

Message from the Chairman



Dear IEEE Indian Members,

I am happy to see that fourth and final issue of 2019 of India Council (IC) newsletter is being released. The newsletter is having information of India Council, Sections, Chapters, Affinity Groups etc., interesting articles on diverse fields of interest to our members along with few regular informative columns. I congratulate and thank the efforts taken by Mr. H.R. Mohan, Newsletter Editor. I would also like to put on record and thank the Section leaders who have extended their cooperation in providing the inputs to the newsletter.

The flagship technical conference of India Council, INDICON-2019, was held in Marwadi University, Rajkot, Gujarat in collaboration with IEEE Gujarat Section during December 13-15, 2019. Out of 502 papers received, 241 papers were accepted after at least 3 technical reviews by the reviewers. INDICON was inaugurated by Toshio Fukuda, IEEE President 2020, Professor, Beijing Institute of Technology/ Meijo University (China). 15 invited talks, 2 tutorials, 2 workshops, 2 focused sessions, start-up-innovation session, YP-WIE session, MVC paper contest and 241 paper and poster presentation through multiple parallel sessions were the highlights of INDICON-2019. Mallikarjun Kompella and Riteshkumar & Shubham Saxena (jointly) were awarded MVC paper contest winner under UG and PG category respectively.

This year India Council has constituted IC Leadership Awards. Sri RK Asthana, Delhi Section was conferred with IEEE India Council Chair Lifetime Achievement Award 2019. Prof Sivaji Chakraborti, Kolkata Section, Er TS Rangarajan, Madras Section, Er NV Rao, Hyderabad Section, Prof Anil Roy, Gujarat Section, Prof KVS Hari, Bangalore Section, and Prof D Doke, Pune Section have been conferred with IEEE India Council Section Chair Lifetime Achievement Award 2019. During INDICON-2019 Awards function, these awards were presented to them.

IC AGM and EXCOM were held on 14th December at Marwadi University Rajkot, Gujarat. Secretary's report, Finance report, Status of INDICON-2020 and AISYWLC-2020 were presented. Council is happy to share that, under IEEE R10 Incentive Scheme, IC has scored highest point and secured first rank among all the three councils of IEEE R10. An incentive of US \$2000 will be received from IEEE R10 for IC's activities and overall performance.

New guidelines for IC Awards and e-notice were formulated. Now any IEEE event information can be sent through e-notice to all the Indian IEEE members by paying INR 5000/ per e-notice, to IC account. Section chairs should endorse the e-notice for the same.

I am sure that with the help of active IEEE volunteers in India, we will be able to make IC as one of the best councils of IEEE.

Prof. Sri Niwas Singh, FIEEE, FIET, FNAE, FIETE, FIE(I)
IEEE IC Chair 2019

snsingh@iitk.ac.in



Message from Editor

H.R. Mohan, hrmohan.ieee@gmail.com

Dear readers,

We are presenting the fourth quarter issue of India Council Newsletter (ICNL) for the year 2019. This current issue of ICNL is of 136 pages and features 18 articles. To facilitate easy downloading, the issue is presented in two parts – Part 1, having regular items such as messages, activity reports, usual columns such as IT Happenings, Information Resources, Books, Book Excerpts and Announcement and Part 2 featuring contributed articles by professionals and academic community.

ICNL extends hearty congratulations to India Council, various Sections for receiving the incentive from R10 for their performance in 2019. Our congratulations to all the award winners during the INDICON-2019 held at Marwadi University Rajkot, Gujarat. (The entire list is published in the Secretary's report in this issue). We are really proud of our winners.

ICNL thanks the organisers/ & chairs of the Bangalore, Kerala, Madras, Hyderabad, UP Sections for sending their section related activity reports as per guidelines. We also thank Vice Chair, IC SAC for the report on AISYWC-2019. Our thanks to Mr Puneet Mishra, IC Secretary for the excellent and comprehensive report on India Council activities for the year 2019. and Dr. S.N. Singh, IC Chairman for the support in facilitating these reports. We note that only few activities are reported out of numerous events conducted across the Sections. We will be happy to publish the reports of all activities if received from the organizers/sections directly at the newsletter email id ieee.icnl@gmail.com as per the guidelines published in the newsletter elsewhere and also available at <https://goo.gl/DcVPmx>

ICNL thanks the authors who have enthusiastically responded to our request and contributed the following informative and interesting articles included in this issue in Part 2.

1. Importance of Lithium-Based Energy Storage in Achieving India's Climate Goals by N. Vedachalam, G. A. Ramadass & M. A. Atmanand
2. Norbert Wiener and his Impact on India by Prof. T V Gopal & Prof. Greg Adamson
3. Use of IOT in Container and Shipping Industry and its impact on Global Trade by Mr. Sunil David
4. Deep Learning meets Coding Theory by Dr. Sreeram Kannan & Dr. Himanshu Asnani
5. Disrupting Primary Healthcare Industry with Artificial Intelligence, Computer Vision, and IoT Enabled Engine by Mr. Mayur Ramgir
6. Digital Transformation: The New Oil: Refineries and Engines to Tap into this Source of Power by Mr. Venkat Krishna
7. Enterprise Master Data Strategy: Deprived Master Data & Remedies by Mr. Subbaiah Bala
8. Best practices for testing AI solutions by Mr. Sojan George & Mr. Rajeev Mullakkara Azhuvath
9. Using AI on IoT Sensor Data - for predicting health of man and machine by Dr. Arpan Pal
10. State of Telecom: A journey to 5G in India by Ashok Subramanian
11. Cognitive Radio Technology for Sub-6 GHz 5G Communications by Dr. Raghvendra Kumar Chaudhary
12. What are Micro Frontends by Mr. Santhosh Krishnamurthy
13. Mining the Powers of Open Source: A Case-Study on Usage of Open Source in Institutions by Dr. S. Mercy Shalinie & Ms. Nagarathna Ravi
14. Why India must amend its Information Technology Act in the age of Artificial Intelligence by Dr. Chandrika Subramanian
15. A note on Interesting Facts on Information Retrieval Systems by Dr. S. Sridhar & Dr. S. Padmakala
16. Blowing the Whistle on Data Breaches and Cybersecurity Flaws by Ms. Hamsa Mahendranathan & Mr. Chris McLamb
17. Get your TNA (Training Needs Analysis) done – Why? by Mr. M. K. Anand
18. Holistic Digital Empowerment for Unleashing Human Excellence by Mr. Lakshman Pillai

ICNL wishes to reiterate that these articles published in this issue are not peer reviewed and are also not checked for plagiarism for which the authors are responsible. Further, the views expressed in these articles are that of the authors and ICNL is not responsible for any consequences of using the information provided in them.

We are happy to have published briefs on the following books and thank the publishers for providing copies of the books.

- Achieving Lifetime Employability
- Technical Communication
- Career Development All-in-One For Dummies
- Blockchain For Beginners
- Engineering Economy and Management
- Information Systems Security

- Virtual & Augmented Reality For Dummies
- Enriching Your English
- Moral Fiber: A Practical Guide to Living Our Values
- 21 Difficult Conversations
- Information Technology - Law and Practice
- Law Relating to Intellectual Property Rights
- From Start-Up to Global Success: The Zensar Story

We are also happy to have included excerpts from the book “Achieving Lifetime Employability” with the permission of the author.

Chairman Dr. S.N. Singh has provided a comprehensive message highlighting the flagship event of IC – INDICON-2019, the IC awards etc., The” What’s hot in IT - An Indian Perspective” a regular column by Prof. S. Sadagopan, Director, IIIT Bangalore provides a broad overview on various important happenings in the IT and Telecom sectors in India during Sep-Nov 2019. We are sure that readers will find the information and the related links provided in the column “Information Resources” compiled by the editor Mr. H.R. Mohan will be of interest to ICNL readers. We wish to add that “Interesting Reads”, a regular blog post published once a week by him (the source from which the matter for the Information Resources is compiled) may also be of interest to our readers The archives of these blog posts can be accessed at <https://goo.gl/VGXizd> We have added some reference information at the end of few articles and effectively utilised the white space. To provide relief from the serious matter, few cartoons, titbits, quotations, news bits are also included which we are sure will interest the readers.

We wish to remind our readers to renew their membership for the year 2020 n time and continue to have undisturbed service from IEEE and enjoy the membership benefits. We request the members to encourage new membership among their contacts.

ICNL wishes to acknowledge various internet sources for the information presented in this issue of the newsletter. Our exclusive thanks to inshorts (<https://www.inshorts.com>) and Mr. Sunil Agarwal & Mr Ajit Ninan for the permission to use their thought provoking cartoons appeared in Times of India.

ICNL wishes all its readers advance happy and prosperous New Year 2020

Conference Announcements

EMPRA 2020 is a workshop and doctoral symposium on "Electromagnetics and Microwave Engineering: Pedagogy, Research Trends and Applications" being held at BITS-Pilani, Hyderabad Campus during Jan 2-4, 2020. More at <http://sites.bits-hyderabad.ac.in/empira/empira/>

AISP'20 - International Conference on Artificial Intelligence and Signal Processing is organized by the Vellore Institute of Technology-Andhra Pradesh and IEEE Guntur sub-section from 10-12th January 2020 with Technical Co-sponsorship by IEEE Hyderabad Section, India. More at <http://www.aisp2020.in/>

First International Conference on Urban Data Science: Theme: Smart Cities is being held at IIT Madras during 20-21, Jan 2020. This event is supported by IEEE Computer Society Madras Chapter, IEEE Smart Cities, IEEE Standards Assn, IEEE TEMS, SETS, CloudMOOL CII, IIT Madras Research Park and ACM Chennai Chapter, ACM India. More at <http://dos.iitm.ac.in/UDS2020/>

An International Conference on Electrical and Electronics Engineering (ICEEE 2020) is being jointly organized by Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur (Uttar Pradesh), India and North Dakota State University, Fargo, USA in collaboration with IEEE UP Section, at MMMUT Gorakhpur (UP), India during February 14-15, 2020. More at <http://www.mmmut.ac.in/iceee2020/>

2nd International Conference on Data Science, Machine Learning & Applications is being held during 3-5 Apr 2020 at Pune. More at <https://www.icdsmla.com/>

The 3rd 21st Century Norbert Wiener Conference is scheduled at the CEG Campus, Anna University between 23 – 26 July 2020. More at <http://21stcenturywiener.org/>

IEEEHYDCON-2020 is the biennial signature conference of IEEE Hyderabad Section. For the first time it is being organised on 11-12 September 2020 at Hyderabad, India on the theme "Industry 4.0".. More details at <http://www.ieeehydcon.org/about/#hydcon-2020>

IEEE Bangalore Section Events

Siddaganga Institute of Technology, Tumakuru

Paper Presentation Workshop

Paper Presentation is an important event in an engineer's life. Keeping that in mind IEEE SIT SB organized a paper presentation event on 3rd October on account of celebration of IEEE day. Y Harshalata, Assistant Professor, ECE Dept, SIT graciously accepted our invitation and delivered the tips and other necessary things that need to be kept during paper presentation.

In this event, the IdEEEas 2k19 poster and website with APP was also launched during the time by Dr. K V Suresh, Branch Counselor and delivered a small talk on idEEEas 2K19. Dr. Sunitha N R, WIE counselor delivered a small speech about the WIE CODE that was about to be conducted in the upcoming week.



WIE CODE.

First time ever in the history of IEEE SIT SB, WIE CODE, a national level 12-hour hackathon was conducted in Siddaganga Institute of Technology, Tumakuru on 12th October 2019 by WIE affinity group of the SB. It was exclusively organized to encourage women in the field of technology. A total of 170 abstracts was received out of which 39 teams consisting totally 148 participants were selected. For the involvement of more girls, with zero registration fee, with a group of 4, 2 minimum girls and a compulsory girl leader, this event was a great success. Cash prizes worth of 15k for the winners, 10k for the runner up and 5k for the best women team and also a consolation prize was given. Certificate of participation was given to all the participants. In total of 8 mentors from reputed companies like Vicasin, Amazon, J P Morgan, Analog devices, Nuclei and zscaler were invited to mentor the participants. Two judges from HCL judged WIE CODE. Event was a huge success with 148 participants.



IDEEEAS 2K19

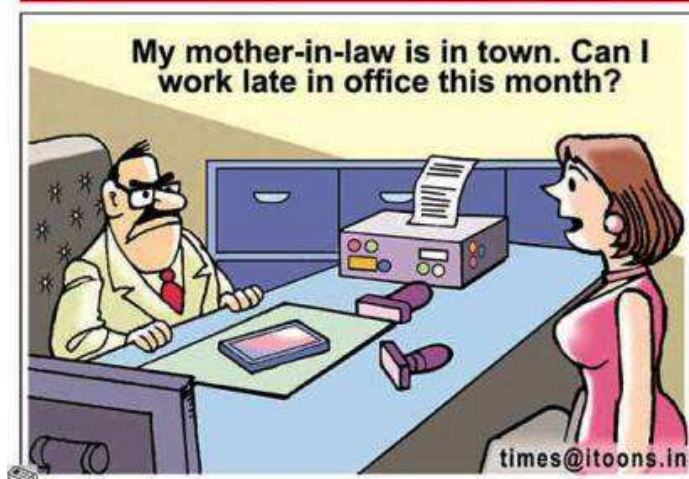
IEEE SIT SB conducted its annual flagship event IdEEEas 2k19, a national level technical symposium. The event comprises of 10 sub events with majority of technical and couple of non-technical. Dr. T Srinivas, Professor, ECE, IISC was the chief guest of IdEEEas 2k19. IEEE Photonics society was inaugurated in the institute followed by keynote talk on optical communication and networking by the chief guest.

Participants from various institutes across the Karnataka participated in the various events in IdEEEas 2K19. With a grand total of 1011 participants, the event became the most successful IdEEEas till the date. The sub events like C-Nario (coding contest), Rectifier(Hardware debugging), Cerebria (Technical quiz), Aavishkar (hobby project), Robotics, Presentario (paper presentation), Android Zone(App building), idEEEas idol (special event), Trademark (logo design) and Photographia (photogenic event) gave the participants a way to explore themselves technically. The response from the participants was overwhelming and it made the event a grand success than any other technical events in the institute.



iToons

Sunil Agarwal & Ajit Ninan



IEEE Kerala Section Events

IEEE TENCON-2019

IEEE TENCON 2019, the Flagship conference of IEEE Region 10 was held during 17th to 20th October 2019 at Grand Hyatt Kochi Bolgatti, Kerala, India. The Theme for TENCON 2019 was **Technology, Knowledge, and Society**. TENCON 2019 at God's Own Country brought together researchers, educators, students, practitioners, technocrats and policymakers from across academia, government, industry and non- governmental organizations to discuss, share and promote current works and recent accomplishments across all aspects of its theme.

Tutorial

The four day TENCON 2019 started with 5 pre conference tutorials on 17th Oct 2019. Of this, three were academic tutorials and two were industry sponsored tutorials. The topics varied from machine learning to hardware security to system design.

1. Physically Unclonable Functions: Design, Applications & Threats by Dr. Rajat Subhra Chakraborty (IIT Kharagpur), Dr. Jimson Mathew (IIT Patna), Pranesh Santikellur (IIT Kharagpur)
2. Preparing Students for 21st Century System Design Challenges & Solutions using NI Platform by Visweswaran Jagadeesan and Nilutpal Choudhury (National Instruments)
3. When IoT Meets Machine Learning: Opportunities and Challenges by Sanjay Srivastava (Dhirubhai Ambani Institute of Information and Communication Technology) and Manish Chaturvedi (Pandit Deendayal Petroleum University (PDPU), Gandhinagar)
4. Deep Learning with MATLAB by Amit Kamath (Mathworks)
5. Malware Analysis by Hemant Rathore (Birla Institute of Technology and Science, Pilani, K K Birla Goa Campus) and Ashu sharma (Mindtree)

Each tutorial was a three hour session with some hands on exercises. Tutorial speakers engaged the audience and entertained questions post tutorial session as well. Each tutorial session ended with a thanking of the speakers and a memento presentation for their invaluable contribution to TENCON 2019.

Inauguration - TENCON 2019



IEEE TENCON 2019, the 4-day International conference of IEEE Region 10, was inaugurated by Hon Governor of Kerala **Shri. Arif Mohammed Khan** on Friday, 18th October at 10am. Dr.Akinori Nishihara, Director, IEEE Region 10

presided the function. Dr. Suresh Nair, General Chair, TENCON, welcomed the gathering. **Dr Suresh Nair**, emphasized the work of IEEE Kerala Section volunteers during the Kerala Floods 2018 .



Kerala Governor Arif Mohammed Khan in his inaugural address called upon technocrats and scientists to develop environment and people friendly technologies that are available and affordable to the common man. The new technologies must be in synergy with the goal of sustainable development and clean and healthy future. Underlining the profound effect of technology in all aspects of human life, he said that development and use of technology has to be rooted in moral commitment. From the social point of view, technology has to be guided by a level of moral and entrepreneurial thinking. He also added that such moral commitment is evident from the theme of the conference, ‘Technology, Knowledge and Society’. Dr. Nishihara applauded the efforts of IEEE Kerala Section and congratulated for the awards they received as token of appreciation. Stephen Welby, Executive Director and COO, IEEE, offered his felicitation. Dr. Sameer S M, Chair Kerala Section proposed the vote of thanks for the inaugural function.

Technical Program committee under Prof. Lillykutty Jacob reviewed a total of 1402 papers from 25 Countries, for the 10 regular tracks and 25 special sessions. After three rounds of blind review process, track chairs and the special session chairs selected 687 papers. The acceptance ratio was 53%. From the accepted papers, we got 504 registrations and 502 oral presentations. The papers were presented during three days distributed under the following tracks:

- Track 1: Data Science & Engineering
- Track 2: Computing Technologies
- Track 3: Computational Intelligence
- Track 4: Communication & Networking
- Track 5: Signal & Image Processing
- Track 6: RF Circuits, Systems and Antennas
- Track 7: Devices, Circuits, Materials and Processing
- Track 8: Power, Energy and Power Electronics
- Track 9: Robotics, Control, Instrumentation and Automation
- Track 10: Biomedical Engineering and Healthcare Technologies

Mr. Tony Thomas, CVP and CIO Nissan Motor Corporation, Dejan Milojicic, distinguished technologist from Hewlette Packard, John-Hwan Kim, Professor, School of Electrical Engineering, KAIST, Vinod A Prasad, Professor, IIT, Palakkad, V John Mathews, Professor, School of Electrical Engineering and Computer Science , Oregon State University, USA and Bruno Grippay, Regional Director, Connected Cars and Intelligent Mobility-Nissan delivered Keynote addresses. The five topics of Keynote address are Deep learning, Machine Intelligence learning for Agent-embedded Robots, Brain Machine Interface System, Neural Prosthesis for Amputees and Spinal injury Patients and Connected Cars in Mobility Revolution.

The conference brought together Researchers, Faculty, Young software developers, Students, professionals, technocrats, policy makers, Government departments, industrialists, governmental and nongovernmental organizations for discussions and facilitated learning of the most advanced technologies applied in various fields of activities.

SPECIAL INDUSTRIES TRACK

The Special Industries Track started with the session chaired by Dr. Chris Gwo Giun Lee, the chair of R10 Industry Relations Committee. The First Key-note Speaker of the day was Mr. Jaswinder Ahuja, the Managing Director of Cadence India, who spoke on the Intelligent System Design. This was followed by another Keynote by Dr. Gopal Pingali Vice President of IBM India.

The Second Session was chaired by Dr. Nirmal Nair, Associate Professor, University of Auckland. The first speaker, Dr. Amit Kumar, the CEO of BioAxis spoke on the dangers of a possible Bio-Hacking, where criminals can hack into the DNA, producing unknown misery to humans, including spoofing, and bio-identity threats! The next speaker was Dr. Kush Agarwal from Singapore who examined the approaches used for evaluating and testing structures using radar and millimeter wave technologies.

The Afternoon Session was chaired by Mr. Harish Mysore the head of IEEE India Office. This session saw many aspects of the progress in e-Mobility. The first speaker Mr. Allabaksh Naikodi, who is heading the pioneers in Electric Vehicles in India, Mahindra Electric. The next speaker, Dr VV Chandrasekar, CDAC and Dr. Ananth Krishna spoke on the current and future directions of Electric Batteries.

After this was the much-awaited session run by Nissan Digital on Cyber Security. The panel was moderated by Tarun Kumar, the Chief Information Security Officer of Nissan Digital India. Atul Gupta from KPMG, Rohit Anand from Tanisi and Vikas Kapoor from Vodaphone participated in the lively panel discussion on Cyber Threat faced by the world.

