

GUJARAT Section Report (2013)

PART A - SECTION SUMMARY

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

- **Section Executive Committee Member List**

The following was the ExCom in the year 2009:

Chair	Suman Mitra
Vice Chair	Mehul Raval
Secretary	R B Jadeja
Treasurer	Haresh Sabhadia
Past Chair	Deepak Ghodgaonkar
Technical Activity Chair	Nirbhay Chaubey
Educational Activity Chair	Rahul Dubey
Chapter Coordination Chair	Deepak Mathur
Humanitarian Activity Chair	Anil K Roy
Membership Development Chair	Kiran Amin
Professional Activity Chair	Nagendra Gajjar
Student Activity Chair	Gunvantsinh Gohil

- **Section Highlights**

1. Following leadership positions held by our volunteers
 - a. R10 2012-13 HTA Coordinator - Mr. Deepak Mathur
 - b. Chair-Elect, India Council - Mr. Deepak Mathur
 - c. Member BoG, IEEE Society for Social Implications of Technology (SSIT) - Mr. Deepak Mathur
 - d. 2013-14 Member-at-Large, IEEE Sensors Council - Dr. Anil K. Roy
 - e. 2013 Member, MGA Ad Hoc Committee - Geo-Unit Vitality Dashboard project - Dr. Anil K. Roy
 - f. 2012-13 Member, MGA-GUOS Committee - Dr. Anil K. Roy
 - g. 2011-onward Webmaster, IEEE Sensors Council - Dr. Anil K. Roy
2. Visit of IAS President Dr. Blake Lloyd, 5 Apr 2013
3. Dr. Anil Roy was invited by IEEE Sensors Council to Conference Capturing for IEEE SENSORS 2013 at Baltimore.
4. Dr. Anil Roy has been nominated as Publications Co-Chair for the signature conference of CAS society, ISCAS 2017 which will be held in Baltimore, May 28-31, 2017
5. Dr. Anil K. Roy was invited to Singapore by SSCS President to discuss about conference capturing and Technology News. This meeting was attended by Prof. Ravi Bagree, Vice-Chair, SSCS/EDS joint chapter of Gujarat Section on his behalf. The concept was appreciated and it was recommended to be included in the forthcoming Board Meeting of the society.
6. Mention of Dr. Anil K. Roy's concept and effort of Technology News by IAS President in his article: "President's Message-Social Responsibilities" by Blake Lloyd, IEEE Industry Applications Magazine, pp. 80-81, Sept-Oct 2013.
7. Visit of Prof. Michael R. Lightner, VP, IEEE Educational Activity Board and Mr. Steve Welch, Director, IEEE Continuing Education. Section ExCom had a formal meeting with these two distinguished leaders on 15 Nov 2013 followed by a dinner.



Mike and Steve during their meeting with Gujarat Section, Executive Committee

- **Major Events (International, National)**

1. **Co-sponsored one International Conference, NUICONE 2013 (Nov 27-29, 2013)**

Nirma University International Conference on Engineering NUICONE is a flagship event of the Institute of Technology, Nirma University. The conference is in its seventh year. IEEE Gujarat Section was the technical co-sponsor of this conference for the third time. NUICONE-2013 was aimed at showcasing University's commitment towards bridging the gap between various disciplines, converge and amalgamate various new ideas, fields and technologies. The event comprised themes related to various disciplines of Engineering & Technology.

The distinguished speakers were: 1) Dr. Virendrakumar C. Bhavsar (University of New Brunswick Fredericton, NB, Canada), 2) Dr. Sisil Kumarawadu (University of Moratuwa), 3) Mr. Prasad Kelkar (Linde Engineering, Baroda), 4) Mr. Kalpesh Shah (Linde Engineering, Baroda), 5) Dr. Prasanna Rao Dontula (A.T.E. Enterprises P Ltd., Bangalore), 6) Dr. Rishi Gupta (University of Victoria, British Columbia, Canada), 7) Dr. Abhijit Mukhurjee (IIT Gandhinagar), 8) Dr. Manjunath Joshi (DA-IICT, Gandhinagar), 9) Shri Gurdeep Singh (Gujarat State Electricity Company Ltd (GSECL), Vadodara), 10) Mr. Sunil Mehta (Mitsubishi Electric India Pvt. Ltd.), 11) Mr. Bhavesh Thakkar (Linde Engg, India), 12) Prof. Yogendra Singh (IIT Roorkee), 13) Dr. G. R. Reddy (BARC, Mumbai), 15) Mr. R. Murlidharan (Tata Power Company Ltd., Mumbai). There were 4 tutorials arranged for the participants, namely, 1) Static and Dynamic Single Objective Optimization with Improved Differential Evolution Algorithms by Dr. Swagatam Das (Indian Statistical Institute, Kolkata), 2) Spectrum sensing techniques in Cognitive Radio by Dr. Yogesh N. Trivedi, 3) Testing of VLSI Design by Dr. Usha Mehta, 4) The Hands on CC-Link and CC-Link IE: Prominent Network for Factory Automation by Experts from CLPA.

