

IEEE GUJARAT Section Report 2018

Members: 1700+
Society Chapters: 10
Council Chapters: 2
Affinity Group: 2
Student Branches: 30

10 February 2019

PART A: SECTION SUMMARY

A.1 Executive Summary

Section Executive Committee Members in 2018

Chair	R B Jadeja
Vice Chair	Maniklal Das
Secretary	Haresh Sabhadia
Treasurer	Ashish Phophalia
Technical Activity Chair	Chirag N. Paunwala
Educational Activity Chair	Sanjay Srivastava
Chapter Coordination Chair	Y. P. Kosta
WIE Chair	Usha Mehta
Membership Development Chair	Kiran Amin
Professional Activity Chair	Manan Thakker
Student Activity Chair	Anjali Diwan
Web Master	Sumit P. Makwana

Section Highlights

1. Following leadership positions held by our volunteers
 - a. R10 Director Elect 2019-20 - Mr. Deepak Mathur
 - b. General Co-Chair, IEEE SENSORS 2018 - Dr. Anil K. Roy
 - c. Member-at-Large of IEEE Sensors Council's AdCom – Dr. Anil K Roy
2. Distinguished visitors to our section
 - a. Dr. Vincenzo Piuri, IEEE Fellow, University of Milan, Italy, visited our section on 1 October 2018.
 - b. Dr. Sandro Carrara, IEEE Fellow, EFFL, visited our section on 2 November 2018 and delivered a distinguished lecture at DA-IICT, Gandhinagar.
3. Dr. Maniklal Das has been appointed as Associate Editor for IEEE Transactions on Dependable and Secure Computing.
4. Dr. Chirag N. Paunwala received the roles of Chapter Chair Coordinator" IEEE SPS, USA.



Meeting with Dr. Sandro

Major Events (International, National)

Title of the event: **Two-Day Workshop on Blockchain Technologies and Applications**

Date(s): 7-8 July, 2018

Venue/Organizer: DA-IICT, Gandhinagar

Audience size: 65

The Computer Society chapter of IEEE Gujarat Section and DA-IICT jointly organized this workshop on Blockchain Technologies and Applications, July 7-8, 2018 at DA-IICT, Gandhinagar. The workshop had a total 65 participants comprising with working professionals, students, and organizers. The audience consisted of scientists, industry professionals, faculty, and students.

Speakers:

The workshop had 10 eminent speakers from different parts of the country, as follows.

- Bimal Kumar Roy, *Professor, ISI Kolkata*
- Palanivel Kodeswaran, *Researcher, IBM Research, India*
- Kalpesh Parikh, *MD and CEO-VM IntellisenseIT Pvt Ltd, Ahmedabad*
- Krishnaprasad Sastry, *Researcher, HPE Bengaluru*
- Vishwas Patil, *IIT Bombay*
- Sushmita Ruj, *Professor, ISI Kolkata*
- Raghavendra Deshmukh, *Researcher, SAP Bengaluru*
- Sri Chandra, *IEEE Standard Association, Bengaluru*
- Anish Mathuria, *Professor, DA-IICT, Gandhinagar*
- Pankaj Gupta, *(n)Code Solutions Ltd., Ahmedabad*

The workshop started with a brief introduction by Maniklal Das (DA-IICT) followed by the welcome message by K. S. Dasgupta (DA-IICT). The first talk delivered by Bimal Roy (ISI Kolkata) on cryptographic primitives used in blockchain technology. The second talk by Kalpesh Parikh (Freelancer) had focused on a broad spectrum of blockchain prospects and applications. The post lunch session of the first day had focused on blockchain platforms and use cases. The sessions were handled by Palanivel Kodeswaran (IBMRL) and Krishnaprasad Sastry (HPE).

The second day starts with the talk by Vishwas Patil (IIT Bombay) on the cryptocurrencies. Followed by Sushmita Ruj (ISI Kolkata) on data management using blockchain technology. The post lunch sessions were driven by standards and specification of blockchain, privacy aspects of Blockchain, use cases, handled by Sri Chandra (IEEE SA), Anish Mathuria (DA-IICT) and Pankaj Chandra (nCode Soln), respectively.

Participants of the workshop found the discussions quite informative and productive. On the whole, the workshop was a grand success!