The last session was a panel discussion on Industries and entrepreneurship moderated by Sarada Jayakrishnan, DGM Terumo Penpol and Vice-Chairperson, IEEE Kerala Section. Participants of this interesting panel were Jijo G John, CEO Calpine Group, Infopark Kochi, Kush Agarwal, CEO, Wavescan, Singapore and Shalini James, Mantra, Kochi. All the panellists successfully running their own business enterprises in India and Singapore shared their experiences and challenges of starting an industry unit and successfully running it. Many young participants in the audience had interesting queries which also led to some good discussions on being constantly innovative in providing solutions to customers, taking calculated risks and being agile to handle the changing market conditions

For the participants of Special Industries Track, a tour to the Maker village was organized on Sunday, October 20. Around 25 people including Dr. Takako Hashimoto, Dr. Nirmal Nair, Dr. Kush Agarwal and a set of student delegates from Japan were part of the visit. Mr. Prasad Balakrishnan, CEO of Maker Village gave a detailed presentation about the facilities and services provided for electronics start-ups for productising their ideas. Around 30 participating companies were also present to demonstrate their products to the IEEE delegation.

HAC (Humanitarian Activity Committee) Track

IEEE TENCON 2019 provided a special platform, the Humanitarian Activities Track, for discussing Humanitarian Activities within the context of IEEE. The track, sponsored by IEEE Humanitarian Activities Committee (IEEE HAC) and TENCON 2019, provided opportunities for experts, practitioners, IEEE members, Students, Young Professionals, NGOs and community representatives to share their experiences and discuss the challenges and opportunities in the domain of humanitarian activities. This one-day track, scheduled for 20 October, was open to all registered participants of TENCON 2019 and it was also possible to separately register and attend this track. The track organizers included officials from SIGHT Kerala Section and present and past members of IEEE HAC committee.

The track was scheduled in two sessions with Invited Talks and Panel Discussions, in addition to presentations of shortlisted papers that were short-listed. The forenoon session on 'Making Science Accessible to Students with Disabilities' started with a keynote talk by Prof Volker Sorge of the University of Birmingham, who covered the topic of "Accessible Science in the age of the open web". He discussed the chances offered by employing open standards and as well as open-source tools to make STEM content accessible for the web. He illustrated his points with particular examples from Mathematics and Data Science, concentrating on accessible equations and data visualisations.

After the talk, Prof VK Damodaran led a panel discussion on Science Accessible to Students with Disabilities. The panelists were Prof Volker Sorge, Mr Ramkamal from Chakshumathi and Dr KG Satheesh Kumar from the National Institute of Speech and Hearing (NISH). After the Panel, there was a Paper Session with four papers. The Session was Chaired by Dr. Akila Surendran and had papers relating to 'User-Centric Assistive Technologies'.

The afternoon session started with a presentation on the Social Return on Investment and a Project - Techno Unati, which was one of the initial places that IEEE HAC was testing it out. The session was chaired by Satish Babu and the speakers included Prof. VK Damodaran a life member from Kerala Section along with Dr. Mini Ulanat and Dr. Bijoy Jose of CUSAT

The second session in the afternoon was a panel discussion on “The role of Technology in Disaster Management”. The panel was moderated by Satish Babu and had very notable participants in the Disaster Management Sector. Dr. Sekhar Lukose Kuriakose from the Kerala State Disaster Management Association led the panellists and described how the Kerala Government was managing the recent disasters with the application of the best technology available. The others who spoke included Ms. Annie George, Dr. Joe John George, from the UNDP, Mr. Viekanandan from FishMARC, Vincent Jain from SIFFS, Sajith Sukumaran from Kudumbashree NRO, Dr. Arun Timalsina from TU Nepal and Mr. KG Girish Babu.

After the session on Disaster Management, we had a good session from Dr. Hussain Mehdi, IEEE Malaysia and Dr. Chanakya Kumar, Pune Section IEEE, who outlined the work of HAC and SIGHT and spoke of how to participate in the activities and the sources of funding for the same. The Session was chaired by Amarnath Raja.

The final session was a paper presentation session which was chaired by Dr. KG Satheesh Kumar of National Institute of Speech and Hearing (NISH) with the Theme of “Humanitarian Technologies for Sustainable Development”.

WiE (Women in Engineering) Track

The WiE Track showcased the capabilities of two women steering the wheel of technology in two different ways. WIE track on 19th was planned with two sessions. Ms. Mary Ellen Randal, Fellow, IEEE took us through her career advancement and IEEE role progression. She gave a detailed picture on the challenges faced and how she overcame it. She started with her early influences, took us through her IEEE life and how MOVE was conceptualised. She concluded with a famous quote of Maya Angelou that *I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.*

Ms. Prema Sankar, an Engineer by education turned wellness expert took a workshop on "Meet Your Future Self". She is a self taught healer who helps in finding clarity, attain inner peace and increase one's well being. The participants felt energized, fresh and motivated. She made things so simple, light and fun.

2019 IEEE Recent Advances in Geoscience and Remote Sensing: Technologies Standards and Applications (TENGARSS 2019)

In Association with the IEEE Geoscience and Remote Sensing Society, IEEE Antennas and Propagation Society and IEEE Kerala Section organised 2019 IEEE Geoscience and Remote Sensing Conference (TENGARSS 2019), a premier Geoscience and Remote Sensing Conference as a colocated event during October 17th through 20th October 20th 2019 at the Hotel Grand Hyatt, Kochi, Kerala India. The main theme of the conference was advancing Technologies, Standards and Applications in Geoscience and Remote Sensing. TENGARSS-2019 was an unique initiative of IEEE GRSS society and IEEE APS Kerala chapter to bring the academicians and researchers working in the area of Geoscience and Remote Sensing to bring under a common platform. The conferences had submissions and presentations in all areas of Geoscience and Remote Sensing pertaining to Earth System including data analytics, Big data, Technologies, Calibration, Standards and Applications.

Conference Banquet

The conference banquet was organised on the evening on 18th October 2019. The banquet was organised in conjunction with a cultural event on stage where various traditional art forms of India, including Bharatanatyam, Kuchipudi, Kerala Natanam, much to the delight of the visiting guests. There was music fusion jugalbandhi also arranged. The banquet menu received glowing feedback from the guests

Conclusion

After the four hectic days of conference activities, there was a very informal concluding valedictory function. Dr. Suresh Nair, the General chair and Dr. Sameer, the co-chair expressed their gratitude and satisfaction in conducting such a mega event in a befitting manner without any flaws from any side. The volunteers and all the stake holders were gratefully remembered and appreciated for their efforts. Feedback remarks from the participants gave rave reviews to the organisers and volunteers appreciating the smooth functioning from registration onwards and the excellent hospitality of the event. The organisers thanked the gracious support of sponsors for making this event a success to this level. Media also supported very well with good coverage in both National dailies as well as local media



Team TENCON-2019 with guests

For more photos of the TENCON-2019, pl. visit

<https://drive.google.com/drive/folders/1IXST0xJ9tepFHZKnPUBzOpm-VDQ-Am6M>

*Report compiled by Dr. Mini, minicusat@yahoo.in & Dr Sameer, sameer@nitc.ac.in
with inputs from chairs of respective tracks.*

Top Ten Energy Leaks

10. *Alcohol.* Alcohol is an extreme carbohydrate and contains a lot of calories. It's also a depressant, a diuretic, increases appetite, slows metabolism, and can damage the organs.

9. *Caffeine.* Don't panic; you can still have your coffee as long as you limit yourself to a cup or two per day. Caffeine is a diuretic. It also stimulates the pancreas to produce insulin, a hormone that regulates blood sugar. When too much insulin is released at once, the body's blood-sugar level plunges rapidly, resulting in cravings.

8. *Irregular sleep,* whether too much or too little. Aim for between seven and nine and a half hours of quality sleep each night. Go to bed and wake up at consistent times each day.

7. *Ineffective exercise.* Whether you exercise inconsistently or not at all, you're not giving your body the workout it needs. Another pitfall for some people is overexercising and undereating. Find the right balance.

6. *Eating just three times per day.* Forget the old paradigm of three large meals. Eating smaller amounts five or six times a day prevents bingeing, stabilizes blood sugar, and cranks up your metabolism.

5. *Skipping breakfast.* Breakfast is the most strategic meal of the day, and skipping it is devastating to your energy for the rest of the day. From an energy standpoint, you cannot recover if you blow off breakfast.

4. *Boredom.* This is the opposite of passion and can occur when you feel in a rut in your career, your marriage, or your faith. If you're felling bored, look for a creative new approach.

3. *Overeating.* Large meals overburden your digestive system, stealing energy from goal-directed activity. Even overeating healthy foods causes excess insulin production, encouraging fat storage and leaving you feeling sluggish.

2. *Dehydration.* Your body is more than two-thirds water, and your brain is 85 percent water. Even if you're just one percent dehydrated, your energy level drops off.

1. *Negativity.* Harboring unhealthy emotions like fear, anger, worry, and guilt—or any sort of “stinking thinking”—will drain your energy. If you're going to plug any of these leaks, plug this one first. Before you can strengthen your body, you must strengthen your mind. Every thought and feeling has an energy consequence.

And, of course, smoking, which is outrageously obvious and offensive to your energy goals.

IEEE Madras Section Events

IEEE ADSF SIGHT

Preliminary Level Consultation on Serve the Underserved with Special Reference to the Tribal People of Sirumalai



The IEEE Smart Village organized a consultation along with IEEE ADSF SIGHT, ARVI Trust, IEEE YP, IEEE SB of SASTRA University and Minniyal Lights PVT Ltd on “Serve the Underserved with Special Reference to the Tribal People of Sirumalai”. It was a preliminary level consultation to explore the interested stakeholders who could join us to serve the tribal people of Sirumalai. It was held at a guest house in Dindigul on 16th November 2019 at 02.00 PM to 04.PM. The schedule and time of the programme was changed for the convenience of the participants.

On 15th Nov 2019, Mr Farid Khan, Chair, IEEE Smart Village, South Asia Working Group, joined with the team lead Er. Eugene Kingsley and visited Thenmalai, one of the tribal settlements. Mr. Farid could see the condition of the broken road, poor harvest, wandering of youth without any work etc.

On 16th November 2019, the team visited Ponnaruvi, another hamlet in Sirumalai. This place was difficult to access as there were no road or transport facilities. The team had to reach the place in a tempo truck.

They gave away honey beehives, books, torch lights, dress, cloths, sweats etc. The team had also a brief interaction with the tribal community to understand their difficulties and requirements.

The Consultation

Most of the tribal people in the two places that the team visited live under strong superstitions and false beliefs which include negative beliefs on using chairs, hair cut etc. This is an area of sentiments and hence, very careful intervention is needed. The people have never come out from their home village and never had opportunities to mingle with the public in the mainland. The consultation recommended the following as an immediate action plan.

1. Organize an exposure programme for the selected members from the villages
2. Provide them small training like stitching their dress, making small lights to use in their house, honey bee hive making, soap making, cooking etc
3. Organize exchange visit
4. Emphasise on children's education

Frequent visits and close monitoring is needed for at least one year for proposing projects to the people. A strong and sustainable IEEE team with the combination of student volunteers, NGO volunteers, Government representatives, representatives from the tribal people etc are needed for carrying out activities successfully.

Report by: Hepziba Lizzie, hepzibalizzie@gmail.com



With rapid developments taking place in the Information and Communication Technologies (ICT), there is a compelling need to keep updating oneself to be relevant in the competitive environment. In an attempt to provide some inputs and create awareness in few select areas such as ICT Innovations, Smart Cities, Cyber Security, Computer Science Curriculum 2020 etc, a Symposium cum Technical Meeting was organized on 15th Oct 2019. In this Meet, along with presentations by experts, an interactive session with Mr. Eric Berkowitz, Membership Direction of IEEE Computer Society, USA, brief presentations on activities & opportunities provided by IEEE CS, ACM, CSI & IEEE TEMS and Chennai Computer Museum were also included. .

Mr. H.R Mohan, Chair-Spl. Events and Imm. Past Chair, IEEE CS and Chair, ACM welcomed the gathering and highlighted the sessions planned in this meet. The sessions of the symposium jointly organized by IEEE Computer Society, Madras Chapter; ACM Chennai Professional Chapter; Computer Society of India Chennai Chapter; and IEEE Technology and Engineering Management Society, Madras Chapter included the following:

- Innovation Ecosystems in ICT and Opportunities – Mr. M. Murali, Technology Consultant
- Cyber Security -- National Initiatives – Dr. N. Sarat Chandra Babu, Executive Director, Society for Electronic Transactions and Security (SETS)
- Computer Science Curriculum 2020 -- Joint Initiative of IEEE CS & ACM – Prof. Janakiram, Dept. of CSE, IIT Madras
- Technologies & Opportunities in Smart Cities – Mr. R Srinivasan, EVP & Head, Smart World & Communication, L&T
- Innovations at TCS – Mr. Sundar Vinayakam, Head of Marketing, Corporate Research & Innovation, TCS
- Presentation on Chennai Computer Museum -- Dr. B. Govindarajalu , President, Computer Museum Society
- Address by Mr. Eric Berkowitz, Membership Director, IEEE Computer Society, USA
- Presentations on IEEE CS, ACM, CSI, IEEE TEMS Activities & Opportunities



After the presentations, Mr. Eric Berkowitz, Membership Direction of IEEE Computer Society, USA felicitated the IEEE CS Richard Merwin Scholars with the certificates and mementos.

The symposium attracted about 120 participants.

Dr. P. Sakthivel, Chair, IEEE CS proposed the vote of thanks and the meet concluded with Dinner

The PPTs of all presentations made at the symposium, stored in a shareable folder in the google drive at <http://bit.ly/2spYiQe>

For photos taken at the symposium pl. visit <http://bit.ly/2LSUYnF>

AISYWC-2019 (Host Section: IEEE Hyderabad)

All India Student –Young Professionals –Women in Engineering Congress

AISYWC, the annual hallmark event of IEEE India Council was organized most vibrantly and fruitfully under the roof of CMR Group of Institutions, Hyderabad from 28 to 30 September. The All India Student –Young Professionals –Women in Engineering Congress founded in 2000 has grown over the years from All India Student Congress to AISYWC turning itself to be one of the biggest events in calendar for IEEE members. It is an amalgamation of inventors, professionals, entrepreneurs, visionaries and some of the greatest minds of the country. By bringing together these brilliant minds from all walks of life, the AISYWC envisions to provide its members a platform with dynamic career opportunities, path to connect with academicians, scholars and entrepreneurs from diversified field along with a reward for blending in cultures. The Congress provides three days of connection, inspiration, motivation, effective networking, personal development and skill building for hundreds of students/young professionals. Expert speakers lead workshops, seminars on recent technologies, including businesses and entrepreneurship, work life balance and more. The Congress offers incredible opportunities for business networking, professional development and personal growth. Every year the AISYWC is held at different venues which gives a glimpse of what the host section has to offer along with the opportunity for each and every delegate to re-evaluate their capabilities.

In its successful history of 10 years, the congress has been organized wonderfully at different sections which include Gujarat, Bangalore, Madras, Kerala, Delhi and UP sections, most recently being hosted again by IEEE Bangalore Section at Vidya Vikas Institute of Engineering and Technology, Mysore during the time span 28-30 September 2018.

This year AISYWC was hosted by IEEE Hyderabad Section at CMR Group of Institutions, Hyderabad from 28th to 30th September.

THEME: The theme of AISYWC 2019 was to acquire knowledge, Ideate to innovate, Strengthen skillset, Youngsters on a learning spree, weaving networks to nurture, Collaborate to change the world.

VISION: To envision the delegates to develop into engineers who are an asset to the society both technically and socially catering to the needs of the people.

MISSION : To provide its members a platform with dynamic career opportunities, path to connect with academicians, scholars and entrepreneurs from diversified fields and a rewarding experience of blending cultures offering an entry to all domains of technology, social activism and entrepreneurship.

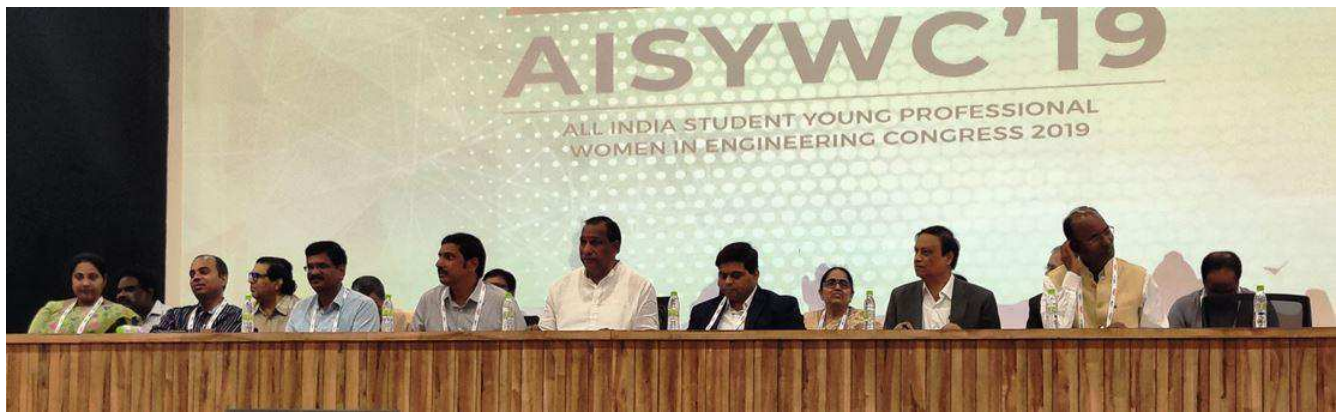
OBJECTIVES:

- **All Career Opportunities under one Umbrella:** A platform that envisions in creating new opportunities amalgamated with exquisite IEEE resources for career development of budding engineers.
- **Channel to Connect, collaborate and create:** To help young minds to find the right path amidst all the tracks and channelize their ideas for the betterment of next-generation technology.
- **Member grade oriented session tracks:** IEEE members are the building blocks of this magnificent society. Tis AISYWC we aim to provide sessions that could assist members in utilizing plethora of IEEE resources for their career and skills enhancement.

AISYWC Events

Day 1

The Flagship event of IEEE India Council brought in with the conjoined effort from the IEEE Hyderabad Section bore fruit as the phase 2 registrations closed within the first week of September. Enormous number of participants from all of the 11 sections registered owing to nearly 700+ registrations. The meet as scheduled saw the accommodation of delegates from far and near at Grand Lotus Hotel and Sri Simran Park Hotel on 27th of September. There was a completely unexpected drizzle but both the organizers along with the participants considered that as a welcome note to the “City of Pearls”. The success of a versatile congress is condemned by the intellectual gathering and delivery of knowledge. The online registrations conducted in 2 phases closed soon as the expected participant rate and the delivered one differed in huge numbers. The Registration desk opened up as soon as the delegates were transported to the venue which is a 45 minute ride from the place of stay. The registrations began from 8 AM IST to nearly 5 PM IST. The participants were provided with an ID card, food coupons and a Kit consisting of the schedule, a notepad along with a pen and some notes regarding an upcoming session on DSP.



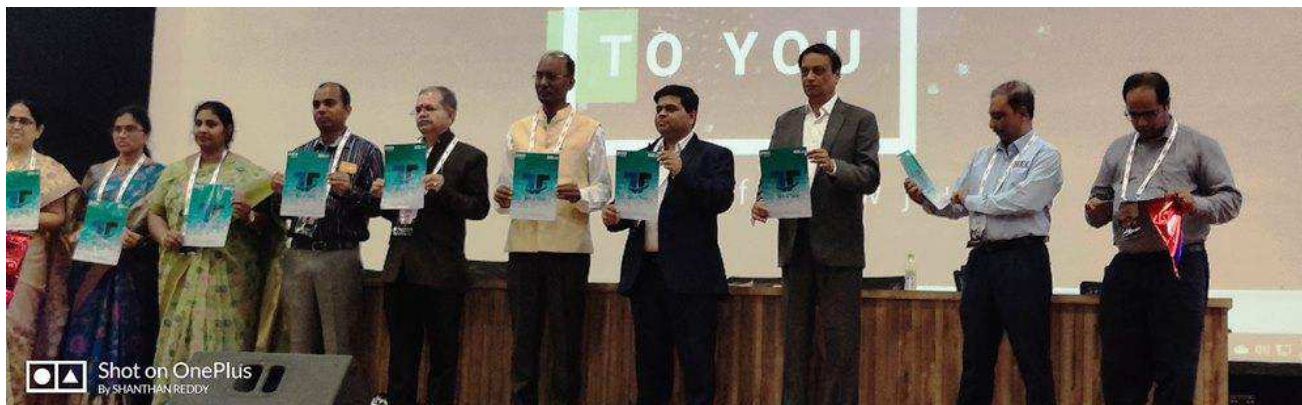
The 19th edition of IEEE's hallmark annual event, All India Students, Young professionals and Women in engineering Congress (AISYWC) was inaugurated with much fanfare at CMR Group of Institutions, Hyderabad on 28th September 2019. The event saw a host of distinguished guests, prominent among which were Sri C H Malla Reddy, Minister of Labor, Employment, Women and Child Development from 2019 in Telangana, Mr. M Janga Reddy, Director of CMRIT and Dr. CH. Gopal Reddy, Secretary and Correspondent CMRGI. From the IEEE gallery of stalwarts, there was Dr. S N Singh, Chair of IEEE India Council, Dr. Rajashree Jain, Vice Chair of IEEE Student Activities, Sri N. Venkatesh, Chair of Hyderabad Section and Senior Vice President, Advanced Technologies and Dr. Y. Vijayalata, Chair of the Congress, Dr. Amit Kumar, Vice Chair of IEEE Hyderabad Section and Sri Vamsi Krishna J, Vice Chair of IEEE Young Professionals and Organizing Secretary of AISYWC 2019.