Around 200 people attended this conference. As per the MoU, the papers which would fulfill the quality criteria of IEEE will be published at IEEE Xplore.

2. **Co-sponsored one National Conference, NCVPRIPG 2013 (Dec 16-18, 2013)**

The fourth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG) was held at IIT Jodhpur from December 18 to December 21, 2013. IIT Jodhpur organized this conference in association with the Indian Unit for Pattern Recognition and Artificial Intelligence (IUPRAI). IEEE Gujarat Section was the technical Co-sponsor for NCVPRIPG 2013. NCVPRIPG is a biennial conference. The primary goal of NCVPRIPG is to bring together researchers working in the broad areas of Computer Vision, Graphics, Image Processing, Pattern Recognition and related fields to promote community-wide discussion of ideas that will influence and foster continued research in the field. The NCVPRIPG family of conferences has evolved from the national-level workshops and is held every alternate year since 2004. The previous NCVPRIPGs were held at Gandhinagar, Jaipur and Hubli.

Following distinguished speakers delivered keynote and panel talks in this conference: 1) Prof. Anil K. Jain (Michigan State University) on "Biometrics: Technology for Human Recognition", 2) Prof. Shmuel Peleg (The Hebrew University of Jerusalem) on "Video Synopsis", 3) Prof. Roberto Scopigno (Director, Visual Computing Labs, CNR-ISTI Italy) on "High-fidelity 3D models for Cultural Heritage", 4) Dr. Shai Avidan (Tel Aviv University, Israel) on "Organizing Visual Data",

5) Prof. B. S. Manjunath (University of California, Santa Barbara) on "Scalable Scientific Image Informatics", 6) Prof. Venu Govindaraju (University at Buffalo, Amherst NY) on "Cyber Security in the Context of CAPTCHA's and Biometrics".

Of a total of 301 submissions for NCVPRIPG 2013, 124 papers were finally accepted for presentation at the conference. 120 papers were finally presented at the conference. This was a substantial improvement from the previously held conferences, such as, NCVPRIPG 2011 received 108 papers, NCVPRIPG 2010 received 120 papers, NCVPRIPG 2008 received 67 papers. The section ensured the quality of the conference. The peer-review process was double blind and each paper had at least 2 reviews. We had a total of 131 reviewers who helped in the review process. As per the MoU, the papers which would fulfill the quality criteria of IEEE will be published at IEEE Xplore.

The conference had tutorial sessions on state-of-the-art research topics. We had selected 6 tutorial speakers who conducted parallel tutorial sessions on 18th December 2013. The speakers for tutorials were: 1) Prof. A G Ramakrishnan (IISc Bangalore) on "Handwriting Recognition in Indic Scripts", 2) Dr. Vidit Jain (YAHOO! Labs) on "New Frontiers in Face Detection", 3) Prof. Partha Pratim Das (IIT Kharagpur) on "Kinetic Vision – Looking deep into the Depth", 4) Prof. Suman K Mitra (DAIICT Gandhinagar) on "Image Denoising: Recent Trends", 5) Dr. Sumeet Agarwal (IIT Delhi) on "Neural Network and Deep Learning approaches to Computer Vision" and 6) Dr. Anoop Namboodiri (IIIT Hyderabad) on "Biometric Authentication: Technical Solutions to the Privacy Challenge". Total 270 people attended this conference.

3. National Workshop on Cyber Security, Gandhinagar (15-17 Nov 2013)

We organized a 2-day National Workshop on Cyber Security during 16-17 Nov 2013 at DA-IICT, Gandhinagar. The workshop had a total 90 participants comprising of working professionals, students, and organizers. The majority portion of the audience consisted of bankers, faculty, and industry personnel. There were about 20 senior undergraduate and post graduate students. The workshop had invited 10 eminent speakers listed below from different parts of the country: 1. Mr. Avinash Kadam (MIEL e-Security, Advisor-India Task Force at ISACA), Mumbai; 2. Dr. Amit kumar (CEO - BioAxis DNA Research Centre Pvt Ltd, Hyderabad), Hyderabad; 3. Mr. Ashikali Hasan (Xeniar Technology, Ahmedabad), Ahmedabad; 4. Mr. Manan Thakker (Freelance lawyer, Cyber Laws), Ahmedabad; 5. Mr. Manish Naik (Freelance consultant, Information Security), Ahmedabad; 6. Mr. Muktesh Chander (Jt. Commissioner of Police, Delhi Govt.), New Delhi; 7. Mr. Nandkumar Saravade (Freelance Security Experts in Financial Applications), Mumbai; 8. Ms. Nina Godbole (Independent Consultant, Cyber Security), Pune; 9. Dr. Rajesh Deo (NII Consulting), Mumbai; 10. Mr. Vicky Shah (Cyber Laws), Mumbai.