Title of the event: **International Conference on Emerging Trends in Engineering, Science and Technology (ICRISET-2018)**

Date(s): 14-15 December, 2018

Venue/Organizer: CHARUSAT, CHANGA

Audience size: 45 full length papers were selected



Title of the event: **Section Technical Expert Program (STEP) Lecture Series**
 Dr. Vijay Shah, Vice-President of ABB India, was the speaker
 Date(s): 6th October, 2018
 Venue/Organizer: L.D. College of Engineering Abad
 Audience size: 70





Title of the event: **Section Technical Expert Program (STEP) Lecture Series**
 Dr Gopal Gajjar, Ex-Chair IEEE Gujarat section and member of POWER ANSER Lab, IIT Bombay
 Date: 6th October, 2018
 Venue/Organizer: L.D. College of Engineering Abad
 Audience size: 70



Title of the event: **Distinguished Lecture on Cyber Attacks on Internet of Things Sensor Systems for Inference"** by Prof. Rick Blum
 Date: 11th July 2018
 Venue/Organizer: DAIICT, Gandhinagar
 Audience size: 30

Title of the event: **"Dimensionality Reduction for Image Recognition"** by Dr. Suman K. Mitra
 Date: 30th November 2018
 Venue/Organizer: SCET, Surat
 Audience size: 100



Title of the event: **Students' Technical Awareness Conference, 2018**
Date: 17th-18th September 2018
Venue/Organizer: GCET, VVNagar
Audience size: 100



Title of the event: **WINTER SCHOOL ON 5G COMMUNICATIONS**
Date: 7th Dec 2018
Venue/Organizer: DAICT Gandhinagar

Major Student and Affinity Group Activities

SAMPARK 2018: SAMPARK is one of the most unique events organized for the students and by the students with a tagline “Reach Out and Engage”. Gujarat Section organized, “Sampark 2018” on February 4, 2018 at Adani Institute Student Branch, which was represented by student members from all student branches of the section. These events provide an excellent opportunity for students to discuss various IEEE related issues with the section ExCom and plan their activity for the year. This annual event also provides an opportunity to student members of Gujarat Section to plan and organize the events as per their own technical and professional need. IEEE Gujarat Section has been organizing this annual event since last 12 years. The event was attracted 400+ young participants.

Other technical programs organized by various student branches have been listed in the student activities section.

Title of the event: **IEEE EXPERT TALK ON "A STORY OF MAXWELL'S DISPLACEMENT CURRENT"**

Date: 31st October 2018

Venue/Organizer: SAC, Ahmedabad

Title of the event: **IEEE EXPERT TALK ON "QUESTS DRIVE TECH -THE LIGO-INDIA & CMB-BHARAT STORIES"**

Date: 24th October 2018

Venue/Organizer: SAC, Ahmedabad

Title of the event: **IEEE EXPERT TALK ON METAMATERIALS FOR THZ APPLICATIONS**

Date: 10th October 2018

Venue/Organizer: SAC, Ahmedabad

Title of the event: **WORKSHOP ON HAM RADIO**

Date: 13th July 2018

Venue/Organizer: LDCE, Ahmedabad

Title of the event: **INVITED TALK ON BIO/NANO/CMOS FOR MEMRISTIVE SENSING**

Date: 2nd Nov 2018

Venue/Organizer: DAIICT, Gandhinagar

Title of the event: **TWO DAYS WORKSHOP ON ADVANCE REMOTE SENSING**

Date: 11th- 12th Dec 2018

Venue/Organizer: Dept of Earth Science, Gujarat Univ, Ahmedabad

Title of the event: **NATIONAL WORKSHOP ON BIODIVERSITY AND REMOTE SENSING**

Date: 6th October 2018
Venue/Organizer: MSU, Vadodara

Title of the event: **DL Talk on Microwave remote sensing through the subsurface for addressing water puzzle**

Date: 1st October 2018

Venue/Organizer: Faculty of Technology CEPT University Ahmedabad, Gujarat

Title of the event: **DL Talk on Microwave remote sensing through the subsurface for addressing water puzzle**

Date: 1st October 2018

Venue/Organizer: Faculty of Technology CEPT University Ahmedabad, Gujarat

Title of the event: **THREE DAYS TRAINING PROGRAM ON SOIL MOISTURE AND AGRICULTURAL MONITORING USING MICROWAVE REMOTE SENSING**

