked for various leading companies like Infosys and Capgemini. She focused on the importance of healthy competition, confidence and encouraged students to take up various challenges.



Invited dignitaries on dais

The last session was taken up by Ms Dibya Maheshwari, software professional on public speaking. She motivated students with her various personal instances of life to pursue the passion and how women should never undervalue their abilities.



Art and craft talents showcased during event

## **GUNTUR SUB-SECTION ACTIVITIES**

International women's day celebrations at GVR&SCET, Guntur

International women's day celebrations in the Guntur Subsection was conducted on 8th March 2018 at GVR&S College of Engineering and Technology, Budampadu, Guntur. An eminent advocate Mrs. Naseema Rajasekhar, Dr. SVNL Lalitha, Vice Chair, Guntur Subsection gave lectures on importance of Women's day celebrations and challenges faced by women in Engineering. Number of girl students actively participated in the celebrations. Prizes were distributed.



Lighting the lamp from left to right.. Dr. PHK, Prasad, Mrs. Sudhamayee, Dr. S V N L LALITHA, Mrs. A. Naseema, Mrs. Nirmala NMV



Group photo with organisers

## An Expert lecture on Present trends on IOT, Industry requirements in current technology at NPEC, Narasarao Pet

IEEE Student branch was inaugurated in Narasarao Pet engineering college, Narasarao Pet on 17-02-2018. On this occasion Er. D. Rama krishna, Chair, Guntur Subsection has given an expert lecture on Present trends on IOT, Industry requirements in current technology". Dr. Prakash Kodali, branch counsellor, Dr. D. Venkata Rao, HOD ECE and Mr. Rajasekhar, student branch chair participated in the event.



Er. D. Rama krishna, Chair, Guntur Subsection with the student branch chair Mr. Rajasekhar

Conference on Signal Processing and communication engineering systems - SPACES - 2018

Conference on Signal Processing and communication engineering systems - SPACES - 2018 was organised by KLEF Deemed to be University under the technical sponsorship of Guntur Subsection and Hyderabad Section on 4th - 5th January 2018. There was a preconference tutorial session on 3rd December 2018 given by Dr. James M. Conrad, Director, IEEE Region-3. There were number of expert lectures given by Dr. James M. Conrad, Director, IEEE Region-3, Dr. M. Lakshminarayana, Scientist-H (Retd.) DRDO Chairman IEEE, Hyderabad Section, Dr. Y.V.N. KrishnaMurthy, Director, National Remote Sensing Centre (NRSC), Hyderabad.

Dr. A. Subba Rao, Head Budget Planning & Monitoring Division Programme Planning & Evaluation Group, National Remote Sensing Centre (NRSC), Hyderabad, Dr. N. Aparna, Group Head NRSC Data Center National Remote Sensing Centre (NRSC), Hyderabad, Dr. Koushik Guha, Associate Professor, Department of ECE, National Institute of Technology Silcher, Prof. G. Sasi Bhushana Rao, Professor Department of ECE, College Of Engineering, Andhra University, Visakhapatnam, Dr. Mahadeva Bhat Kanathila, Scientist, DRDO, Hyderabad, Dr. Shaik Rafi Ahamed, Associate Professor, Department of EEE, Indian Institute of Technology Guwahati, Guwahati, Er. D. Ramakrishna, Vice-Chair, Guntur Subsection, MD Efftronics Systems Pvt. Ltd, Vijayawada

Dr. E. Sreenivasa Reddy, Treasurer, Guntur Subsection, Professor & Principal, University College of Engineering, Acharya Nagarjuna University, Guntur

Dr. M. Kamaraju, Professor & Mentor (AS&A), ECE Department, Gudlavalleru Engineering College, Gudlavalleru. Dr. V. Rajesh was the Convener of the conference. Dr. P. Siddaiah, Chair, Guntur Subsection, Dr. G V Subbarao, Dr. D. Parthasaradhi, Dr. D V Ratnam, Dr. BTP. Madhav from KLEF were the organisers of the technical sessions. A total of 47 research papers have been accepted for presentation during the conference based on the recommendation of the technical program committee headed by Dr. James M Cornard. All 47 members have registered and presented in the conference.