Group Photo of first day, national workshop on Cyber Security

The workshop provided a forum for disseminating knowledge in cyber security and digital forensics. The workshop brought together the researchers and developers in this specialized area from academia and the industry. The workshop was accessible to both non-experts interested in learning and experts interested in sharing different techniques and approaches in this area. The workshop focused coverage of essential aspects of cyber security such as perimeter security, web security, system security, code security, network security, penetration testing, forensics tools, crisis management, cyber crimes and law, and so on.

4. Short Term Training Program on Image Processing and Pattern Recognition, Surat (Mar 9-16, 2013)

- **Major Chapter Activities**

1. Visit of IAS Membership Development Chair, Dr. Peter Magyar
2. Visits of speakers from DLP of various societies:
 - a. Prof. Durgaprasad Misra (EDS)
 - b. Prof. Shiban K. Koul (MTT-S)
 - c. Prof. Monai Krairiksh (MTT-S)
 - d. Prof. Yahia Antar (MTT-S)
 - e.

- **Major Student and Affinity Group Activities**

Sampark 2013: Gujarat Section organized 'Sampark 2013' 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 8 years. The first Sampark was organized in 2006 in Gandhinagar. Subsequently it was organized at AMA, Ahmedabad (2007); ADIT Auditorium, VV Nagar (2008); Indroda Park, Gandhinagar (2009); Science City, Ahmedabad (2010); Greenwoods Resort, Ahmedabad (2011); Science City, Ahmedabad (2012). Sampark 2009 was held in GCET Auditorium, Vallabh Vidya Nagar on 17 Feb 2013. This is one of the most unique events organized for the students and by the students with a tagline "Reach Out and Engage". This gives all student branches an opportunity to interact with other members of the section, to learn the best practices form other student branches, to plan for the year in tandem and to demand from the section.

One of the past Sampark has also been featured by the institute.

(cf. http://www.ieee.org/portal/site/online/menuitem.be4d708ccca114d8fb2275875bac26c8/index.jsp?&pName=print_only&TheCat=2201&article=online/legacy/inst2007/apr07/featureIndia.xml&)



Group Photo of Sampark 2013

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

- **Awards**

1. 2013 R10 Outstanding Volunteer Award - Mr. Arup Dasgupta
2. 2013 R10 Outstanding Branch Counselor Award - Prof. Rakesh Patel (IEEE GCET SB)
3. 2012 MGA Leadership Award - Dr. Anil K. Roy

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

- **Summary (as per submitted L50)**

Particular	Debit (in INR)	Credit (in INR)	Opening Balance (in INR)	Closing Balance (in INR)
70183 - State Bank of India GUJARAT	2467740.14	2598916.00	1046483.41	915307.55
70184 - Custody Banking Section GUJARAT	66491.98	219339.47	723303.90	570456.41
70185 - Non IEEE Investment (CD) GUJARAT	69234.00	0.00	603692.00	672926.00

- **Any other financial activities**

Gujarat Section received financial support for organizing various events throughout the year from:

1. From HTA-HQ to carry out a development project under our SIGHT 'Disha'
2. R10 Professional Activity Chair
3. IEEE Sensors Council
4. SSCS
5. GRSS
6. MTT-S
7. WIE-HQ
8. Gujarat Council on Science & Technology (GUJCOST), Gandhinagar
9. Gujarat State Fertilizer Corporation (GSFC), Baroda
10. Reliance Communications, Ahmedabad

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

Year	Active Members as on 31 Dec
2010	791
2011	880
2012	1498
2013	1365

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

Steps taken by GCET SB to improve the value for members:

1. They started one event named as "MIND HAND", under which their intention is to push up membership drive among the students. The student registering under MIND HAND has to pay a minimum fee to become the member of this group. Various quiz competitions under MIND HAND are regularly conducted. The winners are given scholarship and excellent Prizes. This event emphasized more on the IEEE.
2. They use to conduct 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.

3. They use to visit neighboring colleges and encouraged these colleges for the membership drive. The three colleges were previously inactive. Due to their efforts, the three colleges named as DJNIT, BVM, and MBICT became active and whole heartedly taken interest in IEEE.
4. They started various affinity groups which did not exist earlier. They started WIE & IAS which are running well. They are also in progress to start CS group. This has encouraged the students for retention in IEEE.
5. At present, they are 60 members and planning to increase more members by end of this year. They have really done good job for retention as well as attracting new members every year.