The program was given an auspicious start with the ceremonial lighting of the lamp. This was followed by an overview of the Congress delivered by Dr. Vijayalata in the capacity of Congress Chair. After she walked them through the Congress itinerary, Sri. N Venkatesh addressed the gathering. Subsequently, Dr. S. N. Singh appreciated the efforts put in by the volunteers and participants alike in making this meet possible and hoped for its grand success. Sri. CH. Gopal Reddy then warmly welcomed all the delegates to the City of Pearls and wished them a comfortable and enlightening stay in Hyderabad. Also the Director of IEEE India Operations Mr. Harish Mysore graced the occasion and wished it to be a grand success.



The distinguished guest of honor for the evening was Sri C. H. Malla Reddy, currently Minister of Labor, Employment, Women and Child Development for the state of Telangana who gave a ferocious speech in encouraging the youth to utilize ample opportunities by hard work which is destined to bear fruit in the long run.



The inaugural ceremony concluded with a Vote of Thanks by Dr. Amit Kumar, Vice Chair of IEEE Hyderabad Section.

IEEE Tell-a-Tale, a first of its kind initiative was also launched on the first day of AISYWC 2019. Tell-a-Tale is a project that aims to share the unique and inspiring experiences of volunteers who have worked hard to organize events and conferences of IEEE. It aims to motivate the next generation of volunteers and provides a platform for support and experience sharing. The logo was unveiled by the host of IEEE India Council dignitaries which includes Dr. SN Singh, Chair, IEEE India Council, Dr. Harish Mysore, Director, IEEE India Operations, Mr. Puneet Mishra, Secretary, IEEE India Council, Dr. Rajashree Jain, Vice Chair of IEEE Student Activities and by the congress organizing committee.

After inauguration the meet was progressed by the first Keynote Address on DSP through Digital Filtering by Dr. GVV Sharma, an eminent scholar who received his Ph.D. in Electrical Engineering from IIT Bombay and did his M.Sc. (Engg) from IISC Bangalore and Btech from IIT Guwahati. He mainly works on wireless technologies but has a passion for developmental engineering. The address primarily focused on the programming language Python which could also be implemented using an android phone by using Termux, which is an app in playstore. The session was really interactive which involved students raising questions and he shot down all of them with his quick wit. The most catchy point of the session which the delegates felt or themselves is his saying that “Science is the beginning then Art takeovers”. So he indirectly told the students to widen their horizons and to look for brighter dimensions.



Nextly we had an Ice Breaking Session which was led by Mr. Jeet Dagha who also happens to be the R10 lead for IEEE Day Celebrations 2019. The session started with him briefing on what to be done and then finally took over to all the special discounts that the newbies could use to avail IEEE membership. Finally with a bang Ms. Dimple Khilwani, an India Council Volunteer took over to an unexpected quiz program in which the right answers were given IEEE goodies. There was also another round of goodie giving that promoted networking among different sections and the delegates who had made connections nearly to 5 were again given a hand full.

After the fun round, the congress dispersed for lunch which had in it the aroma of the ethnic cuisines made just for all the delegates to have their tummies along with their hearts content.

After the break, the session was on IEEE Microwave Theory & Techniques- Initiative & Opportunities for Young Minds by Dr. N Srinivasa Rao, a Ph.D. holder in BioElectromagnetics from JNTUH who is also a life member in IETE, ISTE, ISI and so on. Throughout his career, he had many publications and has attended a lot of international conferences. He began with the history of how JC Bose demonstrated the radio theory. His presentation also focused on how the students could

avail the MIC & Antennae trainer kits to perform experiments and get an insight into the same. Nowadays the scenario has completed changed with the advent of software's and is much simpler by all means. He also emphasized on the IEEE MTT Society which focuses on the same domain and wished more students would utilize the same opportunity.

The next session was by Dr.Sulakshana Chilukuri on The Importance of research in RF and Microwave Engineering. An apt speaker for the same, she holds a Ph.D. from NIT Warangal and even worked as a Postdoc Research Fellow at the University of West of Scotland, UK. She is presently the Head of Vardhaman Student Satellite Mission leading students working on VSAT.She primarily focused her talks on how her field still remains untouched to the larger part of the group. Her growth every time she was placed in an entirely different strata and her evolution to who she is today. Her talk would motivate anyone who is the least interested to at least peek in to what's new in the domain. Finally she wished for more students to opt for the same topic and wished every student present there to have a bright future ahead.

Entrepreneurship is kind of the new "Buzz" in today's world.AISYWC wasn't short on that too. The next session was on Entrepreneurship in Global Perspective by Mr. Murali Bukkapatnam who is also an entrepreneur himself of Volkys Technologies who provides an executive leadership focusing on growth strategy, finances, risk management and compliance. His words would have rang a bell in all the delegates' hearts to at least try for something which is as demanding and exploring at the same time. To learn entrepreneurship one should not go far but start from our own homes, the best example being our own Moms who never say 'No' to any of the demands we ever make. The anatomy of an entrepreneur consists of the Mind frame, Heart frame and the Guts Frame. All of these frames can definitely mold in oneself a true entrepreneur. The session ended with a huge crowd waiting to enter the corporate world.

The next session was on Failures, Learning and Experiments: Achieving Something Meaningful by Mr. Puneet K Mishra who has been with ISRO Satellite Centre since 2004 and is presently heading Satellite Antenna Characterization, Test & Design Section. He has a rich experience of RF characterization of 31 satellites operating from UHF to Ka Band. The recent launch of Chandrayaan 2 triggered a very silent audience for Puneet Sir. He started by stating a life experience in which he messed up in one of the situations but was never punished because he was honest about it.He added that life is all about taking risks, it's not for the faint hearted, it's for those who are willing to make mistakes and then rectify it in the long run. Most of the Q&A revolved around the mishaps that happened with Chandrayaan but he was happy to answer them all.

After a full on Tech Session, the delegates were given the opportunity to laugh to their heart's content through a standup comedy by Mr.Sudeendra Koushik which revolved around his native place Bangalore. The road of comedy stretched from Mysore Pak to silk saree to becoming a millionaire by being a billionaire first and getting married after that.

The Host Institution didn't seem to get contented with the hospitality given to delegates that they performed a cultural night starting from traditional dances including folk to hip-hop and beat boxing. The stage also witnessed talents from different sections whose beatboxing could be termed as "phenomenal". Several Dance groups from CMR College named Obvious & Illuminators rocked the whole stage and left the delegates in realm of ecstasy.

There was also an Award Ceremony that took place in remembrance of the founder of Hope Foundation Mr.Pralhad P Chabaria to women who have showed notable contributions to the society in terms of their work. The Best Female Professional Award went to Dr.Rajalakshmi for her excellence in technology and her area of expertise. The Best Female Outgoing Student Award went to Ms.Shubhi Serin also for her efforts to equalize opportunities in programming for both males and females. Both received a medal and a cash prize worth 1.25L for their amount less contributions.

After the ceremony, all the participants moved for the Banquet Dinner and after a hearty meal proceeded to the bus depots that drove them back to their hotels with new ambitions for the next 2 days of the congress.

Day 2

The second day of the Congress started with a positive vibe of turning an obstacle into an opportunity. This positive vibe was spread by Dr. Sandhya Kode Director, Training and Development, IIIT Hyderabad. She began the session by explaining how to turn obstacles into opportunities. Ability to learn and life long journey, collaboration, communication skills, integrity leveraging the technology and leveraging strength were some of the points shared by her. She insisted on some important points such as the right way to treat other people is how you want to be treated and choosing the right thing in difficult situations is the real life. She concluded her speech by motivating the gathering to strengthen the core, exercise, build resilience especially adversity quotient to turn obstacles into opportunities.

Mr. Anil Rachamall Social Activist and Founder End Now Foundation gave a talk on Digital wellbeing - building a positive digital footprint session. He started his session by saying that social media is an entertainment and he insisted the young minds to create new things rather than wasting time in social media. He discussed the pros and cons of social media and said that social media makes us antisocial. He shared more information on the Gallup, social media statistics, screenage world and shared some facts about dopamine and tips to become social. He finally ended the session with a quote 'Disconnect to reconnect'.

The second day noon started with the TEMS panel discussion with 5 eminent speakers. The panelists are Dr. Sudeendra Koushik, Mr. K Gopalakrishna, Mr. J Krishnaswamy, Mr. Bala Prasad and Mr. Abhishek Appaji was the moderator for the panel discussion. The discussion was based on the Employee vs Entrepreneur vs consultant and the benefits of joining TEMS. Mr. Bala Prasad gave more information on the 5G technology and on bringing the technology together in the form of a chip. Dr. Sudeendra Koushik discussed about the half-life of education and the Four E's i.e. education, experience, expertise and exposure. Information on collaborative work was given by Mr. K Gopalakrishna. Followed by him Mr. J Krishnaswamy discussed more on technology, employee, consultant, entrepreneurship and intrapreneurship.

Mr. Atul Negi Professor Ph.D., University of Hyderabad, was the next speaker of the day. His session was based on the future science artificial intelligence and AI for social good. He detailed about the Algorithm 802.11, IEEE standards, hype cycle and shared more information on deep learning and its applications, machine learning and the 17 parameters for sustainable AI in prediction that includes the case study in agriculture using microbots and agrobots. And added that technology can increase the yield. He mentioned that India is one of the few countries in the world which made AI policies.

Followed by that Mr. N Venkatesh Chair, IEEE Hyderabad Section, handled a session on Wi-Fi connectivity for remote sensing drones. He started by briefing about drones, downlink, uplink battery life and radio link connection of the drone. He explained about rate vs range, LoRa, and STBC and concluded by adding more points to geoscience and remote sensing society.



The Most awaited enthusiastic cultural night started with the Rock Band by the host institution CMRIT. The delegates from different sections were dressed in their traditional attires and showcased their talents. The section performance started with Ganesh vandhana and the traditional Kathak dance. The participants from various Zones made the night fun filled and the gathering enjoyed to their core. The cultural night ended with the celebration of the traditional Bathukamma festival of Telangana.

LM Track

The Life Members (LM) track was organized on Day 2 of AISYWC 2019.

Prof Sankaran explained how the LM track materialized this AISYWC, explaining how Region 10 organizes AISYWLC (includes all three affinity groups) and narrating the story of how he and other LMs pushed for having an LM track at the All India Congress on the lines of the Region 10 Congress.

The proceedings began by celebrating the birthday of one of the LMs present, Dr. Vidyasagar with the ceremonial cake cutting. This was followed by a round of brief introductions before beginning the sessions. Mr. N Venkatesh, Chair, IEEE Hyderabad Section, welcomed all the Life Member delegates and thanked them for taking efforts to visit Hyderabad. He also invited them to the cultural evening and dinner that would follow the LM sessions.

Mr. V. Prasad Kodali delivered the first talk on 'IEEE Life Members- a 130 Year History of Philanthropy.' Mr. Kodali is an IEEE member since 1963, a Life Member since 2006, and has conducted extensive research on the history of Life Members in IEEE worldwide. Who better than him to conduct a session explaining the growth of LMs in IEEE. He explained the timeline of how the predecessor organization of the IEEE, namely the American Institute of Electrical Engineers (AIEE) introduced a Life Membership or Associate Membership in 1884. In that time, a one-time payment was sufficient to become an associate member. In 1947, IRE introduced Life Membership. When the IRE and AIEE merged to form IEEE, a formal Life Membership was created in 1963. The bylaws for the same (Bylaw 102.2) were committed to paper in 1971 and there has been no change in rules for LMs thereafter. Prof. Kodali explained that in the early days, LMs majorly contributed towards philanthropy, and their main focus was on funding education for students. He then elaborated upon the IEEE Life Member Fund and how the LM Funds have been put to use so far in myriad applications ranging from History Centers and Museums, to the IEEE Global History Network. He tried to hit home the point that a retired

professional has a lot of time at his/her disposal and yet there are very few Life Members (citing Dr. Vidyasagar as an example) who contribute so much or win prestigious IEEE tech awards.

Day 3

The first session of the final day congress was taken by Mr. Vamsi Krishna J & Mr. Abishek Appaji on the topic “Crossing the chasm from Student to Studentpreneur”. Mr. Vamsi Krishna J shared his experience working with stumax and Mr. Abishek Appaji shared his experience in MIT. They taught what innovation is and the difference between the need vs want. This session motivated the audience and inspired them with much more confidence to go ahead and achieve their goals.

The next session was handled by prof. ML Sai Kumar Past Dean of Academics, Institute of Public Enterprise about the Make a Difference (MAD). He interacted with the delegates by asking questions and motivated them playing the videos of real time examples of people who really made a difference. He advised the gathering to think beyond the books and make a difference to someone’s life. This was followed by the launch of Skill Connect Program website by Dr. Amith Kumar, Mr. Bala Subramanyam and Mr. Ravishankar. Mr. Dev Jothi briefed the benefits, takeaways and the various phases of the skill connect program.



The flagship event of IEEE India Council AISYWC 2019 came to an end with valedictory session and certificate distribution followed by group photo with Congress T-shirt. The vote of thanks was given by Mr.J.Vamsi Krishna. The biggest event on the calendar for IEEE members in India was a remarkable one by achieving the mission and vision of AISYWC 2019 successfully. The Congress ended with Lunch & Wrap up from event place to Hotel.

More photos of the event are available at <https://photos.app.goo.gl/CR9icUjT4QtkFCQD7>

Report by: IEEE Hyderabad Section & IEEE AISYWC Working Committee (Dr Vijayalata Reddy, Congress Chair - AISYWC & N Venkatesh, Chair - IEEE Hyderabad Section)

Coordinated by: Dr Amit Kumar, VC-Conferences, Mr. Vamsi Krishna J, VC-Young Professionals & SCT & Dr Rajashree Jain, VC - Student Activities

A cryptocurrency-mining botnet is infecting computers with an image of American singer Taylor Swift to spread its malware. The operators of botnet MyKingz are using steganography, a technique that enables them to hide malicious files inside the genuine ones, according to UK cybersecurity firm Sophos. They are hiding a malicious EXE file inside a genuine JPEG image of Taylor Swift.

IEEE UP Section Events

KIET Group of Institutions: 2nd International Conference on Issues and Challenges in Intelligent Computing Techniques (ICICT-2019)



KIET Group of Institutions, Ghaziabad in association with IEEE UP Section organised a two days IEEE - International Conference on "Issues and Challenges in Intelligent Computing Techniques" (ICICT-2019) on 27-28 September, 2019. The main objective of the Conference is to stimulate and facilitate active exchange, interaction and comparison of approaches, methods and ideas related to specific topics, both theoretical and applied, in the general areas related to the networking, intelligent techniques, computing technologies.. The main aim of this International Conference is to contribute to academic arena, business world, and industrial community and in turn to the society.

Chief Guest of the conference was Dr. M P Poonia Vice Chairman, All India Council for Technical education. He addressed on the role and importance the contemporary issues like High Performance Computing, Bio-Inspired Computing, Green Computing, and Information Security. Dr. S.A.M. Rizvi from Jamia Milia Islamia University was guest of honor and discussed on the need fostering the exchange of concepts and ideas in latest technologies i.e. Machine Learning, AI and Quantum Computing. Dr. Vineet Sharma, Head of CSE and Chair of conference shared that more than 200 research papers were received from six different countries and almost all the states of India. Dr. A. Garg, Director of KIET Group of Institutions shared success story of KIET Group and contribution towards research and other development activities in institution. Dr. Manoj Goyal, Joint director of KIET group shared that conducive infrastructure and healthy environment of KIET is providing opportunity for research and innovation further he shared that TBI of institution is fostering the students and faculties to use new research and to be entrepreneur. Dr. Deepak Garg from Bennett University delivered a keynote lecture on Artificial Intelligence and Machine Learning and Dr. Grace Eden delivered the keynote lecture on Human-Centred Robotics. Dr. Adesh Pandey, Dr. Ajay Srivastava, Prof. Dayanand, Dr. Sanjeev Kumar, Dr. A.P. Shukla and admin officer Mr. Umesh Sharma were present in conference.

89 accepted papers were presented in 6 different tracks each chaired headed by eminent persons. We are thankful to IEEE Observer Dr. Asim Chandel for his visit and guidance on second day of conference i.e 28th Sep 2019.

Report by: Dr. Vineet Sharma, vineet.sharma@kiet.edu

A 19-year-old woman in the US tracked and recovered her stolen car using the 'Find my' app available on iPhones. The car was stolen after Victoria O'Connor left her car keys, iPhone and wallet inside the vehicle while visiting a convenience store. After discerning the iPhone's location with the app, the police recovered her car from a nearby apartment complex.

Ryan, an eight-year-old American boy who reviews toys, topped Forbes' list of highest-earning YouTube stars after making \$26 million (₹184 crore) in a year. Ryan had topped the list last year as well at \$22 million. He was followed this year by channel 'Dude Perfect' at \$20 million and Russian-born five-year-old Anastasia Radzinskaya at \$18 million.

IEEE India Council

Secretary's Report Presented at the Annual General Meeting

During INDICON-2019 on 14 December 2019 at Marwadi University Rajkot
This report summarizes activities and initiatives taken by IEEE India Council during the year 2019

India Council Core Committee



Prof. S N Singh, Chair



Mr. Deepak Mathur, Advisor



**Dr. Sivaji Chakravarti
Imm. Past Chair**



Dr. Suresh Nair, Chair Elect



Mr. Puneet K. Mishra, Secretary



Dr. R B Jadeja, Treasurer

1.0 Executive Summary

2019 was the year of many unique initiatives and brought many achievements to IEEE India Council. During beginning of the year, Chairman of IEEE India Council outlined initiatives, plans and goals for the Council. With the help of active and dynamic volunteers, council has been able to deliver on many of its plans and conducted several activities with the help of constituents sections.

Council successfully hosted IEEE President's, Executive Director's and Public Policy Chair's Visit. Council was successful in conducting 160th Birthday Celebrations of Sir J C Bose, Public Policy workshop, mini POCO workshop, All India

Students-YP-WiE Congress, 4 Industry Webinar, 3 YP Webinar, 2 Industry visits and 1 Hands-on workshop. These events were a true success for the relentless efforts of volunteers.

Professional activities garnered speed with the revised collaboration (MoU) with IEI. This collaboration effort is for member benefits as it opens up new horizons in the field of technology and management.

On technical front, Council along with Gujrat Section is organizing it's flagship conference INDICON at Marwadi University. 502 papers were received and 241 papers were accepted after 3 technical reviews.

To recognize the efforts the volunteers council has constituted several new awards. As part of Industry initiative council has constituted 3 new awards. To recognize subsections and to provide opportunity to host and organize technical conference of International level an New series of conference is conceived, EoI to host this conference is floated. The first IC Subsections conference is planned to be organized during June/July 2020.

With advancements to social media, Council has invested time and resources to keep its website updated and Facebook feeds active. This has enabled many of our members to stay connected.

Council has taken some strong steps and dissolved all the chapters and merged them with respective sections to stream line their activities. is happy to share that two initiative of section viz. Internship Portal and Insurance Scheme for member benefits have been appreciated a lot and will now be implemented at India level.

NEW INITIATIVES: This year Council has started following new initiatives:

1. IEEE IC – Nokia Industry Visits on Experimental Learning
2. IEEE IC-Anritsu Hand on Workshop
3. LM Track in All India Student-YP-WiE Congress
4. Regulation of IC eNotice
5. Industry Awards namely: Technologist of the year, Startup of the year and Women Technologist of the Year
6. India Council Leadership Awards: a. India Council Lifetime Achievement Awards for IC Chairs, b. India Council Leadership Awards for Section/Subsection Chairs
7. IEEE IC Subsections Conference
8. Revision of IC By laws for improved and efficient functioning

2.0 India Council Executive Committee (IC-EXECOM)

The India Council Executive Committee – 2019 comprises the following Members along with all the Section Chairs as its ex- officio members.