Date: 7th -9th Feb 2018

Venue/Organizer: SAC, Ahmedabad

Title of the event: **THREE DAYS TRAINING PROGRAM ON SOIL MOISTURE AND AGRICULTURAL MONITORING USING MICROWAVE REMOTE SENSING**

Date: 7th -9th Feb 2018

Venue/Organizer: SAC, Ahmedabad

Title of the event: **SUMMER SCHOOL ON SPEECH PROCESSING**

Date: 9th-11th September 2018

Venue/Organizer: DAIICT, Gandhinagar

Title of the event: **TWO DAYS WORKSHOP ON “RECENT TRENDS IN DATA SCIENCE”**

Date: 10th-11th May 2018

Venue/Organizer : UTU, Surat

PART B: ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

The section is consistently maintaining membership growth approx. 15% in past year years. The year 2018 ended with the section's membership count with a total of 1717 members.

Steps taken to improve the membership growth

1. Student branches have conducted various workshops and technical events, under which they focus specially IEEE benefits across the participants. After attending this workshops and events, the students get encouraged by becoming a member of IEEE.
2. Affinity groups such as WIE and IAS have conducted value addition events that encouraged the students for retention in IEEE.
3. Special “**Membership Awareness Drive**” was taken by membership development committee at the events that were conducted under student branches and chapters activities.
4. The student and Branch Counselor conducted multiple presentations on Membership benefits. They also invited the Alumni of college who were IEEE Members and also they shared their experiences that how it beneficial in current corporate world, which they learned as IEEE Student Volunteer.

B.2 Chapter Activities

Total number of chapters in the Section is 10.

Some of the notable technical events conducted by various chapters under the section is listed below.

2-Day Workshop on Blockchain Technology and Applications

7-8 July 2018

DA-IICT, Gandhinagar

No. of Attendees: 60

National Workshop on Biodiversity and Remote sensing

6 October 2018

M S University of Baroda, Vadodara

No. of Attendees: 107

Three days training program on Soil Moisture and Agricultural Monitoring using Microwave Remote Sensing

7 February 2018

Space Applications Centre, Ahmedabad

No. of Attendees: 55

Winter School on 5G Communications

7 December 2018

DA-IICT, Gandhinagar

No. of Attendees: 50

Workshop on Ham Radio

13 July 2018

LD college of Engineering, AHMEDABAD

No. of Attendees: 70

PCB Designing Workshop

21 February 2018

G H Patel College of Engineering & Tech, V. V. Nagar

No. of Attendees: 46

Recent Advances in IoT with Big-Data Analytics using Machine Learning Approach

6 October 2018

A.D.Patel Inst of Tech, V. V. Nagar

No. of Attendees: 44

Red Hat Linux Workshop

27 July 2018

G H Patel College of Engineering & Tech, V. V. Nagar

No. of Attendees: 90

Python Programming Workshop

7 July 2018

G H Patel College of Engineering & Tech, V. V. Nagar

No. of Attendees: 68

Web Development Workshop

6 March 2018

G H Patel College of Engineering & Tech, V. V. Nagar

No. of Attendees: 37

Two Days workshop on Recent Trends in Data Science

10 May 2018

Uka Tarsadia University, Surat

No. of Attendees: 40

B.3 Professional and Education Activities

1. The professional activity unit has organized an event on GDPR to make people aware on this regulation. A number of sessions have been conducted throughout the year on cyber laws at various events conducted by the section.

2. Under Educational Activity unit, the section has arranged technical competitions, seminars, workshop and summer school, which have provided benefits to undergrad and postgraduate students.

B.4 Students Activities

Total number of Student branches in the Section is 30

Number of Student branches formed in the current year is ??

SAMPARK 2018: SAMPARK is one of the most unique events organized for the students and by the students with a tagline “Reach Out and Engage”. Gujarat Section organized, “Sampark 2018” on February 4, 2018 at Adani Institute Student Branch, which was represented by student members from all student branches of the section. These events provide an excellent opportunity for students to discuss various IEEE related issues with the section ExCom and plan their activity for the year. This annual event also provides an opportunity to student members of Gujarat Section to plan and organize the events as per their own technical and professional need. IEEE Gujarat Section has been organizing this annual event since last 12 years. The event was attracted 400+ young participants.