Efforts made by LDRP SB for retention and growth of IEEE Student Members:

1. Every year they conduct “**Membership Awareness Drive**” in end of the January or starting of the February month. They already organized these types of drive on Jan 2011, 16 January, 2012, 16 Feb 2013. They include the other events with membership drive to attract the students.
2. They have conducted session for basic knowledge of Computer for first hour then they include the active IEEE students from higher semesters, who share their past experiences, events organized by SB and the events attended by them at section or region level.
3. In the membership drive of year 2012 they arranged the session on How to write research paper followed by introduction of IEEE and its the membership drive.
4. In year 2013 they have arranged Mock round of interview process which is generally conducted by all IT Companies in the Campus selection. They invited Mr. Rakesh Shah from Renaissance Education, Ahmedabad. He has conducted Aptitude test, Group discussion, Technical and Finally HR Interview. After every round he discussed which types of mistake that students do in the interviews and also given solution on the spot.
5. The student and Branch Counselor frequently give presentation on Membership benefits. They show the statistics and figures of no. of events organized and future events should be organized by the branch in last year and current year respectively. They also invite the Alumni of college who were IEEE Members and also they share their experiences that how it beneficial in current corporate world, which they learned as IEEE Student Volunteer.

For these awareness drives, this branch membership grew by over 75% in two years.

B.2 Chapter Activities

- **Total number of Chapters in the Section**

There are 9 chapters in our section.

- **Number of Chapters formed in the current year**

Three new chapters were added in the year 2013. Those are:

1. Joint EDS/SSCS chapter (Date of approval: 8 April 2013)
2. GRSS chapter (Date of approval: 6 May 2013)
3. SPS chapter (Date of approval: 28 May 2013)

- **Number of Active Chapters (Chapters who have reported required number of meetings during the year)**

8 Chapters

- **Summary of Chapter activities chapter wise with attachment table / information**

IEEE Gujarat Section's Annual Event Report of Chapter list for the year 2013

#	Event	Date	Description
Joint Chapter of IAS, IES and PELS (IE13/IA34/PEL35) EVENTS			
Administrative/Non-technical meetings			
1	Meeting with IAS office bearers with Gujarat Section - GUJARAT IE13/IA34/PEL35 CHAPTER	04-April-2013	Show
2	Meeting at PDPU - GUJARAT IE13/IA34/PEL35 CHAPTER	05-April-2013	Show
Technical events			
1	Expert talk - GUJARAT IE13/IA34/PEL35 CHAPTER	23-February-2013	Show
2	Talk on working of Monorail - GUJARAT IE13/IA34/PEL35 CHAPTER	23-February-2013	Show
3	LabView for control systems - GUJARAT IE13/IA34/PEL35 CHAPTER	09-August-2013	Show
4	Physical computing workshop - GUJARAT IE13/IA34/PEL35 CHAPTER	12-August-2013	Show
Communications Society Chapter (COM19) EVENTS			
Administrative/Non-technical meetings			
1	ComSoC ExCom Meeting - GUJARAT COM19 CHAPTER	22-February-2013	Show
2	ComSoc Popular Lecture Meeting - GUJARAT COM19 CHAPTER	10-August-2013	Show
3	ComSoC ExCom Meeting - GUJARAT COM19 CHAPTER	22-December-2013	Show
Technical events			
1	World Telecommunications and Information Society Day 2013 - GUJARAT COM19 CHAPTER	17-May-2013	Show
2	Expert Talk - GUJARAT COM19 CHAPTER	15-April-2013	Show
3	Expert Talk - GUJARAT COM19 CHAPTER	27-July-2013	Show
4	Tutorial - GUJARAT COM19 CHAPTER	24-September-2013	Show
5	Popular Lecture :India's Planetary Exploration Programme - GUJARAT COM19 CHAPTER	15-October-2013	Show
6	Workshop - GUJARAT COM19 CHAPTER	29-November-2013	Show
SMC Society Chapter (SMC28) EVENTS			
#	Event	Date	Description
1	One Day Workshop on Ethical Hacking - GUJARAT SMC28 CHAPTER	04-May-2013	Show
2	Ethical Hacking - GUJARAT SMC28 CHAPTER	16-November-2013	Show
3	One Week Workshop on Wireless Sensor Network - GUJARAT SMC28 CHAPTER	25-July-2013	Show
4	Advanced computer forensic and ethical hacking - GUJARAT SMC28 CHAPTER	05-October-2013	Show
Joint Chapter of SSCS & EDS (SSC37/ED15) EVENTS			
Administrative/Non-technical meetings			
1	First meeting of the Joint chapter - GUJARAT SSC37/ED15 CHAPTER	12-May-2013	Show
2	Planning a DLP to Inaugurate the SSC-EDS joint chapter - GUJARAT SSC37/ED15 CHAPTER	23-June-2013	Show
3	Planning the membership development activity for the chapter - GUJARAT SSC37/ED15 CHAPTER	28-September-2013	Show
Technical events			
1	Next Generation of Nanoelectronics: More Moore and/or More than Moore - GUJARAT SSC37/ED15 CHAPTER	07-August-2013	Show
2	Half-day workshop on SEMICONDUCTOR DEVICE TECHNOLOGY – PRESENT & FUTURE - GUJARAT SSC37/ED15	28-September-2013	Show