S.No.	Name	Role	Section
1	Dr. Sri Niwas Singh	Chair	UP
2	Mr. Puneet K Mishra	Secretary	Bangalore
3	Dr. R.B. Jadeja	Treasurer	Gujarat
4	Dr. Sivaji Chakravorti	Immediate Past Chair	Kolkata
5	Dr. Suresh Nair	Chair Elect	Kerala
6	Mr. Deepak Mathur	Advisor	Gujarat
7	Mr. RK Asthana	Ombudsman	Delhi
8	Mr. H R Mohan	Newsletter Editor	Madras
9	Dr. Chankya Jha	VC-ECIM	Bombay
10	Mr. Vamsikrishna J	VC-YP	Hyderabad
11	Dr. Sujit K Biswas	VC - Technical Activities	Kolkata
12	Dr Rajashree Jain	VC - Student Activities	Pune
13	Dr. Preeti Bajaj	VC - Awards	Bombay
14	Dr. Rachana Garg	VC - WIE	Delhi

15	Prof. Kumar Vaibhav Srivasnata	VC - Educational Activities	UP
16	Ms.Sarada Jayakrishnan	VC-Professional Activities	Kerala
17	Mr. Girish Khilari	VC-Section and Subsection coordination	Pune
18	Dr. Sudeendra Kaushik	VC - Industry Relations	Bangalore
19	Dr. Amit Kumar	VC - Conferences	Hyderabad
20	Dr. T. Michael N. Kumar	VC - Branding	Madras
21	Mr. Ashok Jagatia	VC - Membership Development	Bombay
22	Mr. Harish Mysore	India Office	Bangalore
Section Chairs			
1	Mr. Keshav Bapat	Section Chair	Bangalore
2	Mr. Abhay Phansikar	Section Chair	Bombay
3	Dr. Perna Gaur	Section Chair	Delhi
4	Prof. Maniklal Das	Section Chair	Gujarat
5	Mr. N Venkatesh	Section Chair	Hyderabad
6	Dr SK Varshney	Section Chair	Kharagpur
7	Mr. Sanjay Kar Chaudhary	Section Chair	Kolkata
8	Dr. Sameer S. M.	Section Chair	Kerala
9	Dr. P A Manoharan	Section Chair	Madras
10	Mr Dinanath Kholkar	Section Chair	Pune
11	Dr Asheesh K Singh	Section Chair	UP

3.0 IC-EXECOM/Core Committee Meetings & EGM

Total six EXECOM meetings, one Core Committee meeting and EGM was conducted for smooth operation of council activities.

SNo.	Date	Meeting	Description
1	17/02/2019	EXECOM Meeting	GIEEE India Office, Bangalore
2	03/03/2019	EXECOM Meeting	Melbourne, Australia
3	30/03/2019	EXECOM Meeting	Aerocity Aloft Hotel, New Delhi
4	04/05/2018	Core Committee Meeting	GIEEE India Office, Bangalore
5	08/06/2019	EXECOM Meeting	Biswa Bangla Convention Centre, Kolkata
6	27/07/2019	EGM 2019	WTC-Brigade Gateway, Bangalore
7	27/07/2019	EXECOM Meeting	GIEEE India Office, Bangalore
8	28/09/2019	EXECOM Meeting	CMR Group of Institution, Hyderabad
9	14/12/2019	EXECOM Meeting	Marwadi University, Gujrat
10	14/12/2019	AGM 2019	Marwadi University, Gujrat

4.0 Celebrating Sir Jagadish Chandra Bose

Sir Jagadish Chandra Bose, one of the fathers of Radio Physics, demonstrated in Calcutta, India, the generation, transmission and reception of electromagnetic waves at 60 GHz frequency over a distance of 23 meters through two intervening walls by ringing a bell and detonating gunpowder in 1895. He developed several components such as a spark-gap transmitter, coherer, horn antenna, dielectric lens, polarizer, and cylindrical diffraction grating.

IEEE celebrated the 160th anniversary of Sir Jagadish Chandra Bose by reflecting on his life and works through eminent speakers compassionately projecting his work to 150 plus aspirant IEEE members and engineers on 17 February 2019 at WTC, Bangalore. This workshop showcased the innovations of Sir J C Bose and its relevance & contribution to the modern technology. While Prof. B S Sonde (ASM Technologies), Prof. D P Sengupta (NIAS) and Dr. Surendra Pal (DRDO) reflected on the life of Sir Jagadish Chandra Bose, Mr. C S Rao (Quadgen Wireless Solutions) and Dr. Yeshwant Gupta (NCRA) presented the application of Sir J C Bose's work in unlicensed 5G band for communication networks and Radio Astronomy. The highlight of the workshop was the demonstration of the working replica model of JC Bose's millimetre wave experiment by Dr. Kareem (MJCET) and demonstration of microwave apparatus by Dr. Sudhir Phaktkar (NCRA).

IEEE Foundation as part of the "Furthering Indian Perception of IEEE" project sponsored the J C Bose workshop organized by IEEE India Council, IEEE Bangalore Section, IEEE Bombay Section and supported by IEEE APS-MTTS Bangalore Joint Chapter and IEEE SPS Bombay Chapter. The workshop held at the landmark World Trade Center Auditorium in Bengaluru was sponsored by World Trade Center, Bengaluru for this noble cause.



Attendees of the Celebration



Prof. S N Singh, Chair, IC Inaugurating the celebrations

5.0 IEEE President Visit

IEEE President & CEO, Dr. Jose F Moura visited Bangalore and met India Council EXECOM on July 27, 2019. A brief presentation on IEEE India Council was made before IEEE President and Executive Director to familiarize them about India Council activities and initiatives. It was informed to the IEEE President that Membership growth in India was 7% and 12% in the year 2017 and 2018 respectively. If 12% YoY growth rate is maintained, by 2026 (when IC will be celebrating its Golden Jubilee year) India Council will have more than 1.35L Members (Equal to 2018 membership of IEEE R10). Even at 7% YoY growth rate by 2031, India Council will have more than 1.35L members. It was informed to President and Executive director that IC is facing following major challenges

- a. Membership
 - i. Retention and Addition
 - ii. Transformation of Student member to Regular member
 - iii. Higher membership Fee
 - iv. Limited Value to IEEE Members
 - v. Outlook
- b. Collaboration with Govt & Industry
- c. Volunteers
 - i. Deficit
 - ii. Motivation

A request to provide a dedicated secretarial assistant to India Council, who can also assist other India Sections if required was made in front of IEEE President and Executive Director.



IEEE President with IC EXECOM

IEEE India office has arranged a dinner meeting with India Council volunteers, IEEE President, IEEE Executive Director and few industry leaders in Bangalore on July 26, 2019.



IEEE President with IC EXECOM during Dinner Meeting

6.0 Workshop on Public Policy Imperatives

A workshop on IEEE Public Policy was organized by India Council. Dr. Gordan Day, Chair, IEEE Public Policy Committee gave detailed information about IEEE Public policy program and requested India Council to take lead in participating with Govt of India in formulation of Public Policy. He informed the India Council ExeCom members that NITI Ayog, GoI is looking for IEEE support in six identified areas.



IC EXECOM attending workshop on Public Policy Imperatives

7.0 Extra Ordinary General body Meeting (EGM 2019)

The 2019 Extraordinary General body Meeting (EGM) of IEEE India Council (IC) was held under the chairmanship of Prof. S N Singh, IC Chair, at WTC Brigade Gateways, Bangalore on July 27, 2019 from 9.30 AM to 10.30 AM. Discussion and Adoption of amendments to Article II, IV, V, VI and VIII of IC Bylaws in respect of objective, management, nomination and election of officers, eligibility criterion and finances were taken up and approved unanimously by general assembly. Updated Bylaws are posted on IC website at: <https://site.ieee.org/indiacouncil/about-ieee/bylaws/>



EGM 2019 Attendees

8.0 All India Student –Young Professionals –Women in Engineering Congress (AISYWC-2019)

The annual flagship event of IEEE India Council was organized by IEEE Hyderabad section at CMR Group of Institutions, Hyderabad from 28 to 30 September 2019. AISYWC is an amalgamation of inventors, professionals, entrepreneurs, visionaries and some of greatest minds of the country. By bringing together these brilliant minds from all walks of life, the AISYWC envisions to provide its members a platform with dynamic career opportunities, path to connect with academicians, scholars and entrepreneurs from diversified field along with a reward for blending in cultures. Every year the AISYWC is held at different venues which gives a glimpse of what the host section has to offer along with the opportunity for each and every delegate to re-evaluate their capabilities. The theme of AISYWC 2019 was to acquire knowledge, Ideate to innovate, Strengthen skillset, Youngsters on a learning spree, weaving networks to nurture, Collaborate to change the world.

AISYWC was inaugurated with much fanfare at CMR Group of Institutions, Hyderabad on 28th September 2019. The event saw a host of distinguished guests, prominent among which were Sri C H Malla Reddy, Minister of Labor, Employment, Women and Child Development from 2019 in Telangana, Mr. M Janga Reddy, Director of CMRIT and Dr. CH. Gopal Reddy, Secretary and Correspondent CMRGI. From the IEEE gallery of stalwarts, there was Dr. S N Singh, Chair of IEEE India Council, Mr. Puneet Kumar Mishra, Secretary, IEEE India Council, Dr. Rajashree Jain, Vice Chair of IEEE Student Activities, Sri N. Venkatesh, Chair of Hyderabad Section, Dr. Y. Vijayalata, Chair of the Congress, Dr. Amit Kumar, Vice Chair of IEEE Hyderabad Section and Sri Vamsi Krishna J, Vice Chair of IEEE Young Professionals and Organizing Secretary of AISYWC 2019



Prof. S N Singh, Chair IC



Dignitaries on the dais during Inaugural Session of AISYWC 2019

IEEE Tell-a-Tale, a first of its kind initiative, that aims to share the unique and inspiring experiences of volunteers was also launched on the first day of AISYWC 2019.

First Keynote Address on DSP through Digital Filtering was given by Dr. GVV Sharma, IIT Hyderabad. Subsequently, an Ice Breaking Session was led by Mr. Jeet Dagha and Ms. Dimple Khilwani. Next session was on IEEE Microwave Theory & Techniques- Initiative & Opportunities for Young Minds by Dr. N Srinivasa Rao. Dr. Sulakshana Chilukuri gave a talk on The Importance of research in RF and Microwave Engineering. Session on Entrepreneurship in Global Perspective was

taken by Mr. Murali Bukkapatnam. Last Technical session was on Failures, Learning and Experiments: Achieving Something Meaningful by Mr. Puneet K Mishra Head, SACTDS/ISRO. Before cultural program a standup comedy by Mr.Sudeendra Koushik was performed. Host Institution performed a cultural night starting from traditional dances including folk to hip-hop and beat boxing



IEEE Day Celebrations during AISYWC

The second day of the Congress started with a talk on “How to turn obstacles into opportunities” by Dr. Sandhya Kode, IIIT Hyderabad. Mr. Anil Rachamall Founder End Now Foundation gave a talk on Digital wellbeing - building a positive digital footprint. For TEMS panel discussion, the panelists were Dr. Sudeendra Koushik, Mr. K Gopalakrishna, Mr. J Krishnaswamy, Mr. Bala Prasad and Mr.Abhishek Appaji (moderator). Prof. Atul Negi University of Hyderabad, took a session on the future science artificial intelligence and AI for social good. Mr. N Venkatesh Chair, IEEE Hyderabad Section, handled a session on Wi-Fi connectivity for remote sensing drones.

The Most awaited enthusiastic cultural night started with the Rock Band by the host institution CMRIT. The delegates from different sections showcased their talents. The performance started with Ganesh vandhana and the traditional Kathak dance. The participants from various sections participated in the cultural night. Program ended with the celebration of the traditional Bathukamma festival of Telangana.



Cultural Program during AISYWC 2019

Third day first session of the final day congress was taken by Mr. Vamsi Krishna J & Mr. Abishek Appaji on the topic “Crossing the chasm from Student to Studentpreneur”. The next session was by prof. ML Sai Kumar Past Dean of Academics, Institute of Public Enterprise about the Make a Difference (MAD). This was followed by the launch of Skill Connect Program website by Dr. Amith Kumar, Mr. Bala Subramanyam and Mr. Ravishankar. The flagship event of IEEE India Council AISYWC 2019 came to an end with valedictory session and certificate distribution followed by group photo with Congress T-shirt. The vote of thanks was given by Mr.J.Vamsi Krishna. The biggest event on the calendar for IEEE members in India was a remarkable one by achieving the mission and vision of AISYWC 2019 successfully. The Congress ended with Lunch & Wrap up from event place to Hotel

9.0 Life Member Track in AISYWC 2019

The Life Members (LM) track was added for the first time in AISYWC and was organized on Day 2. Prof. Sankaran, R10 LMC Chair, welcomed the attendees and opened the session with a brief on the background of how this LM Track came to be a reality. The track was attended by 14 LMs from various Sections of India including Chair/Vice Chair of all the 5 LMAGs in India – viz. Delhi, Bombay, Hyderabad, Bangalore & Kerala. The special guest was Dr V Prasad Kodali, IEEE Fellow, past R10 Director and one of the senior most LMs in India. Dr Kodali delivered an invited talk on “History and Contributions of LM grade in IEEE”. Kodali’s talk was followed by address by Sankaran who spoke on “Some IEEE experiences and vision of some things for IEEE”. He also outlined his idea of “IEEE Laureate Forum” for the future of IEEE and benefit of young researchers in engineering fields. This was followed by brief speeches by LMAG Chairs. The next session was a Panel Discussion, with the theme “Experience of LMs with IEEE and giving back to IEEE & Community as LMs”. Prof. Jenkins of Bangalore LMAG was the Moderator and initiated the panel with some opening remarks and invited LMs R K Asthana of Delhi, Madhu Mangal of Kerala and T S Rathore of Bombay to kick-start the session with their thoughts on the theme. Dr. Kodali appealed for focus by LMs on school & college students, explore possibilities for new IEEE Milestones in India, increase the winning of IEEE Field Awards by Indians and revive the earlier mooted regional budget to provide for annual meeting of LMAG Chairs. Jenkins concluded the Panel Discussion with observing the need to reflect on how much the world has changed and the need for innovative ways and means of finding solutions for the many challenges, where LMs can certainly contribute. Prof. Sankaran then did a wrapup of the LM Track, expressing hope that the LM Track would become an integral part of the AISYWC from the year 2020.



Life Members of India Council attending LM Track

10.0 INDICON 2019

INDICON 2019, will be held during 13-15 December, 2019 at Marwadi University, Rajkot, Gujarat. tOTAL 502 papers were received and 241 papers were accepted after 3 technical reviews. INDICON 2020 will have 3 keynote talks by Ravindra Dahiya, University of Glasgow, Toshio Fukuda, IEEE President 2020, Professor, Beijing Institute of Technology/ Meijo University (China), Cecelia Maitra, IEEE Computer Society President 2019. INDOCN 2019 will also have 15 invited talks, 2 tutorials, 2 workshops, 2 Focused sessions, Startup-innovation session, YP-WIE session, MVC paper contest and 241 paper and poster presentation through multiple parallel sessions.

11.0 Student Activities

Student Activity Committee, IEEE India Council set the following objectives for the year 2019.

- To act as an Interface between IEEE HQ, Region 10, and IEEE Sections in India
- Design and Implement student exclusive programs
- Community Development, Awards and Appreciations
- Membership Development, Retention, Conversion to full members

The same are achieved by the following activities

SI No	Activity Name & brief Description	Date and Time and Venue	Number of Students participated	Activity in association with
1	Two Experiential Learning opportunities to IEEE student member of all sections of under IEEE India Council through Industry visit- Nokia R & D Labs Bengaluru	13 April 2019 and 29 th June 2019 Nokia R & D Labs Bengaluru	97 +81=178	IEEE IC and Nokia University Collaboration

2	<p>A national level Technology Dissemination Contest for Students(TDCS)-Eu-Reka 2019.</p> <p>Event saw a record registration of about 450 students from different parts of the country. Regional selection of the contest was done during first week of August in coordination with volunteers from 7 IEEE Sections; 90 of the selected students appeared for finals at Pune.</p> <p>Dr K Kasturirangan, Former Chairman of ISRO and Chief Architect of National Education Policy gave away prizes for the winners on 31st August, 2019</p>	<p>Regional Level- At Branch and Section level</p> <p>Finals at Pune on 31 August 2019</p>	<p>450 Students participated.</p> <p>More than 10000 School students were reached by IEEE students to create an awareness of STEM education and emerging trends among them</p>	<ul style="list-style-type: none"> • SAC IEEE India Council • Education Society, IEEE Pune Section • IEEE Humanitarian Technology Committee • IEEE EAB Region 10 • Leap & Scale Growth Partners Pvt. Ltd. • Netlux Antivirus • MIT WPU
3	ITC fellowship to IEEE students and Faculty members ITC India was held under International Test Conference	21-23 July 2019	30 Students 30 Faculty members	<ul style="list-style-type: none"> • In association with ITC
4	M V Chavan Paper contest	13 Dec 2019	58 Papers received, 13 Accepted	<ul style="list-style-type: none"> • IEEE IC and IEEE Gujarat Section
5	<p>Some Awards and Achievement-</p> <ol style="list-style-type: none"> 1. IEEE Regional (10) Exemplary Student Branch Awards – 9 out of 15 are from IEEE IC 2. R10 Student Activities Committee Outstanding Student Branch Award -First PlaceA. D. Patel Institute of Technology, Gujarat Section, Third PlaceDr. Akhilesh Das Gupta Institute Of Technology And Management, Delhi Section 3. R10 Joint Student Branch Initiative Fund 2019 - 6 out of 10 selected for Joint SB initiatives were from IEEE IC 4. IEEE IC student Branch most promising and upcoming-Under progress. 			



IEEE India Council -Nokia Experimental Learning Series (Batch 1)



IEEE India Council -Nokia Experimental Learning Series (Batch 2)



TDCS/EU-Reka 2019, 31 Aug

12.0 Women in Engineering (WiE) Activities

The salient points of WiE activities are as follows:

1. Contact details of WiE chairs of various sections under IC has been obtained and common mails with the members have been exchanged. Also WhatsApp group of active WiE volunteers of various sections has been created
2. IEEE WIE-India Council, Equal Opportunity Cell DTU and WIE Delhi Section had organized a program on "Cyber Security" for women students and faculty members of the institutes under Delhi Section. The program was an initiative of National Commission for Women (NCW) under "Digital Shakti Program" in association with Cyber Peace Foundation. The event took place on 9th April, 2019 at Delhi Technological University. 90+ women participants where everyone had a great learning experience.
3. The information about IEEE Region 10 WIE Travel Grant for ILS (Partial travel funding) program for IEEE R10 WIE members to attend and present IEEE WIE International Leadership Summits 2019 in R10 (Bangalore, Beijing, Islamabad) has been shared and has been put on IC website.
4. The information about IAS CMD WIE travel grant program IAS members for attending a local WIE International Leadership Summit (ILS) has been shared with all the WiE chairs.

13.0 IEEE IC-Hope Foundation Prahlad P Chhabria Award

In the honor of Late Shri Prahlad P Chhabria's, Hope Foundation and Research Centre, IEEE India Council and Women in Engineering (WIE) Affinity Group, IEEE Pune Section has constituted two awards that are designed to recognize and applaud outstanding female student/s specifically from the faculties of Science, Engineering or Technology as well as young women Scientists, Engineers or Technocrats who are in their early career stage. Each award is a cash prize of 1,25,000/- (Rupees One Lakh Twenty Five Thousand only) Taxes as applicable shall be deducted from this prize money, a medal and a citation. The awards were presented during AISYWC 2019, held at Hyderabad.

- I. Award I - Best Outgoing Female Student (from faculty of Science / Engineering / Technology) For 2019 Awarded to Ms. Shubhi Sareen
- II. Award II - Best Women Engineer / Scientist / Technocrat (working Professional -Early Career Stage). For 2019 Awarded to Dr. Rajalaxmi Chouhan



IEEE IC-Hope Foundation Prahlad P Chhabria Award ceremony

14.0 Conference Activities

I. **TCS Approved Conference - 01 - ICETET** -International Conference on Emerging Trends in Engineering and Technology Signal and Information Processing- Held at Nagpur on Nov 1-2.

II. **R10 POCO** - Organized at MMMUT Gorakhpur along with IEEE UP Section

60+ attendees joined for the minipoco at Gorakhpur which was very well received. Sessions on Technical cosponsorship, Conferences quality and Publications with IEEE Xplore were emphasized during the event. More Details here <http://www.mmmut.ac.in/poco2019/#speakers>



III. **IC Conference Policy rework and adapted - Updated on IC:**

Website <https://site.ieee.org/indiacouncil/conference-norms/>

IV. **Indicon Conference Bidding Policy and Forms are regulated**

VC Conferences was one of the lead organizers of IEEE Region 10 first 'Conference Leadership Program (CLP)' on 17-18 August 2019 at Goa, India. The program was attended by 42 delegates. Participants were from India, China, Bangladesh, Singapore, Indonesia, Japan, Malaysia and Australia. The course was tailor-made by MCE for Region 10 after having discussion with Region 10 volunteers. A team of MCE led by Fred Schindler and assisted by Kevin Hanft, Jacqueline Sturdivant and Ray Borgone were the speakers in the CLP. Anil Roy and Harish Mysore discussed about the flagship conferences and role of IEEE offices respectively.