Summary of Student branch activities student branch wise with attachment table / information

Sr. No.	Event name	Type	Number of participants	Organizer	Objective	Date
	SAMPARK'18	Networking	400+	IEEE Gujarat Section	Annual event since last 12 years	4 February 2018
	INSPIRO 2018	Professional	390+	ADIT	During this event 12 eminent speakers delivered talks with the aim to create professional awareness amongst students	28-29 September, 2018
	Logout Session	Technical	60	SOCT	IEEE SOCET SB has chosen to master mind a specialist session extraordinarily for this vital theme on Cyber burglary and cybercrimes.	13 January, 2018
	Python Workshop	Technical	45	SOCT	Awareness program about Python	19 January, 2018
	Seminar on	Technical	287	ADIT	Talk covered	25

	Cyber Awareness				mostly on Cyber Attacks and how to come up with it. Speaker had a brief note on various hacking incidences and made the present CYBER addicted folks known too.	January, 2018
	Web-Development Workshop	Technical	30	GCET	Workshop on Web Dev. is designed to start on a path toward future studies in Web Dev. and Web Design.	2 February-7 March 2018
	Ignis	Technical	530	MBICT	Ignis is the annual festival was 3 day fest comprising 4 technical, 2 nontechnical events, 1 workshop and 1 seminar	8-10 February 2018
	SIG Mobile Apps	Technical	45	DA-IICT	SIG Mobile conducts regular sessions every week where we try to cover the basics of Android app dev.	14 February to 9 August 2018
	Workshop on Microsoft AZURE	Technical	75	MBICT,GCET, Sardar Patel Educational Campus	A two-day workshop on Microsoft AZURE for the students	16-17 February 2018
	SIG Machine Intelligence	Technical	70	DA_IICT	Machine learning and AI enthusiasts who would engage in discussions and collaborative projects and at the same time, foster a healthy environment and support to beginners.	22 January to 3 October 2018
	Augmented	Technical	35	DDU	The workshop	28

	Reality				was conducted by instructors from Robokart and Innovation cell, IIT Bombay.	February, 2018
	Ingenious Hackathon	Technical	142	Ahmedabad University	Ingenious Hackathon 2018 was a 30 hour "Innovate and Build" competition	3-4 March, 2018
	Project-O-Gram	Technical	49	Nirma University	Participants showcase their projects and their projects were evaluated by a panel of judges in the competition.	7 March, 2018
	DGM v5.0	Technical	80	Ahmedabad University	A quiz aimed at testing the knowledge of students in the field of science and technology	18 March, 2018
	Applied CS with Android	Technical	16	Ahmedabad University	Students who wanted to dig in deeper in Data Structures and Algorithms, and the process of applying the concepts in developing an Application.	24 March to 22 April, 2018
	SUMMER SCHOOL 2018	Technical	250	DA-IICT	It was 7-day long training of Selected Topics of Machine Learning and the hands-on experience.	18-24 June 2018
	Embedded aurdino workshop	Technical	60	MBICT	This seminar was conducted with an aim to inbuilt understanding of Aurdino systems	13 July 2018
	Two Days workshop on "IOT and Machine Learning	Technical	48	ADIT	It is to give preliminary introduction about IOT and Machine Learning to	26-27 July, 2018

					Undergraduate students.	
	Workshop on Raspberry-Pi	Technical	37	DDU	Two-day workshop on Raspberry-Pi and the purpose was to make the students learn what basically is Raspberry Pi, how it can change the modern-day computer system, what are the developments that has been taking place in this field.	20-21 July, 2018
	Seminar on Competitive Programming	Technical	39	DDU	It was a task-based program.	23 July, 2018
	Societies and Communities under IEEE seminar	Non-technical	45	MBICT	A seminar on 'Societies and Communities under IEEE' was conducted by IEEE MBICT SB for students of MBICT College	7 August 2018
	Recipe of Becoming a Researcher	Non-Technical	160	Nirma University	The talk on "Recipe of becoming a Researcher" was organized to familiarize and educate the students with the recent trends in projects.	23 August, 2018
	ICT Tools for Effective Research	Technical	160	Nirma University	The talk on "ICT Tools for Effective Research" was where the students were made aware of usage ICT tools for Research.	31 August, 2018
	Workshop on Manual Robotics	Technical	200	DA-IICT	The workshop on manual robotics, the	9 September 2018