	CHAPTE		
3	Sensor and Actuators - GUJARAT SSC37/ED15 CHAPTER	13-September-2013	Show
4	FinFET: Past, Present and Future - GUJARAT SSC37/ED15 CHAPTER	22-November-2013	Show
5	Low-power sensor readout circuit design - GUJARAT SSC37/ED15 CHAPTER	14-December-2013	Show

#	Event	Date	Description
PES Chapter (PE31) EVENTS			
Administrative/Non-technical meetings			
1	Social gathering at country side - GUJARAT PE31 CHAPTER	06-January-2013	Show
Technical events			
1	Celebrating IEEE Day - GUJARAT PE31 CHAPTER	28-September-2013	Show
2	Energy Scenarion - India and World - GUJARAT PE31 CHAPTER	28-September-2013	Show

#	Event	Date	Description
Joint Chapter of MTT & AP societies (MTT17/AP03) EVENTS			
Administrative/Non-technical meetings			
1	Excom meeting - Plan Activities for Calender Year - GUJARAT AP03/MTT17 CHAPTER	25-February-2013	Show
2	EXECUTIVE COMMITTEE MEETING OF IEEE A...	21 Mar 2013	Show
3	Discussions with Prof. Koul - GUJARAT AP03/MTT17 CHAPTER	06 Sep 2013	Show
4	Discussions with Prof. Monai Krairiksh - GUJARAT AP03/MTT17 CHAPTER	24-September-2013	Show
5	Dinner with Prof. Yahia Antar - GUJARAT AP03/MTT17 CHAPTER	13-December-2013	Show
Technical events			
1	One day workshop on Communication & navigation satellite technology - GUJARAT AP03/MTT17 CHAPTER	20-April-2013	Show
2	Workshop on Microstrip antenna Technology - GUJARAT AP03/MTT17 CHAPTER	27-April-2013	Show
3	Distinguished Microwave Lecture Program - GUJARAT AP03/MTT17 CHAPTER	06 Sep 2013	Show
4	Distinguished lecture program - GUJARAT AP03/MTT17 CHAPTER	23 Sep 2013	Show
5	International conference on "Sensor Network and Wireless Communication" - GUJARAT AP03/MTT17 CHA	09-October-2013	Show
6	One-day Workshop On "Antennas, RF Circuits and Satellite Communications - GUJARAT AP03/MTT17 CHAPTER	12-October-2013	Show
7	Distinguished lecture program - GUJARAT AP03/MTT17 CHAPTER	13-December-2013	Show
8	Distinguished lecture program - GUJARAT AP03/MTT17 CHAPTER	13-December-2013	Show
9	International Experts Meet on Microwave Remote Sensing - GUJARAT AP03/MTT17 CHAPTER	16-December-2013	Show

#	Event	Date	Description
Computer Society Chapter (C16) EVENTS			
Administrative/Non-technical meetings			
1	Meeting for Workshop Plan in Cyber Security - GUJARAT C16 CHAPTER	25-April-2013	Show
2	Meeting for Cyber Security Workshop - GUJARAT C16 CHAPTER	07-November-2013	Show
3	Meeting for Financial Planning and Technical Support for Upcoming Events - GUJARAT C16 CHAPTER	11-December-2013	Show
Technical events			
1	Expert Lecture on "Distributed Dynamic Clustering Algorithm in Randomly Deployed Wireless Sensor Netw	17-October-2013	
2	National Workshop on Cyber Security - GUJARAT C16 CHAPTER	16-November-2013	Show
3	Session on Cyber Crimes and Laws - GUJARAT C16 CHAPTER	16-November-2013	Show
4	Session on Network Security - GUJARAT C16 CHAPTER	16-November-2013	Show
5	Session on Information Security - GUJARAT C16 CHAPTER	17-November-2013	Show
6	Session on Digital Forensics - GUJARAT C16 CHAPTER	17-November-2013	Show
7	Session on Financial Security - GUJARAT C16 CHAPTER	17-November-2013	Show