Region 10 Conference Leadership Program

15.0 Memorandum of Understanding

The MoU between IEI and IEEE was signed on 26 July 2019 at IIT Bangalore in presence of Dr. Jose Moura, President & CEO, IEEE, and Dr T M Gunaraja, President IEI as part of Inaugural function of IEEE CONECCT 2019. During the event Prof Bhargab Bhattacharya of ISI Kolkata, was presented with the 4th IEI-IEEE Award for Engineering Excellence.



MoU between IEEE and IEI signed by IEEE President and IEI President

16.0 Industry Engagement

The following are the webinars conducted in 2019.

1. Pratik Baheti - IPR filing for academia- 45+ participants
2. Sudeendra Koushik- Can employees become entrepreneurs? - 50+ participants
3. Ravikiran Annaswamy - How to build lasting professional networks? - 35+ participants
4. Nidhi Raina- Managing Technical Career- HR leader's perspective- 40+ participants.

Industry forum is being organized in December and Engineering Manager of the year award has been initiated VC-Industry Relations, Represented IC for IEI in Mauritius. Various sections have been synergised to joint activities, like Hyderabad, Pune, Kerala, Bangalore.

17.0 Educational Activities

Under Educational activities a hands-on training cum workshop on RF instruments and 5G technology was organized at Anritsu, Bangalore on October 11, 2019. Total 30 Students across India participated in the program and got benefitted. Students were given hands-on training on RF Signal Generator, Vector Network Analyzer, Power Meter and Spectrum Analyzer. Second program is planned in December 2019.



Hands-on Training on RF Instruments Participants

18.0. Professional Activities

Professional activities team of Kerala section along with IC Vice Chair of Professional Activities organized a meet-up of members from other sections in the Region 10 and with Dr. Nirmal Nair, chair, professional activities, IEEE Region 10. This was held on Friday, 18th October at Grand Hyatt, Bolgatty Island, Kochi on the sidelines of TENCON 2019. Dr. Kush Agarwal, Chair, Professional activities, IEEE Singapore Section, Prof. Jung Chang, Chair Professional Activities of IEEE Seoul Section, Sarada Jayakrishnan, Vice Chair Professional Activities, IEEE India Council, Mr. M C Jayakrishnan, Chair Professional Activities IEEE Kerala Section and Mr. Aju Thomas IEEE Kerala Section participated in the meet-up. In the meet-up participants shared the activities being organized in their respective sections.

Ms. Sarada Jayakrishnan, IC VC Professional activities pointed out on the need for the members from Industry to feel enriched by their association with IEEE. For Members from Academia, being with IEEE has inclusive benefits also for enhancing their career paths. There was discussion on how IEEE Professional activities could help find programs which could benefit members from various industry including manufacturing.

Dr. Nirmal Nair shared in detail about his plans of revamping the professional activities in region 10. His plan is to give clear directions for the professional activities groups to influence policy decision makers of respective region. He is also planning to initiate professional activities day in the major IEEE conferences. He is planning to present his ideas to the Region 10 and get their approval before circulating to various sections.



Professional Activities meet-up during TENCON 2019

19.0 Membership (As on November 1, 2019)

India Council Membership has grown from 45890 to 49900 YoY with a rate of 9% approximately. Following are grade wise comparison in various member grade levels.

Member Grade	Count		Member Grade	Count	
	2018	2019		2018	2019
Honorary Member	01	01	Standards Association Member	NA	14
Life Fellow	25	29	Life Member	35	40
Fellow	47	48	Member	12098	13374
Life Senior Member	159	165	Graduate Student Member	2399	4900
Senior Member	2399	2790	Student Member	25947	28083
Affiliate	NA	149	Associate Member	534	424

20.0 India Council Awards

The India Council Awards are administered by IC Awards Committee. In order to recognise the dedicated efforts of IEEE Volunteers of IEEE India Council following awards were declared.

1. Outstanding Volunteer Award

a. IEEE Volunteer (Age greater than 35)

1. Dr Perna Gaur - Delhi Section
2. Mr K Bijju - Kerala Section
3. Dr J Ramkumar - UP Section

b. IEEE Volunteer (Age equal to and below than 35 – Outstanding Student, Outstanding WIE Student, Outstanding YP)

a. Outstanding Student Volunteer

1. Ankit Yadav, UP Section
2. M Sai Prashant, Hyderabad Section
3. CM Kishore, Kerala Section
4. Axat Patel, Gujarat Section
5. Jatin Batra, Delhi Section
6. Gaurav Sonawane, Pune Section

b. Outstanding Volunteer YP

1. Shyam, Kerala Section

2. Outstanding Student Branch Award

- a. Outstanding Student Branch : U V College of Engineering, Bangalore (STB34411 Branch Counselor Dr. Kiran K)
- b. Outstanding Upcoming Branch : Symbiosis Institute of Computer Studies and Research (STB114047 Branch Counselor Dr Rajashree Jain)

3. India Council Leadership Awards

- a. IEEE India Council Chair Lifetime Achievement Award 2019:
Sri. RK Asthana, Delhi Section
- b. IEEE India Council Section Chair Lifetime Achievement Award 2019:
 - 1. Prof Sivaji Chakraborti, Kolkata Section
 - 2. Er TS Rangarajan, Madras Section
 - 3. Er NV Rao, Hyderabad Section
 - 4. Prof Anil Roy, Gujarat Section
 - 5. Prof KVS Hari, Bangalore Section
 - 6. Prof D Doke, Pune Section

In total 362 volunteers have applied for the various awards and out of which 129 have submitted data and rest of the entries were incomplete. India Council Congratulate all the awardees.

21.0 IC Newsletter

IEEE India Info, the IEEE India Council Newsletter (ICNL) has been brought out on time every quarter as detailed below:

Vol. 14 – No. 1 -- Jan-Mar 2019 in 160 pages with 25 articles

Vol. 14 – No. 2 – Apr-Jun 2019 in 207 pages with 38 articles

Vol. 14 – No. 3 – Jul-Sep 2019 in 202 pages with 26 articles

The fourth quarter issue for Oct-Dec 2019 is getting ready for release by mid Dec 2019 around the time of INDICON-2019. In the newsletter, along with sizable no. of quality articles on current interest topics authored by working professionals & academic faculty from India and abroad, regular items such as Messages from IC Chairman, Editor, Reports on activities conducted by various Sections & Society Chapters, Reports on activities organised by IC, columns -- “What’s hot in IT - An Indian Perspective” & “Information Resources”, Book Reviews, Excerpts from books and Announcements relating to various schemes, events & activities of interest to members are published.

Editor of ICNL, Mr. H.R. Mohan wishes to record his sincere thanks to all the contributors to the newsletter. As soon as the newsletters are published and uploaded at the IEEE India Council website, all the IC members are informed about the access details through email to facilitate them to read the contents. The ICNL issues are archived at <https://site.ieee.org/indiacouncil/newsletter/>

22.0 Slate for 2020

The nomination Committee for the year 2020 was formed by IEEE IC Chair as per By- laws of IC. The IC Nomination Committee is as below.

Chair – Prof. Sivaji Chakravorti, Immediate Past Chair of IC

Member – Dr. S.M. Sameer, Chair of Kerala Section

Member – Mr. J Ramkumar, Past Chair of UP Section

The committee has unanimously, resolved to extend the tenure of current IEEE India Council Chair, Prof. S.N. Singh, for one more year (i.e. for 2020) as per the provisions of IEEE India Council Bylaws - the Article III, Section 2, after review of performance in the year 2019.

23.0 Liaison with IEEE India Office:

Mr Harish Mysore, Director IEEE India Office in Bangalore, continues his close association with the activities of India Council and is regularly present at IC meetings. India Council acknowledges the various efforts of IEEE India Office, which have added value to members in India.

24.0 INDICON 2020 & AISYWC 2020

IEEE Delhi Section will be organizing both the Flagship event of IEEE India Council viz. INDICON 2020 and AISYWC 2020 at Netaji Subhash University of Technology and Chitkara University respectively. INDICON 2020 will be organized from Dec 11-13, 2020. AISYWC 2020 dates are to be finalized.

25.0 ACKNOWLEDGEMENTS:

I wish to place on record my sincere thanks to the IC Chair, Past Chair, Chair-Elect, Treasurer, Section Chairs, all IC Vice-Chairs and Executive Committee Members, Ombudsman, Editor IC Newsletter, IC and Section volunteers, who have worked hard throughout the year and helped us in organizing meetings, conducting events and taking India Council to new level.

Puneet Kumar Mishra
Secretary, IEEE India Council

Difference between a GRE person and a normal person

A GRE STUDENT	: All articles that coruscate with resplendence are not truly auriferous.
A NORMAL PERSON	: All that glitters is not gold.
A GRE STUDENT	: Sorting on the part of mendicants must be interdicted.
A NORMAL PERSON	: Beggars are not choosers.
A GRE STUDENT	: Male cadavers are incapable of rendering any testimony.
A NORMAL PERSON	: Dead men tell no tales.
A GRE STUDENT	: A revolving lithic conglomerate accumulates no congeries of small, green, biophytic plant.
A NORMAL PERSON	: A rolling stone gathers no moss.
A GRE STUDENT	: Members of an avian species of identical plumage tend to congregate.
A NORMAL PERSON	: Birds of the same feather flock together.
A GRE STUDENT	: Pulchritude possesses solely cutaneous profundity.
A NORMAL PERSON	: Beauty is only skin deep.
A GRE STUDENT	: Freedom from incrustations of grime is contiguous to rectitude.
A NORMAL PERSON	: Cleanliness is godliness.
A GRE STUDENT	: The stylus is more potent than the rapier.
A NORMAL PERSON	: The pen is mightier than the sword.
A GRE STUDENT	: It is fruitless to attempt to indoctrinate a superannuated canine with innovative maneuvers.
A NORMAL PERSON	: U can't try to teach an old dog new tricks.
A GRE STUDENT	: Surveillance should precede saltation.
A NORMAL PERSON	: Look before you leap

What's hot in IT - An Indian Perspective



Prof. S. Sadagopan
Director, IIIT-Bangalore
ss@iiitb.ac.in

November 2019

Science & Technology

- **ISRO** (Indian Space Research Organization) launches **CARTOSAT-3** and 13 micro-satellites on November 27, 2019
- **Infosys Science Prizes** for 2019 were announced on November 7, 2019
 - Professor **Sunita Sarawagi** of **IIT Bombay** is the winner for **Engineering & Computer Science**
 - Professor **Manu Devadevan** of **IIT-Mandi** is the winner for **Humanities**
 - Professor **Manjula Reddy** of **CCMB (Center for Cellular and Molecular Biology)**, **Hyderabad** is the winner for **Life Sciences**
 - Professor **Siddhartha Mishra** of **ETH-Zurich** is the winner for **Mathematical Sciences**
 - Professor **G Mugesh** of **IISc, Bangalore** is the winner for **Physical Sciences**
 - Professor **Anand Pandian** of **Johns Hopkins, USA** is the winner for **Social Sciences**

Policy

- **Department of Telecom** orders **payment of Rs 93,000 Crores** on November 14, 2019, as per **Supreme Court** ruling adding further blow to the ailing telecom companies; Government provides partial relief by way of 2-year moratorium on November 21, 2019
- **Finance Minister** announces **Rs 25,000 Crores fund** to help the **real estate** sector on November 7, 2019
- India decides to opt out of **RCEP** (Regional Comprehensive Economic Partnership) on November 5, 2019, though it was very close to signing the agreement; steps towards bi-lateral agreement with USA are on

Special events and Milestones

- **Rajya Sabha** had its 250th Session on November 18, 2019
- **China** launches **5G services** on November 1, 2019 (second country after South Korea); India yet to announce the auction dates!
- **Supreme Court** makes history by deciding on the vexed **Ayodhya issue** on November 9, 2019
- **Jammu & Kashmir** and **Ladakh** form **new Union Territories** on November 1, 2019
- **Maharashtra Elections** results announced on October 24, 2019 but **Chief Minister Uddhav Thackeray** was sworn in only on November 29, 2019 after lots of drama; **Jharkhand** Election dates announced on November 2, 2019 with results on December 23, 2019; **Karnataka** By-elections (whose results are crucial for the survival of the current Government) were also announced
- **Brexit** confusion continues with UK having Elections on December 12, 2019

Products

- **Google Nest Mini** launched on November 25, 2019 at Rs 4,499
- **Apple** starts selling **iPhone XR** units in India and even exports to other countries from Chennai plant owned by its supplier Foxconn

Markets

- **Aramco's historic IPO** (the largest ever IPO) oversubscribed marginally on **November 30, 2019**

- RPA (Robotic Process Automation) software **AutomationAnywhere** gets \$ 290 Million funding on November 21, 2019, taking its market cap to \$ 6.8 Billion
- **Google** buys wearables company **FitBit** for \$ 2.1 Billion on November 1, 2019

Indian IT Companies

- **TCS** bags \$ 2 Billion order from Europe's largest pension funds consolidator **Phoenix** group on November 12, 2019
- **Manthan Software** acquires US-based personalization start-up **RichRelevance** on **November 6, 2019**
- **TechMahindra** acquired the Indian unit of US-based media group **Born Commerce** (with \$ 50 million turnover) on November 6, 2019
- **CapGemini** India layoffs 500 employees in November 2019

MNC IT Companies in India

- Power major **Eaton** opens aerospace manufacturing facility in Bangalore in November 2019

People

- India-born **Microsoft** CEO **Satya Nadella** tops the list of 20 **Business Persons of the year 2019**
- **Wipro** founder **Azim Premji** gets **MMA Amalgamation Award 2019**
- **Sri Lanka** elects a new President on November 16, 2019; the new President **Gotabaya Rajapaksa** nominates his brother **Mahinda Rajapaksa** as Prime Minister on November 21, 2019
- **Sharad Arvind Bobde** takes over as **47th Chief Justice of India** on November 18, 2019
- **Sanjay Gupta** (earlier with Disney) appointed as the new **Google India Country Manager** on November 6, 2019
- **TVS Motors** Chairman **Venu Srinivasan** gets the Japanese **Deming Prize** on November 6, 2019 (for Quality Management); he is the first Indian industrial to get this coveted prize
- High-profile visitors to India in November include **German Chancellor Angela Meckel** (November 1-3)

Start-ups scene

- Mobile Ad biggie **InMobi** acquires Gurgaon-based video platform **Roposo** on November 27, 2019
- **PayTM** raised \$ **1 Billion** in end November 2019 taking its **valuation** to \$ **16 Billion**
- **RazorPay** buys payroll management software **OpFin** on November 23, 2019
- Aztec founder **Govi** founded **Perfios** raises \$ **50 Million** funding on November 20, 2019
- Fresh capital infusion of \$ 150 Million into **Freshworks** (Chennai-based customer engagement company) on November 13, 2019 takes its **market cap** to \$ **3.5 Billion**

Interesting Apps

- **FASTag** (RFID reader-based toll collection) becomes mandatory on all toll booths of NHAI (National Highway Authority of India) effective December 1, 2019, hopefully avoiding wasteful delays
- UPI-based mobile payment App **BHIM** goes global with its **Singapore launch** on November 14, 2019

Interesting numbers

- **GST collections** cross Rs 1,00,000 in November 2019
- India's stock market index **Sensex** touches 41,000 for the first time on November 26, 2019
- India's **Foreign Exchange reserves** cross \$ **449 Billion** for the first time in November 2019
- **Reliance market capitalization** touches Rs 10 Lakh Crores, the highest ever for any Indian company on November 29, 2019
- **Alibaba** creates history with \$ **38.4 Billion sales on a single day** on November 11, 2019
- Of the total 1.1 Million **foreign students** in **USA**, **Indian students'** population crosses 200,000 in 2019 (Open Doors Report dated November 19, 2019)
- **FlipKart** and **Amazon** clock **Rs 31,000 Crores sales** during the Indian festival season in November 2019

Universities

- Sponsored **Research grants** scale new heights in IIT's; **IIT-Madras** earns more than Rs 500 Crores in 2018-19; **IIT-Delhi** and **IIT-Bombay** are not far behind
- **IIT Council** announces in its October 16 meeting, several interesting options including inter-institutional faculty and student transfers
- **IIT-Delhi** starts a **Billion Dollar fund raising** campaign, the first such large-scale fund collection drive; FlipKart founders **Bansals** kick off the drive with **Rs 125 Crores** donation

Science & Technology

- Google claims quantum computing breakthrough on October 27, 2019 with its quantum computers beating the reported fastest computer
- The first-ever “**all female**” **space-walk** by Christina Koch and Jessica Meir on October 18, 2019 sets a new record
- **Nobel Prizes** for 2019 announced in October;
 - Announced on October 7, 2019, Nobel Prize in **Medicine 2019** went to **William Kaelin Jr** of **Harvard, USA**, **Sir Peter Ratcliffe** of **Oxford, UK** and **Gregg Semenza** of **Johns Hopkins, USA** for their contributions “how cells adapt to oxygen availability”
 - Announced on October 8, 2019, Nobel Prize in **Physics 2019** went to **James Peebles** of **Princeton, USA**, **Michael Mayor** of **Geneva, Switzerland**, **Didier Queloz** of **Cambridge, UK**
 - Announced on October 9, 2019, Nobel Prize in **Chemistry 2019** went to **John Goodenough** of **UT Austin, USA**, **Stanlet Whittingham** of **Binghamton, USA** and **Akira Yoshino** of **Meijo, Nagoya, Japan** for their work on “Lithium-ion batteries”
 - Announced on October 10, 2019 Nobel Prize for **Literature 2018** went to for Polish author **Olga Tokarzuk** and Nobel Prize for **Literature 2019** went to **Australian author Peter Handke**; 2018 and 2019 were announced together, for the first time!
 - Announced on October 11, 2019, Nobel **Peace** prize **2019** went to **Abiy Ahmed Ali, Ethiopian Prime Minister**
 - Announced on October 14, 2019 Nobel Prize in **Economics 2019** went to **Abhijit Banerjee & Esther Duflo** of **MIT USA** and **Michael Kramer** of **Harvard, USA**
 - Nobel had interesting **India connection** – the winners include Dr Abhijit Banerjee (who grew up in Kolkata and studied in Presidency College, Kolkata and JNU)
 - Nobel Prize 2019 had one of the oldest winners – **97 year old** John Goodenough, and a **couple** (Abhijit and Esther)
- India gets delivery of its **first Rafael Aircraft** from France on October 6, 2019 (Vijayadasami Day)

Policy

- Finance Minister Nirmala Sitharaman announcing a slew of measures to address the sagging economy in September 2019 is followed by “**IT returns going faceless**” (with minimum human intervention to avoid collusion from October 8, 2019 (Vijayadasami))

Special events and Milestones

- **Prime Minister Modi** hosts **Chinese Prime Minister Xi Jinping** at Mamallapuram in Tamil Nadu for a Summit during October 11-12, 2019
- **Reliance** quarterly **profits touch new high** of Rs 11,262 Crores for July – September 2019, the highest-ever for any private sector company in India (**Indian Oil** had the highest profit of Rs 14,512 Crores on 4Q2013). Similarly its **market capitalization** touches Rs 9 Lakh Crores, the highest ever for any Indian company (**TCS** mar-cap touched Rs 7.68 Lakh Crores in 2018)
- **Karnataka** in the **Top State** for Innovation as per NITI Aayog **National Innovation Index** launched on October 18, 2019
- **Maharashtra** and **Haryana Assembly Elections** on Oct 21, 2019; results on Oct 24, 2019. Haryana gets BJP government; Maharashtra is yet to get a new Government though BJP Shiv Sena win majority
- **PMC Bank** crisis in October causes misery to tens of thousands of its customers
- **Floods in Japan** leave a wave of destruction in October 2019 due to typhoon **Hagibis** on October 13, 2019
- **Brexit** confusion continues; the deadline of October 31, 2019 set by EU is revised to January 31, 2020; UK Prime Minister calls for Elections in December 2019! **Israel** continues its impasse on the choice of its Prime Minister; **Hong Kong** stir continues all of October 2019; **Japanese** royalty, **Thai** royalty see minor turbulence!