Dr. James M Conrad, Director, Region 3, delivering key note lecture.

#### **VIZAG-BAY SUB-SECTION ACTIVITIES**

An Invited talk on Smart Grid technologies at GVP college of Engineering, Madhurawada, Vishakhapatnam by Sri K. Ramakrishna, past R10 IEEE Director.

EEE Vizag-Bay sub section organized an invited talk on "Smart Grid Technologies" at GVP college of Engineering, Madhurawada, Vishakhapatnam on 27 March 2018 by Sri K. Ramakrishna, Past Director R10, IEEE. Total 85 participants were profited with this discussion and out of 85, 22 were IEEE members. Prof. Ramakrishna talked on digital automation technology for monitoring, control, analysis within the supply chain, hybrid electric vehicles etc. He also talked on various application and implementation to achieve modernized smart grid. He discussed impact of intelligent appliances, smart power meters and smart substations.

Invited talk on IoT Edge Analytics gateways – Technologies and Challenges at Aditya College of Engineering & Technology, Surampalem, A.P.

IEEE Student Branch was inaugurated at Adtiva College of Engineering & Technology Surampalem, Andhra Pradesh on 31 March 2018. Dr. Dr. Lakshminarayana Sadasivuni (Past Chair) and Sri K.V. Sriram, Vice-chair, Vizag-Bay sub-section were invited for inauguration. They invited Mr. P.V.S. Maruthi Rao, Chair, IEEE Hyderabad Section for an invited talk on "IoT Edge Analytics gateways - Technologies and Challenges". Mr. Rao talked about the creating the IoT analytics model and the impacts after deployment. He discussed Predictive Model Markup Language (PMML), the detailed architecture from cloud to gateways, servers and the challenges of IoT analytics including data structures, combing multi data formats, need to balance scale and speed, analytics at the edge, and IoT analytics and AI. Mr. Rao also spoke about the benefits of IEEE collabratec. He stated that it is an access to robust networking, collaboration, authoring tools to dedicated technology and showcase all key accomplishments. and motivated the participants to join this world largest association for advancement of technology. The talk was very well attended by more than 100 participants.



Sri K.V. Sriram Vice-Chair IEEE Vizag Bay Sub Section(right) handing over the letter to N. Satish Reddy(left)



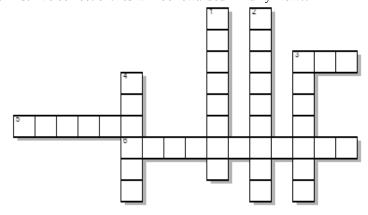
Sri KV Sriram with other participants

## **Synapse Crossword Contest**

### Crossword - April edition

You can win IEEE Hyderabad section Branded merchandise by participating in the Synapse Crossword Contest. Follow these steps and send the results to <a href="mailto:synapse@ieeehyd.org">synapse@ieeehyd.org</a>

- 1. Read the complete newsletter as the clues are available in the various sections of this newsletter
- 2. Complete the crossword(by hand on sheet of paper) and send a scanned copy/photo of the crossword to <a href="synapse@ieeehyd.org">synapse@ieeehyd.org</a> with the following details Name, Organization, Email address, Mobile Number and IEEE membership ID(This contest is open to only IEEE Hyderabad Section members)
- 3. First five correct entries will be rewarded Hurry Now!!



#### ACROSS:

- 3. Month when 2018 mini-POCO is scheduled.
- 5. Company where Dr. Nirmal Saxena belongs.
- 6. Social network platform of IEEE.

#### DOWN-

- 1. City where IEEE CAS/EDS organized IoT workshop.
- 2. Chief guest of Women's day celebration at CVR CE.
- 3. Guest speaker of IoT Edge Anlaytics
- 4. Conference abbreviation organized by Guntur sub-section.

## Call for articles / Individual member achievements

It is decided in the Section meeting that individual member accomplishments like publishing of a paper in IEEE journal/conference, taking up of a new position/responsibility (IEEE or any office of Public Interest), elevation to IEEE membership status, IEEE awards/Notable mentions can be mentioned in the newsletter under the achievements column to be started from next issue of newsletter. Please send in your articles/achievements for publication in newsletter to

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