#	Event	Date	Description
SPS Chapter (SP01) EVENTS			
Administrative/Non-technical meetings			
1	IEEE SPS Chapter under IEEE Gujarat section Members meeting - GUJARAT SP01 CHAPTER	21-September-2013	Show
2	IEEE Execom - GUJARAT SP01 CHAPTER	14-December-2013	Show
Technical events			
1	Expert Talk on "Solar Tracking System" SP-013 by Mr. Anup Shah - GUJARAT SP01 CHAPTER	11-October-2013	Show
2	Expert Talk on "Energy Efficient Sensor Node and Network" by Prof. Niteen Patel - GUJARAT SP01 CHAPTER	11-October-2013	Show
3	Biometrics: Technology for Human Recognition - GUJARAT SP01 CHAPTER	18-December-2013	Show
4	Specialized DSP Hardware Features - GUJARAT SP01 CHAPTER	07-December-2013	Show
#	Event	Date	Description
GRSS Chapter (GRS29) EVENTS			
Administrative/Non-technical meetings			
1	First meeting of members - GUJARAT GRS29 CHAPTER	15-June-2013	Show
2	Members meeting - GUJARAT GRS29 CHAPTER	28-December-2013	Show
Technical events			
1	lecture on Remote Sensing of the Physical Qualities of Fruits by Dr. Monai Krairiksh, Thailand	24-September-2013	Show
2	National Seminar on New Challenges In Remote Sensing Technology With Emphasis on Microwave data - G	05-October-2013	Show
3	International Experts Meet on Microwave Remote Sensing - GUJARAT GRS29 CHAPTER	16-December-2013	Show
4	International Experts Meet on Microwave Remote Sensing - GUJARAT GRS29 CHAPTER	16-December-2013	Show

Taken from https://meetings.vtools.ieee.org/meeting_report/list

B.3 Professional and Continuing Education Activities

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

Events under Professional Activities:

We organized an event "IEEE Industry Day" to reach out professionals of our ecosystem. This event was partially funded by R10 Professional Activity Chair's fund.

Events under Educational Activities:

1. We organized a state-wide circuit program on Hacking and Cyber Awareness by an expert of this field, Ashik Ali Hasan. This event was organized in four locations of Gujarat, Rajkot, Gandhinagar, Mehsana and Palanpur. The objective of this event was to educate people about the cyber crimes, the common online mistakes that we often make for which we might regret for life and how to prevent such situations. This event converged into a National Workshop on Cyber Security in the month of Nov. 2013.
2. Under our Educational Activity we developed a workshop-cum-seminar program for new engineering students, namely, "Welcome to Engineering". In this we organize a two hour talk, which introduces engineering via working of engineered systems around us and case studies of a) Engineered systems (Elevators, Automatic doors, Petrol dispensers....) and b) Case studies (Trains, Water canals, Mars Rovers). The objective of the talk and workshop is to introduce principles of engineering design using multi-disciplinary approach. This event has been very popular among students of Electrical, Mechanical, Electronics, IT and Computer engineering. It also includes hands-on workshop for first year UG students.

B.4 Students Activities

- Total number of Student branches in the Section
21
- Number of Student branches formed in the current year
1 (L D College of Engineering, Ahmedabad)
- Section level student activities (student congress, paper and other contests, awards etc)

Summer School 2013

The “Summer School”, was a one-of-its kind event being organized in DA-IICT by the IEEE Student Branch. It was a two week long workshop, with the main aim to bring together Technology & Design, which were very essential to develop any successful product. Budding engineers from all over India got a common platform to explore, learn, and innovate. Students get a chance to play with the latest technologies and build something cool. We wanted to break the stereotype of non-productive summers and improve the technical skills of students.

This was the 3rd version of the all popular Summer School and this time we are bringing the best speakers out there to help students get a lifetime of a learning experience. The students got to explore these cool technologies in a totally hands-on manner. The participants got an opportunity to learn the whole cycle of developing products and to work in teams to make something truly awesome. It was a great place to make new friends, learn from the best people out there and get a head-start on the latest technologies.