Products

- **Xiaomi** launches **Note 8** and **Note 8 Pro** in India on October 2019
- **Nokia** launched Nokia 6.2 and Nokia 7.2 in India in October 2019
- **Google** launches **Pixel 4 phone** on October 18, 2019 (not to be sold in India)
- 1,600 **Samsung Fold Phones** sold in 3 minutes in India!
- **Microsoft** launches its **Tablet** products on October 2, 2019; announces **Surface Foldable phone**, but products to reach consumer hands only in 2020 Festival season!
- **Apple** iPhone sales see 10% rise in October 2019

Markets

- **IRCTC IPO** on October 14, 2019 got oversubscribed 110 times! Stock price gained 29% on Day !
- **L&T Infotech** acquires **PowerUpCloud** for over Rs 100 Crores on October 16, 2019
- **Infosys** acquires Ireland-based 1,400-strong **BPO Eishtec** on October 8, 2019
- The over-hyped **WeWork** loses market cap steadily; misses IPO in October 2019
- **Amazon India** and **Flipkart Big Billion Days** Shopping Festival in September & October 2019 saw big increase in sales in an otherwise damp market condition

Indian IT Companies

- **TCS** has second quarter (July – September) top line of Rs 38,977 Crores and bottom line of Rs 8,042 Crores; with addition of 14,097 its headcount touches 4,50,738 on October 31, 2019
- **Infosys** has second quarter (July – September) top line of Rs 22,629 Crores and bottom line of Rs 4,019 Crores
- **Wipro** has second quarter (July – September) top line of Rs 15,130 Crores and bottom line of Rs 2,561 Crores
- **Bajaj** re-launches an Electric version of its historic “**Chetak**” scooter in October 2019

MNC IT Companies in India

- Cloud management & analytics company **Rubrik** opens its Bangalore R & D center on October 22, 2019
- **Microsoft India** annual revenue goes past \$ 1 Billion for the first time
- **Oracle** starts its first India data center in Mumbai on October 11, 2019; its second data center in Hyderabad will start soon in 2019-20
- **Johnson Controls Hitachi** Center starts operations in Kadi, Gujarat from October 2019
- **HP Inc.**, the printer major, announces its decision to cut 16% of its workforce (around 7,000), globally in October 2019

People

- Bangalore-born Prashant Chandrasekar is the CEO of **StackOverflow** – the largest and most trusted open source Q&A community - from October 1, 2019
- There were several high-profile visitors to India in October; 2-day visit by **Chinese Premier**; 3-day visit by **Bangladesh Prime Minister**, and 5-day visit **Dutch King & Queen** during October 2019

Interesting numbers

- India's stock market index **Sensex** touches 40,000 once gain (after significant losses) after 4 months on October 31, 2019
- India's **Foreign Exchange reserves** cross \$ **440 Billion** for the first time in October 2019
- Prime Minister **Modi** has 30 Million followers on **Instagram** – the highest for any leader – on October 14, 2019
- Government announces **5% Dearness Allowance hike** effective July 1, 2019 on October 12, 2019
- **RBI** cuts **Repo rate** by 25 bps on October 4, 2019
- Mobile payment platform **UPI** volume exceeds debit card volume on October 1, 2019; touches 1 Billion mark on October 25, 2019

Universities

- **IIT Council** announces several **sweeping changes** in its meeting held on September 28, 2019; **MTech fee** to see substantial **increase** and weak B Tech students to leave after 3 years with BSc degrees
- **IIT's** to add 4,320 seats in 2020-21; **IIIT's** to add 556 seats in the same period
- **Finance Minister** announces a policy change on September 20, 2019 that allows **CSR funding** to be used for R&D Funding in IIT's and Universities
- **SASTRA University** announces **Ramanujan Prize** for 2019 on September 20, 2019 to Dr **Adam Harper** of Warwick University, UK
- **Times Higher Education** ranking of September 14, 2019 leads to lots of confusion; 56 Indian Institutes in the Top 500 but none in Top 300 (for the first time after 2012); **IISc** that had been in the Top 300 for many years talks of "data error"; **other IIT's** join to take up "data errors" with the Agency; interestingly, **IIT-Ropar** and **IIT-Indore** take it to the Top 400!
- **IoE** (institutes of Eminence) list of September 5, 2019 gets **five new** additions – **IIT-Kharagpur, IIT-Madras, BHU, Delhi University and Central University of Hyderabad** - on September 5, 2019 (Teachers Day)
- **IIT-Kanpur, BITS-Pilani and La Trobe University** of Australia agree to collaborate in the area of "Smart Cities" on September 3, 2019

Science & Technology

- **ISRO** gets **approval** from the global standard body **3GPP** for its **home-grown GPS "NavIC"** on September 24, 2019
- **India's Moon Mission Chandrayaan II** (that created global attention of the Space scientists) Rover **Vikram** managed to reach all but 2.1 KM of the 4,00,000+ KM journey to the Moon on 6th September 2019 night, but "crash lands"; luckily, the **Orbiter** successfully keeps sending Lunar images and said to be in good health with nearly one full year of life.
- Amazon's AI-based voice assistant device **Alexa** starts to **speak and understand Hindi** in September 2019

Policy

- Expenditure Finance Secretary clears the ambitious **Rs 7,500 Cr AI Mission** on September 10, 2019
- **Finance Minister Nirmala Sitharaman** announces a slew of measures to address the sagging economy; IT returns goes "faceless" from October 7, 2019 (Vijayadasami); Public Sector consolidation on September 12, 2019; sops for the real estate sector on September 14, 2019; finally, corporate tax reduction on September 20, 2019 that led to nearly 2,000 point increase in Sensex (the highest single day gain in a decade)

Special events and Milestones

- **Prime Minister Modi** addresses **UN General Assembly** on September 29, 2019
- **Google turns 21** on September 27, 2019
- On September 27, 2019 Election Commission announces dates for **Maharashtra** and **Haryana Assembly Elections**; Oct 21 Election Day and Oct 24 Election results
- **Prime Minister Modi** and **President Trump** share the stage in a historic "Howdy Modi" event on September 22, 2019 in Houston, Texas
- **India Post Bank** turns 1 on September 10, 2019
- **Brexit** in deeper trouble with British Prime Minister Boris Johnson losing majority and deadline of October 1, 2019 is dangerously close!
- **Aramco** oil refinery in Saudi Arabia hit by Drones on September 14, 2019
- **Wikipedia** has a "blackout" for several hours on September 6, 2019
- **Hong Kong** stir continues all of September 2019

Products

- **Amazon** launches new **Echo devices** on September 25, 2019
- **OnePlus** launches its **TV's** globally in September 2019; launches immediately in India, including possible "Make in India" option soon!
- **Apple** launches **iPhone 11, Apple tv+, new iPad** versions on September 10, 2019
- **Android 10** is out in September 2019
- **Jio Fiber** rollout starts on September 5, 2019
- **Samsung** launches its **5G chipset Exynos 980** on September 5, 2019

Markets

- BSE Index **Sensex** has 1,800 point increase on September 20, 2019, following Finance Minister Nirmala Sitharaman announcement of corporate tax reduction (the highest single-day gain in a decade)
- **Amazon India** and **Flipkart** announce their **Big Billion Days** Shopping Festival starting September 29, 2019; post record sales on Day 1
- **Microsoft** buys cloud migration software company **Movere** on September 5, 2019

Indian IT Companies

- **ITI Ltd.**, announces a **cloud services** for **PSU** (Public Sector Undertakings) on September 27, 2019
- **Infosys** reaches **Top spot** (No 3) in **Forbes 2019 “World’s Best Regarded Companies”** on September 25, 2019
- **TCS** signs **\$ 700 Million contract** (over 5 years) with **General Motors** and absorbs 1,300 professionals on its payroll on September 19, 2019
- **Mindtree** starts European operations on September 16, 2019
- **Infosys** opens the **6th Tech Center in USA in Arizona** on September 14, 2019
- **Wipro** gets \$ 300 Million services contract from **ICICI Bank** on September 5, 2019
- **TechMahindra** gets \$ 1 Billion contract from **AT&T** on September 5, 2019

MNC IT Companies in India

- China’s **Thunder Software** to invest \$ 500 Million over 5 years in its Bangalore operations
- **Siemens Healthineers** starts a **medical device manufacturing facility** in Electronics City in Bangalore on September 19, 2019
- **Manhattan Associates** starts a second Tech Center in Bangalore on September 18, 2019
- **PepsiCo** sets up a Tech Center in Hyderabad on September 10, 2019 (with 3,80,000 square feet space) and plans to hire 2,500 professionals over the next 3 years
- **Airbus Industries** opens its new Bangalore Tech Center facility on September 3, 2019 and plans to house 500 professionals

People

- **Bhatnagar Prizes** announced on September 26, 2019; of the 12 recipients, **Dr Manik Varma** of Microsoft India Research gets the Award for Engineering Science
- **Prashanth Chandrasekar** (Bangalore born) is the new CEO of **Stack Overflow** (the first port of call for 50 million developers, globally)!
- **Google** announces the starting of **Google AI Research Lab in India** and named **IIIT-Bangalore Professor Manish Gupta** as the **Head** on September 19, 2019
- **Ramkumar Ramamoorthy** named **Cognizant India MD** on September 19, 2019
- **British Prime Minister** loses majority on September 3, 2019; Brexit in trouble!

Start-up Scene

- **Prime Minister Modi** hands over the awards for **India-Singapore Hackaton** winners during **IIT Madras Convocation** on September 30, 2019
- Hotel room-aggregator **Oyo** announces on September 23, 2019 its decision to **raise** another **\$ 1 Billion**
- **HCL Technologies** acquires Hubli-based semiconductor start-up **Sankalp Semiconductor** for Rs 180 Cr on September 10, 2019; **Tier 2 Cities are getting their act right!**
- Food delivery startup **Zomato** lays off 600 people on September 10, 2019
- Pune-based Clean-tech startup **75F** gets \$ 18 Million funding on September 6, 2019
- **Mahindra & Mahindra** acquires 55% stake in cab company **Meru** on September 1, 2019

Interesting numbers

- Mobile payment platform **UPI** volume exceeds debit card volume on September 1, 2019

Professor Sowmyanarayanan Sadagopan (ss@iiitb.ac.in) is the Director of IIIT-Bangalore. These are his personal views. He has been writing on “**What’s hot in IT**” from an Indian perspective continuously from 1997; Times of India, Financial Express and IT Magazine carried the monthly (and yearly columns) till 2016; IEEE India has been carrying the quarterly columns since 2017

Information Resources



Compiled by

Mr. H.R. Mohan

Editor, IEEE India Info – The Newsletter of IEEE India Council
ICT Consultant & Former AVP (Systems), The Hindu, Chennai
harmohan.ieee@gmail.com

13 Leading Data Science Products From India That Made It Big In 2019: There has been a steady increase in the analytics and data science service providers in India facilitating the adoption of analytics functions across organisations. Analytics products and services may come in various forms, helping companies transform the way they conduct business. This year, Analytics India Magazine brings a list of ‘Top 13 Data Science & Analytics Products in India’ that are helping organisations to make decisions with data. It lists 13 amazing data science products that are transforming the industry. <http://bit.ly/2PLUH7c>

40+ Corporations Working On Autonomous Vehicles: Beyond trendy names like Tesla and Alphabet chasing self-driving cars, a host of auto brands and other tech heavyweights are also investing in autonomous R&D. <http://bit.ly/2rzk2cF>

16 inventions getting us off fossil fuels and into renewable energy: Much of the world's energy is sourced from fossil fuels. .. Several innovators and companies have developed inventions to help get the world off of non-renewable energy. For example, the HomeBiogas 2.0 turns food waste into gas, producing up to three hours of cooking gas. <http://bit.ly/2rKzq5V>

Terms of Service; Didn't Read: <https://tosdr.org/> is a user rights initiative to rate and label website terms & privacy policies, from very good Class A to very bad Class E. Terms of service are often too long to read, but it's important to understand what's in them. Your rights online depend on them. The tosdr initiative hopes the ratings of this site can help you get informed about your rights. Click on a service below, to have more details!

Digital transformation: 10 counterintuitive tips: No two digital transformations look alike - so why do so many organizations try to follow the same rules? Turn common wisdom on its head with these tips from CIOs and tech execs. <https://red.ht/34kbcN1>

The Multi-Billion Dollar India-SaaS Opportunity (250+ SaaS Startups): Here's our snapshot of the India SaaS-ecosystem (where someone interested can go and find a list of SaaS companies) curated from SaaSBoomi attendees/applicants. <http://bit.ly/2RQrZER>

Open-Source Software Has Changed The Way Software Is Developed. Here's where the \$33B Industry Is Headed: When it comes to software development, the term “open-source” is almost synonymous. And as the most collaborative method of software development, it has grown increasingly popular over the last two decades. In fact, the open-source services industry is set to exceed \$17B in 2019, and expected to reach nearly \$33B by 2022, according to CB Insights' Market Sizing tool. Among its many characteristics, open-source software is publicly accessible, which allows developers to exchange code & ideas in a transparent and collaborative fashion. It also enables flexibility for many businesses looking to solve a wide range of problems. Today, over 30M developers contribute to community-based platforms like GitHub. And the broader market is estimated to be worth hundreds of billions based on recent big-ticket acquisitions like Red Hat (acquired by IBM for \$34B) and GitHub (acquired by Microsoft for \$7.5B) — as well as large public market valuations like those of MongoDB (\$7.9B) and Elastic (\$7.3B). In this analysis, we discuss the various elements of open-source, including what the software is, who the major players are (as well as who they're benefiting — hint: cloud providers), and what the future has in store. <http://bit.ly/2t9TTRV>

Project Management Guide for Beginners: Your ultimate introduction to the fundamentals of project management, curated best practices, and resources for project management beginners, all in one place. <http://bit.ly/2LOHhGv>

AI in the enterprise: 8 myths, debunked: Enough with romantic robots: Let's dispel eight common misconceptions about applying AI in the business world now. <https://red.ht/2qUQsOo>

2045: Death will be optional: If the sensational but well-researched book *la Muerte De la Muerte*, authored by two genetic engineers is to be believed, within 27 years, death would be an option and ageing reversible. Humans by then will only die in accidents and never of natural causes or illness and that old age should be classified as an ‘illness’ so that a public-funded research can be done to find the cure with Wood saying that he doesn’t consider death an illness. <http://bit.ly/2YOGKcE>

Smart Cities 2025: Smart cities and smarter projects have been among the most actively discussed realizations made possible by IoT, data, connectivity and by leveraging a mix of varied technologies. The interest in smart cities continues to grow, driven by a range of socioeconomic and technological developments across the globe. A smart city responds to the challenges of our time and quality of life. It also ensures that the city meets the needs of future generations — In terms of economic, social and environmental issues. In short, it is a good place to live with the best possible quality of life and most efficient use of resources. Worldwide smart cities market will grow from its current \$622 Billion to \$1 Trillion in 2019 and \$3.48 Trillion by 2026, registering a CAGR of 21.28%. <http://bit.ly/36AbFMF>

Paging Dr. Robot: How Robotics Is Changing The Face Of Medicine: Can robotics transform the medical industry? While there are plenty of medicine-focused robotics apps in development, the long-term outlook for their use remains to be seen. In this analysis, we’ll dig into whether reality is matching those big ambitions, and dive into applications where medical robotics are beginning to enter the mainstream. <http://bit.ly/2tcKA3G>

8 TED Talks on emerging technologies to watch: From quantum computing to AR to bionic limbs, these emerging technologies deserve your attention. Get up to speed with 8 intriguing TED Talks <https://red.ht/2IPVsaB>

10 ways to have better conversations: Many leaders take a vested interest in improving their communication skills. They labor over email drafts to ensure the most important updates are explained. They fine-tune and practice their presentations repeatedly before they take the stage at business events. They might even coach their teams on communication best practices and etiquette. But what about the side conversations that happen in the hallways at work or on the road with customers? Do you treat them with the same level of preparation and care? Often not. In those situations, most of us simply wing it. Getting better at day-to-day, informal conversations can improve your overall communication skills, and leaders can practice every single day. Keep these 10 rules in mind for more professional and productive conversations. <https://red.ht/2Ejkgal>

AI In Automotives: The Future is Now!: Flying cars are no longer a fantasy or science fiction! With AI, autonomous, or self-driving, cars and autonomous flying cars are no more a futuristic dream. Companies like Boeing and Terrafugia have already developed fully-autonomous flying cars. With the emergence of AI, we can see many transformations in automotive and aviation industries. Although autonomous flying cars are not yet available in the market, self-driving cars are ready for commercial sale. Now, imagine our world with self-driving vehicles including cars, taxis, trucks, buses and bikes rolling out on highways, on the streets and on rural roads. This could become a reality with AI a few years from now. Riding a self-driving car with much anticipation would be an exciting and thrilling experience for most of us. Everything in a driverless or self-driving car would seem magical when the steering wheel turns by itself, or the car automatically stops at a traffic light. This article will delve into AI trends driving the automotive industry, including self-driving cars and driver-assistance technologies. <http://bit.ly/2EexC7S>

A solar-powered system can turn salt water into fresh drinking water for 25,000 people per day. It could help address the world's looming water crisis: People have been trying to turn seawater into drinking water for thousands of years, but the process is not usually energy-efficient or affordable. At a newly constructed facility in Kenya, however, a nonprofit called GivePower is tackling that challenge using solar power. The desalination system, which started operating in the coastal area of Kiunga in July 2018, can create 19,800 gallons (75,000 liters) of fresh drinking water each day - enough for 25,000 people. <http://bit.ly/36AFwok>

What Technology Is Most Likely to Become Obsolete During Your Lifetime?: Certain Boomer basements are little shrines to obsolescence, untidy stockrooms of the one-time cutting-edge: VCRs, corded telephones, immense beige PC monitors, etc. Way fewer Millennials will have basements to store trash in (‘home ownership’ itself quickly verging on obsolete), but presumably, once climate change really hits and they’re all renting cots in corporatized storm shelters, they’ll have little lockers to put stuff in. And it’s worth wondering: what worthless old technology will they be inexplicably hoarding? For this week’s Giz Asks, we reached out to a number of historians of technology for their takes on what tech will become obsolete in the next fifty years. <http://bit.ly/2LUtHS5>

What Would Happen If the Whole Internet Just Shut Down All of a Sudden?: A world in which the internet suddenly stops: surely the TV show’s already in development. Sprawling cast, gorgeous visuals, tediously on-the-nose themes. Some handsome B-lister tearing around the country in pursuit of his wayward kids, or the shadowy sect that pulled the plug in the first place. A patch of prairie in Kansas with a weak but functional signal, people lining for miles to check texts, riots breaking out. Thankfully, we don’t have to wait for this show to be shot and streamed to get a decent idea of what the

internet apocalypse might look like: for this week's Giz Asks, we asked a number of experts to do the imagining for us. <http://bit.ly/2rOp9We>

Career advice I wish I'd been given when I was young: A reader who prefers to remain anonymous — but whose career we think did a lot of good — passed us this list of advice which they were grateful to have received, or wish they'd been given when they were younger. We thought it was very interesting, including where it doesn't line up exactly with our usual views, and so are publishing it here with their permission. The advice is targeted towards people sympathetic to the principles of effective altruism, especially those with an interest in public policy careers, but we think much of it is more broadly useful. <http://bit.ly/2PFwjnO>

12 Industries That Will Thrive Thanks To Millennials: Millennials are one of the largest generations in history, and they're on the cusp of their prime spending years. These are the industries that stand to benefit the most. In this report, we dive into some of the industries — from frozen foods and fast casual dining to micromobility and personal finance apps — that could massively benefit from the rise of Generation Y. <http://bit.ly/2YKUVzw>

How to build a portfolio and get a job in UX?: This post sums up what author used, what steps he took and what conclusions the author drew from reverse-engineering of UX portfolios. It's not comprehensive. The author assumes that if you're starting out, you will Google terms that you're not familiar with. The author is focusing on outlining a process and sharing tips and tricks which he had learned along the way so that you have an access to what he needed the most during his job changing process. <http://bit.ly/2EdFx Cv>

Networking Technology: Where It Is Now — And Where It's Headed: As corporate bandwidth requirements continue to surge exponentially with every passing year, it becomes clear that bandwidth demands as well as the business requirements of the modern digital workspace are setting the stage for the implementation of new, advanced technologies. These technologies give rise to fresh possibilities and further fuel the demand for adding intelligent systems to our daily lives and greater reliance on tech support, both in the home and workfronts. With software trends emerging regularly in the IT scene, digital services and people are becoming further intertwined to characterize everything that's new the world of network technology this year. These recent advancements are more than likely to disrupt existing operations and foster an era of digitization and intelligence throughout the business sector. Let's see what's getting hot now in networking technology — and how they will be sizzling by the end of the year. <http://bit.ly/2ti8hI2>

LinkedIn Top Startups 2019: The 25 hottest Indian companies to work for now: With the 2nd annual Top Startups ranking, we uncover the young companies commanding professionals' attention today: the ones that are growing massively, scrambling industries, shifting talent flows around the world and, often, altering how we work and live. Our editors and data scientists parsed billions of actions generated by LinkedIn's 645 million members — and looked at four pillars in particular: employee growth; jobseeker interest; member engagement with the company and its employees; and how well these startups pulled talent from our flagship LinkedIn Top Companies list. To be eligible, companies must be 7 years old or younger, have at least 50 employees, be privately held and headquartered in India. (You can learn more about our methodology at the bottom of this article.) <http://bit.ly/2Efy99D>