					target audience for which includes students of BTech First Year.	
	Disaster Management Poster Presentation	Technical	30	GCET	The topic of poster presentation is historical improvement in disastrous prone area with the use of technology and early warning systems.	18- 19 September, 2018
	STAC'18	Technical	150	GCET	The Students Technical Awareness Conference was a national level conference held under IEEE GCET SB. It was a foregathering of hundreds of students from colleges all over Gujarat in the span of 2 days	18- 19 September, 2018
	A seminar on Understanding Behaviour & Timing in Digital Circuits	Technical	66	DDU		19 September, 2018
	Techstars Start-up Weekend	Non-technical	100	Ahmedabad University	A three-day event on event themed 'Sustainable Development Goals' was A three-day event Startup Weekend event themed 'Sustainable Development Goals'	5 to 7 October, 2018
	Imperium18	Non-technical	233	MBICT	Imperium is a one day national event	5 October 2018

					organized by IEEE MBICT Student Branch volunteers. This event combined inspiring people from different fields who are known best for what they do.	
	Talk on ‘Current Market Trends & Skills Required in IT industry	Technical	35	Ahmedabad University	A talk on ‘Current Market Trends & Skills Required in IT Industry’ was delivered by Mr. Swayam Rajan, CEO, Analytics Valley	6 October, 2018
	One day symposium on “Recent Advances in IoT with Big-data analytics using Machine Learning”	Technical	52	ADIT	This symposium presented taxonomy of machine learning algorithms for exploring different applications of real-world problems into domains of IoT and big-data.	6 October, 2018
	Closer look at IEEE Young Professional life Seminar	Non-technical	49	MBICT	Ankit Dave, an IEEE Young Professional member, shared his IEEE journey and members could relate to his experience	8 October, 2018
	IEEE Xtreme v12.0	Technical	45	Ahmedabad University	The annual 24 hour coding competition ‘IEEE Xtreme 12.0’ was organized by IEEE	20 October, 2018

Neelanshi Varia, IEEE IAS DA-IICT Student Branch Chapter Chairperson and Siddharth Mishra, IEEE DA-IICT Student Branch Vice Chairperson received Travel Grant Award to attend the IAS Annual Meeting, 2018 going to be held at Portland, Oregon, USA.

\$80 was Awarded to Anery Patel, Secretary, IEEE IAS DA-IICT Student Branch Chapter to attend IEEE WIE International Leadership Summit (ILS)

\$180 was Awarded to Raksha Rank, Vice Chair, IEEE IAS DA-IICT Student Branch Chapter for registration, travel and accomodation at IEEE WIE International Leadership Summit (ILS)

Student Branch chair Sarthak Shah received Richard E. Merwin Student Scholarship.

B.5 Communication activity

The section homepage is: <http://ieeegujaratsection.org/>. Our website normally gets updated on weekly basis. But when there is some event there, it might get updated 2-3 times a day even. Many student branches also maintain their own website.

Other means of contacts with section members

- a. e-notice
- b. We have created our own customized list of emails and that is used most frequently
- c. Very often we reach out to all engineering colleges, academic institutions for our national, state level events' announcements. For this also, we have developed our own customized address database which we use on case-to-case basis.

PART C: OTHERS

Problems to be anticipated

1. Scarcity of good, dedicated volunteers.

PART D: GOALS AND PLANS**Goals for 2019**

	Key Result Areas	2018	2019	Growth (in %)	Comment/Remarks
1	Member strength	1717	2200	15	
2	Chapters	10	11	10	
3	Student Branch	30	33	10	Make dormant branches active with section's support
4	Affinity Groups	WIE	GOLD		
5	DLP Speakers	2	2		
6	Technical Events	30	40		More quality technical events to be planned
7	Website				
8	Officer Training				Must hold exclusive F2F sessions on training besides CLE and other regular support
9	Reporting				Timely Reporting using vTools, e-meeting tools to be used for more frequent meetings, not necessarily F2F

**Submitted by
IEEE Gujarat Section**

10 Feb. 2019