Summer School of DA-IICT has been extremely popular since years

i.Fest 2013

The IEEE Student Branch of DA-IICT organized a national event, named, i.Fest 2013 during 25-27 Oct 2013. The theme of the i.Fest was “Connected Thinking” with the very essence of the quote: “When you tug a single thing in the universe you find it’s attached to everything else!” said by author and naturalist John Muir. This year's i.Fest saw an enormous participation of students from the campus as well as other institutes namely PDPU, Nirma and LDRP and many participants did come from other states such as Rajasthan, Delhi, Punjab etc. A total of 328 students participated this year, of which 58 were from schools of Gandhinagar and Ahmedababd. There wer events like i.Bot, i.Code, i.Rubble, Treasure Hunt, i.Quiz, i.Maze, i.Capture, i.Design, Blind C, i.App, i.Database, i.Electro, Electro Quiz, B2B (Business Plan Presentations) and i.Vision. The strikingly new feature which the i.Fest team inculcated this time was “Custom Game Controller”. Two projectors were set up in cafeteria where games were being projected and they were controlled by students’ developed interfaces! It was a great success; people enjoyed watching basic electronic circuits at work to control their virtual players! This year’s main attraction was that we invited pre-university students from various schools also. We are very thankful to GUJCOST is supporting this endeavour. We approached more than 100 schools

through GUJCOST and our own sources. We must say that we got a very good response from schools in the first year of our effort. There were special events organized for school kids, such as IT Quiz and Music Quiz. The best part of these two events was that we invited quiz masters from schools only.

- Number of Active Student branches (Student branches who have reported required number of meetings during the year)
16 (1 branch formed on the last day of the year and 4 branches remained inactive)
- Summary of Student branch activities student branch wise with attachment table / information

IEEE GUJARAT SECTION Student Activity - Summary Report - 2013				
1	DA-IICT, Gandhinagar	1	Summer School	6/1/2013 to 6/15/2013
		2	i.Decipher	10/21/2013
		3	Expert Talk	10/25/2013
		5	Arduino Workshop in association with PDPU student Branch	2/2/2013 to 2/3/2013
		6	i.Code - Hardcore online coding competition.	10/23/2013
		7	Solder for a Cause(WIE)	4/6/2013
		8	Tech Nite(WIE)	2/23/2013
		9	Trip to Wilderness Park	1/20/2013
		10	Talk on Social Enterpreneuership	3/15/2013
		11	Women In Industry Awareness Challenge	3/15/2013
		12	Manual Robotics	10/13/2013
		13	Game Controller Workshop	10/19/2013 to 10/20/2013
		14	Tech Talk	1/12/2013
		15	Session on Processing	1/11/2013
		16	Session on Jhoomla	10/22/2013
		17	Lecture on Growth,Activities and scope of IAS	4/5/2013
		18	GRE unfolded	1/29/2013
		19	Members Meet in Taj Gateway Hotel	4/3/2013
		20	Talk on HR skills and Functions	6/26/2013
		21	IEEE Membership Development Activities	7/31/2013
		2	GCET, VV Nagar	1
2	ISSP 2013(International Conference of Intelligent System and Signal Processing)			28th Feb - 13 to 2nd March - 13
3	MIND HUNT AT BVM			25th Feb 2013
4	MIND HUNT AT MBICT			26th Feb 2013
5	MIND HUNT AT DJMIT			26th Feb 2013 to 27th Feb 2013
6	WORKSHOP BY GEDA			21st Sept 2013
7	CODE O MANIA 2			27th April 2013
8	ARDUINO WORKSHOP			3rd May 2013 to 4th May 2013

		9	AUTOMATION WORKSHOP	5th May 2013 to 7th May 2013
		10	CONFIANZA 2	3rd Feb 2013 to 4th Feb 2013
		11	CONFIANZA 3	12th July 2013 to 14th July 2013
		12	FIX IT	3rd May 2013
		13	LAB VIEW	18th April 2013
		14	PHOTOSHOP	5th January 2013 to 11th January 2013
		15	QT PROGRAMMING	8th April 2013 to 9th April 2013
		16	Industrial Visit to BRTS	26th Sept 2013
		17	Mind Hunt 3	28th January 2013
		18	WEB O HOLIC	9th May 2013 to 10th May 2013
		19	Industrial Visit to AMUL	8th August 2013
3	PDPU, Gandhinagar	1	Linear Algebra, Data Acquisition and Computer-based Control using LabVIEW (SIG-MACT)	Jul 3, 2013 to Jul 4, 2013
		2	Adhyayan	March 23, 2013
		3	Abhivyakti	March 23, 2013
		4	Steeplechase	March 24, 2013
		5	Android Workshop	March 16, 2013 to March 17, 2013
		6	Power Plan	March 24, 2013
		7	Seminar on Modeling and Simulation	Oct 10, 2013
		8	Laser Quest	March 24, 2013
		9	Fool's Good	March 23, 2013
		10	Dude!! Where is my circuit?? 2.0	March 23, 2013 to March 24, 2013
		11	Advanced Arduino Workshop	Oct 12, 2013
		12	Dynamics, Control and Automation using LabVIEW	Aug 9, 2013 to Aug 11, 2013
		13	Arduino Workshop	Feb 3, 2013 to Feb 4, 2013
		14	Seminar on Modeling and Simulation	April 3, 2013
		15	IAS: Expert lecture- Dr. Nitin Padhiyar	April 12, 2013
		16	IAS: Expert lecture- Prof. Dipak Adhyaru	Sep 4, 2013
		17	SIG-MACT: Expert lecture- Dr. Nitin Padhiyar	Sep 13, 2013
		18	IAS: Inauguration and Institute Visit	April, 2013
		19	IAS: Renewable Trip	July 2, 2013
		20	IAS: Expert lecture- Mr.RameshchandraBhoraniya	June 18, 2013
		21	SIG-MACT:Expert lecture- Mr. Priyank Desai	June 19, 2013