7 Must-See TED Talks On AI And Machine Learning: When it comes to educational dialogue, there is nothing more entertaining than a great TED talk. They provide insight into fascinating subjects in an entertaining way often filled with stories, mind-blowing facts and first-hand experiences of those giving the talks. With AI and machine learning at the forefront of so many questions and topics now, what better way to get the scoop on it than by enjoying some great speeches from those on the cutting-edge of innovation. Here are 7 of the best AI and machine learning TED talks you should watch. <http://bit.ly/2qW1d32>

21 weird tech job titles of the future: While many human workers fear that they will ultimately be replaced by artificial intelligence (AI), it's more likely that our current workforce will shift into new types of roles for people, according to a new report from professional services company Cognizant. Full post at <https://tek.io/2swkR5R> Report at <https://cogniz.at/2PmY8T1>

What Is Geoengineering?: Scientists and researchers are exploring geoengineering, a strategy that could help avert global warming through the intentional, large scale modification of the climate. We examine the business opportunities, major risks, and potential in these technologies. In response, governments, corporates, and startups are looking to geoengineering, a tech-driven solution to fighting change climate that removes greenhouse gases from the atmosphere. <http://bit.ly/2PNSNCX>

How Big Data is Leading to Big Change: From personalized healthcare to digital farming, and from energy management to digital governance solutions, Business 4.0 technologies have transformed lives across the world by creating customized solutions to tackle challenging social issues. And the organizations that have made a profound and sustainable impact on communities are those that have harnessed the power of big data. At Tata Consultancy Services (TCS), we believe that the coming together of data and artificial intelligence will accelerate social transformation. Our digital publication pArIvartana

explores all the ways in which this change will play out on the ground, highlighting the role of data and analytics for social transformation. Published by the Analytics and Insights (A&I) unit at TCS, this book contains a compilation of articles and interviews with a diverse set of technology experts, industry leaders, CXOs, economists, academicians, researchers, social entrepreneurs and philanthropists, who have all made a sustainable impact on society. The contributors have not only shared their success stories, but also charted out their organizations' vision to make the world a better place for generations to come. ebook at <https://on.tcs.com/2RSiYLJ>

Toward a New Field of Global Engineering: The Engineer's role in addressing global poverty challenges has often been confined to village and community-scale interventions, product design and development, or large-scale infrastructure design and construction. Yet despite fifty years of these approaches, over half the world's population still lives on less than \$5.50 a day, the global burden of disease in low-income countries is overwhelmingly attributable to environmental health contaminants, and climate change is already negatively affecting people in developing countries. The conventional community, product or infrastructure focuses of development engineering is insufficient to address these global drivers that perpetuate poverty. The emerging field of Global Engineering can work to identify and address these structural issues. Global Engineering should be concerned with the unequal and unjust distribution of access to basic services such as water, sanitation, energy, food, transportation and shelter, and place an emphasis on identifying the drivers, determinants and solutions favoring equitable access. Technology development and validation, data collection and impact evaluation can contribute to evidence-based influence on policies and practice. Global Engineering envisions a world in which everyone has safe water, sanitation, energy, food, shelter and infrastructure, and can live in health, dignity, and prosperity. <http://bit.ly/34mWftN>

100+ Coding Interview Questions for Programmers: Coding Interviews are such an important thing in a programmer's life that he just can't get away with that. It's the first hurdle they need to cross to get the software developer job they wish throughout their school and college days. To make the matter worse, you will find that so many people on the internet telling that coding interview is flawed, the hiring process for programmers sucks and so on but you don't need to pay attention to them, not at least at the start of your career. We all know that Coding Interview System is not perfect and many are trying to change it but until it's changed, you got to follow its rules to get into the System. This is something for experience developers to deal with, as a junior developer your priority should be to clear the coding interview and get the job you want. In this article, the author shares with you top 100 coding interview problems from programming job interviews which every programmer should know. <http://bit.ly/36DTPbQ>

Inside the Raspberry Pi: The story of the \$35 computer that changed the world: The co-creators of the credit-card-sized board reveal the many challenges they overcame to build the breakthrough machine. <https://tek.io/35mZZwC>

Has Edtech Failed To Revolutionise India's Traditional Education System?: The Indian education system is currently suffering from some serious lacunae. Over the years, a fair share of the blame has been appropriated to the archaic system of 'gurukuls', the colonial rule, and, later on, the society's obsession with engineers and doctors. <http://bit.ly/35okuZN>

How to Mine the Invisible Web: The Ultimate Guide: The Invisible Web refers to the vast amount of content and information that is not easily discoverable in a general search engine query, such as databases, private networks, or password-protected information. However, there are a wide variety of high-quality Invisible Web search tools, search engines, and directories that can help you mine this fantastic resource that is considered to be at least 500 times larger than the visible web. The following Invisible Web resources will connect you to a virtual goldmine of knowledge, anything from medical dictionaries to moving picture archives to academically vetted articles and journals. Each of these links connects you to a resource that will help you find information that is not easily found with just a simple, rudimentary search. These tools help you do a deep dive into untapped treasure troves of information. <http://bit.ly/2PJ6yDe>

Artificial Intelligence Technology: Top 18 Technologies Used in AI: Artificial Intelligence (AI) is the combined attribute of science and computer that makes the system or program or any machines perform the Intelligent and Imaginative functions of a human, independently and solution to problems, be able to make decisions. The main aim of Artificial Intelligence systems is to have the ability to discover, which makes people increase their performance and productivity over time. Artificial Intelligent Technology tools include machine learning and deep learning which gives an analysis report to increase the clarity of planning, reasoning, thinking, problem-solving and also learning. <http://bit.ly/2Eetip8>

Estonia is running its country like a tech company: Estonia is often described as a genuinely digital society. Today a majority of government services are offered 24/7 online, and data integrity is ensured by blockchain technology. You can use medical e-prescriptions, file taxes, or even buy a car online without needing to go to the vehicle registration office. There are only a few things that you still need to do in the analog world, such as get married or buy property. <http://bit.ly/2RUtCS2>

Industry 4.0 - the Nine Technologies Transforming Industrial Production: The rise of new digital industrial technology, known as Industry 4.0, is a transformation that makes it possible to gather and analyze data across machines,

enabling faster, more flexible, and more efficient processes to produce higher-quality goods at reduced costs. This manufacturing revolution will increase productivity, shift economics, foster industrial growth, and modify the profile of the workforce—ultimately changing the competitiveness of companies and regions. Advanced digital technology is already used in manufacturing, but with Industry 4.0, it will transform production. It will lead to greater efficiencies and change traditional production relationships among suppliers, producers, and customers—as well as between human and machine. Nine technology trends form the building blocks of Industry 4.0. <https://on.bcg.com/2PSvXva>

10 principles of workforce transformation: When you (or your board members) think about thriving in a digital world, you probably think first about technology. It's evolving so fast that your business constantly has to adapt. But the greatest challenge is not the tech itself: It's developing a knowledgeable, strategically adept, cognitively flexible, and proficient workforce. You want people who can command artificial intelligence, analyze data, invent and apply solutions on the fly, and slide effortlessly into new roles as needed. All the while, they should keep their skills sharp with mobile apps and online self-taught courses. Ideas should flow from all corners of the company, whether from full-time managers or a pool of gig workers who jump in when work heats up. How to raise the skills of your employees to meet your digital challenges? The 10 principles below can help you ready your company's workforce for the future. <http://bit.ly/2Qkg6F4>

How the Economics of Data Science is Creating New Sources of Value: There are several technology and business forces in-play that are going to derive and drive new sources of customer, product and operational value. As a set up for this blog on the Economic Value of Data Science, let's review some of those driving forces. <http://bit.ly/34UIDXP>

Secrets you should have learned before your first programming job: It's an all too common story in many professions: You go to school for years and walk out with a freshly printed diploma. You snag your first job—and immediately, you're buried under a pile of unwritten rules and day-to-day complexities that no one bothered to warn you about. Programming jobs are no exception, even with the rise of coding boot camps: those accelerated schools that promise to teach you everything you need to know about coding in a matter of months. As it turns out, whether you've earned a Computer Science degree or a boot camp certificate, odds are you're still not 100% ready for your first real job writing software. The basic skills listed here—which you may or may not have learned in school—can help you get started doing real work with less hand-holding and fewer mistakes. We've divided the list into three categories: technical skills, habits and mindset, and soft skills. <http://bit.ly/2MouxGP>

Hands-On with Google's Quantum Computer: Staking its claim for “quantum supremacy,” the company pulls back the curtain on its landmark Sycamore chip <http://bit.ly/3950IEV>

Inside blockchain and its various applications: In this post, the author explores the technology around blockchain shaping how businesses use data. <http://bit.ly/2QqY83N>

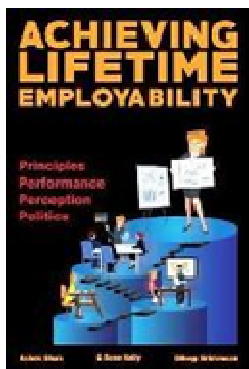
Why you should worry if you have a Chinese smartphone: China's use of technology for social control of its citizens is extensive – but it could affect users elsewhere too, says security analyst Samantha Hoffman <http://bit.ly/2tNYslv>

7 Bio-Inspired Robots that Mimic Nature: The rise of robots in automation has led to many humanoid helpers. This can be best seen in collaborative robots (cobots) like Baxter from Rethink Robotics or the UR cobots from Universal Robots. The robotic arm is the new standard in automation assistance because we do not have to change the human environment for these robots to operate effectively. These human-like functioning robots can pick up, locate and place, and operate handheld machinery. However, the human form is not the most efficient form for a robot to mirror. Sangbae Kim, leader of bio-robotics and professor at Massachusetts Institute of Technology, says that industrial robots are “designed to perform rigid and accurate position-control tasks in a fixed location...[however] manufacturing robots are not designed to control force in dynamic situations.” The goal of bio-robotics is to design a machine that can interact with its environment and dynamic situations like coming in contact with the ground. Kim points out that “when it comes to the mobile robot, the design paradigm must be completely different from industry robots.” Several companies and research groups have focused on biology-inspired robots to create more responsive machines that have an easier time manipulating their environment. <http://bit.ly/396PpfC>

What Are the Biggest Challenges Technology Must Overcome in the Next 10 Years?: Technology's fine—I definitely like texting, and some of the shows on Netflix are tolerable—but the field's got some serious kinks to work out. Some of these are hardware-related: when, for instance, will quantum computing become practical? Others are of more immediate concern. Is there some way to stop latently homicidal weirdos from getting radicalized online? Can social networks be tweaked in such a way as to not nearly guarantee the outbreak of the second Civil War? As AI advances and proliferates, how can we stop it from perpetuating, or worsening, injustice and discrimination? For this week's Giz Asks, we've assembled a wide-ranging panel—of futurists, engineers, anthropologists, and experts in privacy and AI—to address these and many other hurdles. <http://bit.ly/2QdA7gi>

For more resources, pl. visit Interesting Reads archives at <http://bit.ly/2XGvIkZ>

Books



Achieving Lifetime Employability

by Dileep Srinivasan , Ashok Shah and G Ross Kelly
2019 / 274 Pages / Paperback / Rs. 1347 (On Amazon India)
ISBN: 978-1642376661 / Gatekeeper Press

Achieving Lifetime Employability is a comprehensive and detailed book in the marketplace today on how to achieve and sustain career growth in this new millennium. The authors have risen to a new level to conduct a detailed examination of just what it takes to survive, thrive, and remain viable and employable in the 21st century workplace. What are the skills, attributes and attitudes required to maintain your relevance and employability in an ever changing marketplace fuelled by innovation, technology and global competition? If you are looking to: Continually be employable; Achieve accelerated growth in the workplace; Navigate the organizational complexities of your workplace; Cultivate your leadership skills; or Hone your entrepreneurial skills, then it is the book for you. According to the authors, the framework for lifetime employability is based on Four Ps: Principles that guide their actions and

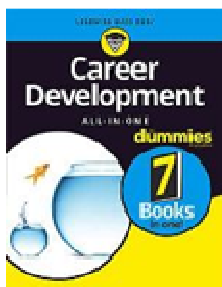
behaviours; Performance that reliable and congruent with those principles; Perception, how you project yourself and are perceived others; and Politics, how you navigate the political machinations of your organisations. The elements of these four Ps are examined in terms quotients such as Intelligent Quotient, Emotional Quotient, Learning Quotient, Execution Quotient, Networking Quotient, Industry Quotient, Digital Quotient, Style/Social Quotient, Political Quotient and Marketing Quotient (your brand). The more you master these quotients, the more you are valued and the more you are in demand as an employee, as a leader and an agent of change. According to the authors, while these quotients are the linchpins of lifetime employability and career success, the others such as your health, your career choices and your willingness to accept guidance or advice are equally important. It is a relevant, practical, powerful and a must to read book for anyone wishing to build a remarkable career.



Technical Communication

by Wiley Editorial
2019 / 496 Pages / Paperback / Rs. 355 (On Amazon India)
ISBN: 978-8126579891/ Wiley India

Language and Communication skills are recognised as important foundation in the teaching of the modern engineer. In this competitive world, English language skills and word knowledge can help one flourish in all fields by effective interaction and accurate communication. It is indispensable for students to become confident in their communication skills. Technical communication is a unique and well-structured book that contains best-in-class pedagogy, intending to provide effective communication skills to students in various technical fields. Keeping in mind students belonging to various technical fields, this book has been customised to facilitate students in imbibing them in effective communication skills. This is a ready reckoner which will assist students in their professional fields as well as day-to-day lives by properly instilling in them the understanding, structure, and usage of the language skills. The book covers the matter in 12 chapters broadly under four parts namely: Grammar at a Glance; Developing Writing Ability; Reading and Listening; and Verbal and Non-Verbal Communication. The 12 chapters include: Fundamentals of Grammar; Vocabulary Building; Grammar for Effective Speaking and Writing; Basic Writing Skills; Identifying Common Errors in Writing; Technical Writing Skills; Creative Writing Skills; The e-English; Improving Reading Skills; Listening Skills; Process of Communication and Effective Speaking; and Soft Skills. Additionally, Practice Questions and Useful Resources are included in this book. It is a valuable book for both students and working engineers.



Career Development All-in-One For Dummies

2017 / 680 Pages / Paperback / Rs. 377 (On Amazon India)
ISBN: 978-8126568796/ Wiley India

Combined from seven of the best For Dummies books on career development topics, this book is an one-stop guide to taking control of your career and improving your professional life. Perfect on its own or as part of a formal development program, it gives you everything you need to advance your career. All-n-one volume covers the following topics: Mindfulness; Project Management; Leadership; Time Management; Businesses Writing; Presentations; and Negotiation.



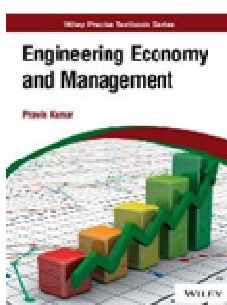
Blockchain For Beginners: The Art Of Decentralisation & Cryptography

by Yathish R & Tejaaswini N

2019 / 148 Pages / Paperback / Rs. 300 (On Amazon India)

ISBN: 978-9352138852/ Shroff Publishers & Distributors Pvt. Ltd.

Ever gone through hundred and ten resources for blockchain and still not able to figure out where to start off. Well this book would lay the foundation for most of the concepts that you would require to at least get started somewhere and scratch the surface of this hyped technology. From the different underlying technicalities to the diversity of platforms, from the variety of scenarios where Blockchain fits to understanding when it would be an overkill, from learning the two most important platforms to getting you started for creating your own applications on top of them, from various simple humorous references to intriguing exercises, this book aims to not only make you feel comfortable with the technology but also confident enough to ponder more about it. The contents include: History; All About Blockchain; Why Use Blockchain? ; Introduction To Cryptography In Blockchain; Introduction To Cryptocurrencies; Blockchain Not Krypto; Blockchain Platforms; Prerequisites; Public Platforms; Private Platforms; and Limitations Of Blockchain. As stated in the title, this is an introductory book on Blockchain and provides the concepts in a simple and easily understandable manner for the beginners to the subject.



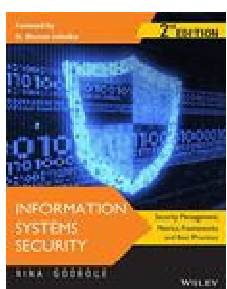
Engineering Economy and Management

by Pravin Kumar

2019 / 516 Pages / Paperback / Rs. 458 (On Amazon India)

ISBN: 978-8126579921/ Wiley India

Engineering Economy and Management highlights the importance of economics and management in engineering and helps engineers in managerial decision making. It provides comprehensive coverage of the subject from basic principles to state-of-the-art concepts and applications. This book is common to all students in engineering discipline and is very useful in evaluating the economic merits and demerits of various solutions to engineering problems. Engineering problems may involve the decisions related to resources and their allocation. Engineering economics is closely associated with conventional microeconomics; but here, its focus is on problem solving at operational levels. The content in 21 chapters covers the most essential concepts for an engineer aspiring to get into management and leadership role include: Introduction to Engineering Economics; Managerial Economics; Money, National Income, and Goods and Services Tax; Poverty, Unemployment, and Inflation; Banking Systems; Market Structures; Marketing Management; Concepts in Management; Human Resource Management; Corporate Social Responsibility and Business Ethics; Production and Operations Management; Demand Forecasting and Cost Estimation; Time Value of Money; Project Evaluation; Comparison Among Alternatives; Depreciation and Taxes; Replacement Analysis; Concept of Financial Statement; Financial Ratios; Capital Budgeting; Decision Making. It is a recommended text for both engineering students and working engineers.



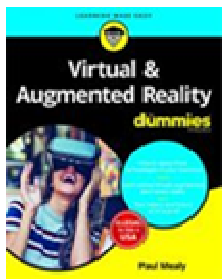
Information Systems Security Security Management, Metrics, Frameworks and Best Practices

by Nina Godbole

2019 / 972 Pages / Paperback / Rs. 624 (On Amazon India)

ISBN: 978-8126516926 / Wiley India

Keeping the essence of the first edition, this new edition of Information Systems Security: Security Management, Metrics, Frameworks and Best Practices is restructured to meet the ever-growing demand for books that give a comprehensive treatment of the Information Security topic. Designed with ample figures to illustrate key points and Review Questions and Reference Material Pointers at the end of each chapter, it is truly a treatise on the subject. This book should prove a valuable reference on the topic to students as well as professionals. It is useful for candidates appearing for the CISA certification exam and maps well with the CBOK for CSTE and CSQA Certifications. The revised 2nd edition of this book in eight parts namely Introduction; Cloud, Mobile Applications, Smartphone, IoT, Smart Cities and Wireless Networks in Security Perspective; Network Security and Other Controls; Security of Applications and Operating Systems; Models, Frameworks and Metrics for Maturing Security Practices; Metrics, Legal Aspects and Privacy Consideration for Information Security; Security Best Practices; and Other Important Concepts in Information Systems Security and in forty chapters covers all essentials of Information Systems Security aspects. It is an essential read can serve as a guide book to students, professionals



Virtual & Augmented Reality For Dummies

by Paul Mealy

2018/ 356 Pages / Paperback / Rs. 479 (On Amazon India)

ISBN: 978-8126577071/ Wiley India

For such a large-scale technology revolution that is about to happen in the VR/AR space, there are very few books that address Virtual Reality outside of programming language specific "How to program VR applications." There is a huge market for a book that offers an easy to understand primer on Virtual Reality and Augmented Reality and how it will affect the future. Rather than focus on a specific piece of hardware (HTC Vive, Oculus Rift, iOS ARKit), or software (Unity, Unreal Engine), the book functions to offer a broad look at VR/AR/MR -- what they are, a history of the technologies, how they are being used currently, how they will affect the reader both professionally and personally in the future, and where things could go from here.

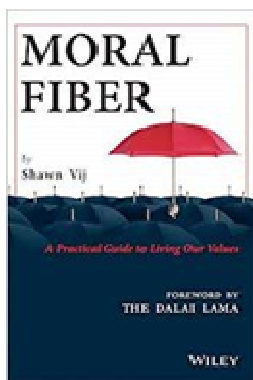
Enriching Your English

by M.S. John

2017 / 238 Pages / Paperback / Rs. 195

ISBN: 978-93-8598-2217/ Thamarai Publication / NCBH Publishers

The author, a well-informed teacher, proficient in English, taught in Montfort Brothers Schools and various other schools has written this book which is an anthology of Vocabulary from Latin, French; Synonyms, Antonyms, Phrasal Verbs, Idioms, Abbreviations, Symbols and Proverbs. This book will be useful to the students to perfect their command of the language, writing and useful in competitive examinations. A large collection of proverbs will help in improving the spoken language. This book will be of interest not only to the students but also to the general readers.



Moral Fiber: A Practical Guide to Living Our Values

by Shawn Vij

2019 / 208 Pages / Paperback / Rs. 358 (On Amazon India)

ISBN: 978-8126519385/ Wiley India

This practical guide is filled with tips, tales, and tools to identify and eliminate toxic behaviors and motivators, as well as priceless lessons from top industry leaders and powerful research from academics, moral fiber is the ultimate guidebook on how to create a thriving business and career while staying true to who you are and what you believe. Taking an innovative and secular approach to business Ethics, moral fiber shows us how living our values unlocks a more purposeful life and career. According to the author, while most companies are designed to make profit, they are now adapting to meet new social and political expectations and we are starting to see a shift from cut-throat business to conscious capitalism as more millennials enter the

workplace. It also highlights how capitalism and compassion must co-exist to improve our human conditions. This book helps us to re-discover the inherent core values, such as fairness, respect, compassion, and honesty, and then how to genuinely Act on them daily.



21 Difficult Conversations: Tools to Navigate Your Most Important Talk and Master Exactly What to Say

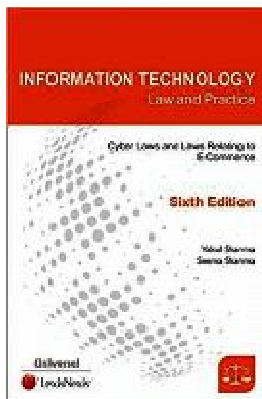
by Dr Latha Vijaybaskar

2019/ 184 Pages / Paperback / Rs. 399

ISBN: 978-1794149403 / Independently Published

We all experience difficult conversations. Difficult conversation is emotional, high stakes, or challenging for at least one of the people involved. Some are planned, and we dread the path, while some are spontaneous and catch us by surprise. You might be the initiator of a difficult conversation or the receiver. In this book, the author helps you navigate 21 such difficult conversations. From saying a no, giving feedback, delivering bad news, turning debates to dialogues, to going back to an old, hurtful incidents and dealing with irrational and sometimes insensitive talk, this book is filled with life affirming primers. The most exciting part of the book

is the "exactly what to say" section, weaving together the conceptual and the anecdotal with the practical and commonsensical. You'll learn to: Live fully and not skirt around the perimeter of relationships; Talk your differences and not avoid relationships because of a few small errors; Say no and not feel bad, say sorry and smile, speak from the heart and be respected; and Connect with customers, colleagues, and friends at a far deeper level. A great self-help book. The author's facebook group "Handling Difficult Conversations" aims to bring more people together and share productive ways to solve issues.



Information Technology - Law and Practice -- Cyber Laws and Laws Relating to E-Commerce

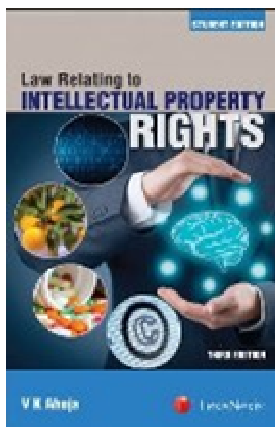
by Vakul Sharma

2018 / 681 Pages / Paperback / Rs. 650

ISBN: 978-9386515919 / Universal Law Publishing Co. (ULPC) (an imprint of Lexis Nexis)

This book, presented in lucid language with anecdotes, examples and diagrams analyses different aspects of cyber laws and laws relating to e-commerce • This 2018 edition is thoroughly updated with latest developments and case law in the subject area. The book features comparative analysis of corresponding provisions in different jurisdictions rendering an exhaustive view of the subject to the readers. This sixth edition has been meticulously revised to include important decisions of the various courts, the developments in the subject area since the publication of the last edition, such as implications of virtual currencies (such as Bitcoin),

cybercrimes, cyber-surveillance, etc. have been added in this edition. Starting with IT Act, the matter relating to trademarks in the online medium are dealt in 40 chapters. It is a valuable resource for legal practitioners, academicians, research scholars, law students and institutional libraries, etc.



Law Relating to Intellectual Property Rights

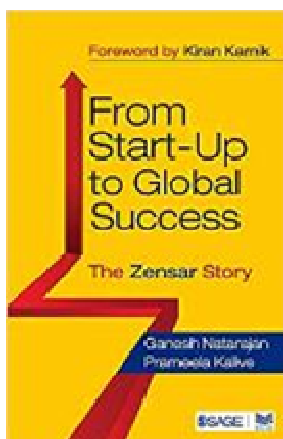
by V K Ahuja

2017 / 852 Pages / Paperback / Rs. 725

ISBN: 978-8131251652 / Lexis Nexis

Law Relating to Intellectual Property Rights comprehensively covers legal aspects governing IPRs. This third edition of the book comprises analytical study of various branches of IPRs, such as Copyright Act, 1957; Designs Act, 2; Patents Act, 197; Trade Marks Act, 1999; Geographical Indications of Goods (Registration and Protection) Act, 1999; Protection of Plant Varieties and Farmers Rights Act, 21; Semiconductor Integrated Circuits Layout-Design Act, 2; and law of confidential information including trade secrets. This book also covers concepts such as know-how and licences in detail. Key Features:- Updated with latest amendments and case law New chapter on Protection of Traditional Knowledge and Bio-diversity Written in a simple and lucid manner Provides analysis on various aspects of Intellectual Property Laws

Features plethora of Indian and English cases making the book more useful for the readers Provides a summary of international treaties, conventions and agreements Includes amendments upto the Finance Act, 2017 While this book is a must have for the students of legal courses, it will be useful for the aspirants of Judicial Service Examinations and professionals working in the area of IPRs and engineers in product development.



From Start-Up to Global Success: The Zensar Story

by Ganesh Natarajan and Prameela Kalive

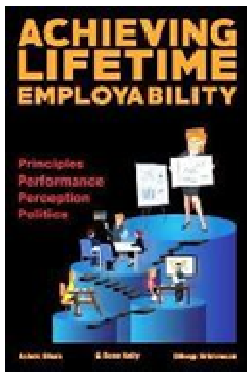
2015 / 288 Pages / Paperback / Rs. 407.23 (On Amazon India)

ISBN: 978-9351508632 / SAGE Response

It was February 2001 and Zensar Technologies was at crossroads. The shareholders of the company were still waiting for a maiden dividend, and profit margins were sliding. A new leadership team took charge and turned it around into one of the most successful Indian IT companies. In this interesting and insightful account, the authors Ganesh Natarajan and Prameela Kalive who held the leadership positions at Zensar reveal the story behind Zensar's success—a story that has seen revenues multiply, share prices jump manifold, and customer satisfaction become an industry benchmark. This is one company that customers respect, employees love, and the community adores. This book in ten chapters starting from A Look at the Indian IT Industry, highlights the success story of the company Zensar though rest of the chapters such as Zensar—Building Credibility and Stature; Building a Credible Full-Services

Organization; Thinking Vertically; Inorganic Growth at Zensar—The Acquisition Journey; Profit Maximization—New Levers and Ideas; Motivating people—The Secret Sauce; The Story of Smiles—Corporate Social Responsibility at Zensar; Vision for a Digital World; Toward a Billion Dollar Zensar. An inspirational book which provides the hope that India has a great future. Zensar story is an example to many Indian companies to build their futures on its successful model and, helping to change the world for the better. The authors state Zensar is an idea that can create organizations and teams in any industry, in any country. They also believe that understanding Zensar will provide an opportunity to every reader to make choices about the type of organizations they want to work for and the lens through which to view the IT industry and the organizations that dot its firmament.

House of Lifetime Employability & Guiding Principles of Various Quotients



Excerpts from the book

Achieving Lifetime Employability

by Dileep Srinivasan , Ashok Shah and G Ross Kelly

2019 / 274 Pages / Paperback / Rs. 1347 (On Amazon India)

ISBN: 978-1642376661 / Gatekeeper Press

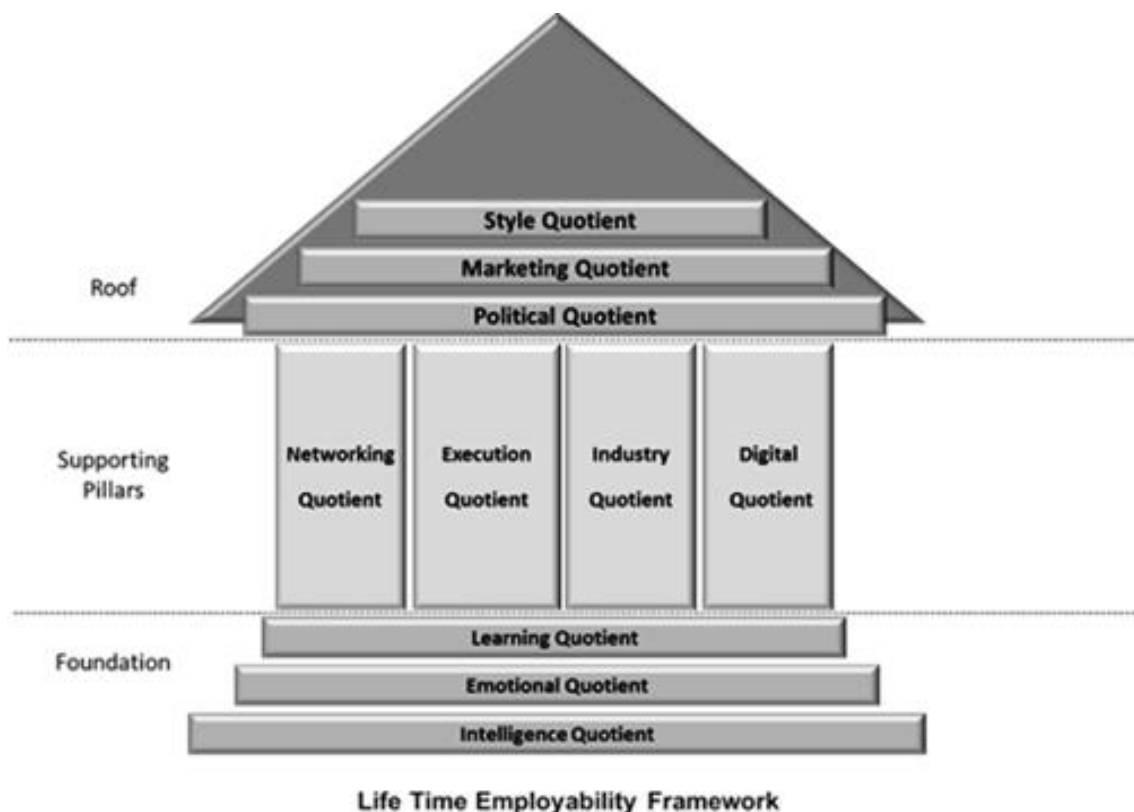
House of Lifetime Employability

The book on Achieving Lifetime Employability is put forth in a consistent realm, that of building a house . . . which we describe as a house of lifetime employability!

What you look for in building or buying a house is the perspective from which we have organized this book. At a minimum, you look for a solid foundation (**your principles**), a substantial structure of pillars (**your performance**), and a solid roof (how you are **perceived** and how you manage the power **politics** of your organization). Those are the same basic components which are essential to leadership and lifetime employability.

As we examine the elements of the Four P's, think of each of them in terms of quotients, or how you would measure yourself in each of them. Further, view those quotients in the context of a structure. How solid are the principles that guide you, your foundation? How would you measure up in terms of your supporting pillars, your performance? And, what about the face you project to those around you, your roof?

To examine those Four P's, Principles, Performance, Perception and Politics, we will do so as a collection of quotients. Those quotients, in our collective view, represent your House of Leadership, or your House of Lifetime Employability.



Here we present you the guiding principles for each of the quotients that have been explained at length in our book and make up the Lifetime Employability Framework.

Guiding Principles For IQ: Intelligence Quotient

1. Complement your intelligence with AI and other technology tools.
2. Remember current jobs will be replaced with “repetitive intelligence” technology—keep moving up the value. Disrupt yourself.

3. Listening, Understanding, Teaching and Inspecting is the best way to enhance intelligence (LUTI).
4. Invest in learning that requires testing, certifying and presenting (stretch; Test yourself). Seek CII (Continuous Innovation and Improvement).
5. Select institutions for formal training that offers scenario planning, case studies and discussions.
6. Go beyond online learning from Khan Academy. (More “traditional” learning; 2-way learning)
7. Do not be intimidated to network with higher intelligence individuals and groups.
8. Suspend judgement of others— Compliment other’s intelligence. Leverage other’s value. Be aware of other’s hidden intelligence.
9. Leverage others—you cannot know everything!
10. Calibrate your IQ when looking for new opportunities. Think through the skills you have vs. what the skills the opportunity requires. Do your homework.

Guiding Principles For EQ: Emotional Quotient

1. Actively Engage—Confront and embrace EI opportunities; do not shy away. This practice will internalize and you’re your ability to address emotional or sensitive situations.
2. Respond Immediately—Emotions are now. Practice a sense of urgency, as opposed to waiting for a better time.
3. Cultivate your network—Prepare a nimble network of advisors you can call upon for different situations.
4. Confirm the Facts—Why? What? When? How? Know the cause and know the proposed resolution.
5. Focus on the Goal—Every situation has emotions, and every situation is tied to an intended objective. Respond to the emotions but focus on the goal.
6. Move on—Address the situation, then move on. Do not allow emotions to linger; do not gloat; do not sulk.
7. Stay in the Present—Yesterday’s situation belongs to yesterday; not today.
8. Master the Analytics—Social media and other tools provide analytics to enhance EI. Learn them and use them.
9. Shift the Balance—Negative emotions are typically expressed more than positive ones. In those circumstances, shift the balance from the negative to the positive by accentuating successes.
10. Invest, Learn and Practice—Make EI an integral part of your interactions.

Guiding Principles For LQ: Learning Quotient

1. Establish your personal Learning Hub
2. Be hungry to learn.
3. Attend seminars, TED talks, etc.
4. Take a lead from your Leaders’ learning efforts.
5. Learn to unlearn.
6. Develop your cognitive skills.
7. Seek opportunities to invest in learning
8. Devote 2% + in annual salary in your learning hub.
9. To learn more effectively . . . teach others!
10. Learn from Your Customer

Guiding principles For XQ: Execution Quotient

1. Think . . . perform or perish!
2. Loyalty is assigned to talent, not people.
3. Get results ethically!
4. Digitize your execution (ERP systems; smart contacts, etc.)
5. Maintain your external focus.
6. Create new knowledge—Drive towards IP or new knowledge.
7. Work to help your boss make his/her numbers.
8. Beware of watermelon metrics.
9. Seek autonomy with accountability.
10. Numbers-Numbers-Numbers!

Guiding Principles For NQ: Network Quotient

1. Networking is your career “net worth.”
2. Be Deliberate about Networking.
3. Network with those that know more than you.
4. Mastering E-Networking will pay huge dividends.
5. Be what you expect your Network to be.
6. Cultivate your Network; you cultivate your brand.
7. Get noticed by your Network.

8. Screen your Network periodically.
9. Leverage and be levered.
10. Be Thankful.

Guiding Principles For InQ: Industry Quotient

1. Understand the various processes and business practices within your organization (ie, how the company makes money; how money flows in and out of the company; what are its revenue and expense models.)
2. Look beyond the current industry linkages to what the next touchpoints could be.
3. Learn the trends and emerging Industry Ecosystems.
4. Look at your company from the outside. Who are your customers? Who are their customers? How do they make money?
5. Learn your customer's journey.
6. Stay abreast of new and emerging start-ups.

Guiding Principles For DQ: Digital Quotient

1. There are no barriers to entry when it comes to innovation and use of digital technology.
2. Operational success does not equate to Digital Success, unlearning and disrupting yourself is key.
3. Be open to new business models, as digital disrupts traditional models
4. Learn to adopt fast, fail fast, and move on. Emotional attachment will leave you behind.
5. Keep asking yourself, am I digital? Am I enlarging my digital footprint?
6. Be forward-thinking, understand that digitization in an organization is a requirement, not an option so go with the flow and lead.

Guiding Principles For SQ: Style Quotient

1. Perception is a new reality.
2. Style is as important as substance.
3. Invest in Style.
4. Style will enhance your brand.
5. Conquer style—Practice/Practice/Practice.
6. Master story telling.
7. Master articulation.
8. Master confrontation-debates.
9. Be Authentic.
10. Achieve GRAVITAS (Described by others as the ultimate in credibility).

Guiding Principles for PQ: Political Quotient

1. Stay aware of your organization's powerbase, quietly and discreetly
2. Identify the key influencers in the organization build your connections with them and their followers.
3. Keep your emotions in check.
4. Maintain your visibility inside and outside the organization's power base.
5. Keep expanding your Circle of Influence.

Guiding Principles For MQ: Marketing Quotient

1. Define your target audience
2. Assert your value proposition
3. Actively Engage your Network
4. Sense, Intercept and Act on Negative Perceptions
5. Pro-Actively Employ Social Media and Technology
6. Own your success and make it visible
7. Give Back
8. Promote Accomplishments of others
9. Timing

"You can never know who you really are or what you can do until you discover yourself"

"You must add value to yourself to be relevant"

"Until you take time to discover yourself, you never know what you can achieve or how far you can go"

Guidelines for submitting reports and articles to get published in the IEEE INDIA INFO, the India Council Newsletter (ICNL)

- Please submit the event reports within TWO months of its happening. Older events reported may be ignored.
- The matter may be in doc / rtf / txt format. Please avoid other formats such as pdf, jpg as they will not be considered.
- Please use SINGLE column format (while the report is prepared).
- Please avoid embedding the photos in the document relating to event reports. However, images referred in articles alone may be embedded at appropriate places in the article document in addition to sending them separately.
- Please send the event photos (typically one/two best) separately (even in they are included in the report).
- Preferred format for photos is “jpg”. Please avoid sending the photos in “bmp”, “png” formats.
- Photographs in digital form should not to exceed 1024 pixels in width. You may use any photo editing software (MS Office Picture Manager is quite useful) to re-size the image. This will reduce the file size of the images considerably. Pl. avoid sending large size photos (Sometimes we get files even up to 6 MB size). We generally recommend file sizes less than 500K.
- Provide your name, full affiliation, membership no. and email id at the end of the document.
- Send the matter by email with the subject: From <Section / College Name in short form> -- Report on <Event Name (short name is OK) & Date> eg: “From Madras Section / SSNCE -- Report on Conf on Wireless Networking dt. 10-11, Feb 2017”
- Please send the matter by email to ieee.icnl@gmail.com
- Please note that the matter sent to other email ids may get ignored and may not be considered.
- Please submit the matter for publication latest by 8th of the publication month (currently Mar, Jun, Sep, Dec as ICNL is a quarterly) to facilitate inclusion in that quarter’s issue of IC Newsletter.
- Please note that while all efforts will be made for publishing, due to certain practical constraints, the actual publishing may be delayed.
- We will be constrained to ignore the submitted materials, if they do not follow the above guidelines.
- Please co-operate with us by adhering to the guidelines specified.

IEEE India Council Website

The website of the IEEE India Council (IC) has been redesigned using the Wordpress content management system and is hosted on the IEEE webserver at <http://sites.ieee.org/indiacouncil/> with the efforts of the web master Dr. Suryanarayana Doolla of IIT Bombay. The readers may find the following links of the IC useful.

Home: <http://sites.ieee.org/indiacouncil/>

Executive Committee: <http://sites.ieee.org/indiacouncil/about-ieee/executive-committee/>

Sections: <http://sites.ieee.org/indiacouncil/about-ieee/sections/>

Chapters: <http://sites.ieee.org/indiacouncil/about-ieee/chapters/>

Announcements: <http://sites.ieee.org/indiacouncil/category/announcements/>

Events: <http://sites.ieee.org/indiacouncil/events/>

Newsletter Archives: <http://sites.ieee.org/indiacouncil/newsletter/newsletter-archives/>

Conference Norms: <http://sites.ieee.org/indiacouncil/conference-norms/>

INDICON: <http://sites.ieee.org/indiacouncil/indicon/>

Student Activities – Awards: <http://sites.ieee.org/indiacouncil/student-activities/awards/>

M V Chauhan Student Paper Contest: <http://sites.ieee.org/indiacouncil/student-activities/mvc/>

For Private Circulation

IEEE INDIA INFO

IEEE Newsletter from India Council

Vol. 14 No. 4

Oct -- Dec 2019

Edited by: H.R. Mohan

Published by: Prof. Sri Niwas Singh

for

IEEE INDIA COUNCIL

Email: ieee.icnl@gmail.com

Website: <http://sites.ieee.org/indiacouncil/>