		22	SIG-MACT: Promotion of use of different Open source software	Sep 21, 2013
		23	IAS: Experience Talk	Nov 16, 2013
		24	SIG-MACT : Scilab Workshop	Dec 21,2013
		25	OSCAD Workshop	April 5, 2014 to April 6, 2014
		26	Python Workshop	Feb 8, 2014 to Feb 9, 2014
		27	LATEX Workshop	Jan 31, 2014
		28	Robotics Workshop (IIT-B)	March 15, 2014 to March 16, 2014
		29	Linear Algebra, Control and Simulation using MATLAB	April, 2014
		30	Distinguished Lecture Series	Sep, 2014
		31	Mathematical Modeling ,Identification and Control using LabVIEW	Aug 8, 2014 to Aug 10, 2014
		32	Seminar on Modeling and Simulation	March 21, 2014
4	LDRP, Gandhinagar	1	Hack-a-fest	March 15, 2013 to March 16, 2013
		2	X-Quiz	March 15, 2013 to March 16, 2013
		3	X-Mania	March 15, 2013 to March 16, 2013
		4	X-Press	March 15, 2013 to March 16, 2013
		5	X-hibit	March 15, 2013 to March 16, 2013
		6	WordPress	March 15, 2013 to March 16, 2013
		7	Women In Engineering	March 15, 2013 to March 16, 2013
		8	Women Empowerment	March 15, 2013 to March 16, 2013
		9	Youth PolitiX	March 15, 2013 to March 16, 2013
		10	WorkShop on KEIL Software	March 15, 2013 to March 16, 2013
		11	Ethical Hacking	Mar-13
		12	Workshop on Open Hardware Arduino & Interfacing	Aug-09
		13	WIE-Womens Day Celebration	Mar-08
		14	WIE-Blood Donation Camp	Sep-07
		15	WIE-2 day Workshop on Photoshop	17-Sep

		16	SIG-HTML	Feb-23
		17	SIG-C++	Mar-05
		18	Annual WIE General Meeting	Dec-13
		19	Annual WIE Execom Meeting	28-Dec
		20	IEEE-Explore Digital Library User Awareness Workshop	Jul-29
		21	Workshop on Communication & Navigational Satellite Technology	Apr-20
		22	Remote Sensing of Physical Qualities of Fruit	Jun-15
		23	Workshop on Semiconductor Device Technology- Present and Future	Sep-28
		24	Webinar on How to Write a technical Paper	28-Jun
		25	Webinar on How to GeniOS-13	20-Oct
		26	4 Ways to Improve Linux Performance for Multicore devices	23-Jul
		27	Technical Writing and Xplore Webinar	29-May
5	Marwadi College, Rajkot	1	Two days Technical Workshop on MATLAB	17/10/2013 to 18/10/2013
		2	Electrical Quiz	17/10/2013
		3	Project Presentation	18/10/2013
		4	Ethical Heaking	4/5/2013
		5	Industrial Visite at - Sardar Sarovar	7/3/2013 to 9/3/2013
		6	Wireless sensor netwok & related area	25/7/2013 to 27/7/2013
6	UVPCE, Mehsana	1	Industry interaction seminar	23/02/2013
		2	India AppFest 2013	26/02/2013
		3	One Day Workshop on Cloud Computing & Research Issues	7/4/2013
7	Nirma Inst. of Technology, Ahmedabad	1	Technodyssey'	13 10/7/2013 to 10/8/2013
		2	WIE-Star activities	8/24/2013 to 10/3/2013
		3	WIE-Say Interview series	1/1/2013 to 1/30/2013
		4	Quizyber	4/6/2013
		5	Online story writing competition	9/24/2013 to 10/5/2013
8	IIT Gandhinagar	1	1082p 1.0: Hands-on Workshop on "Introduction to Image Processing using MATLAB"	3-Sep-13
		2	1082p 1.1: Hands-on Workshop on "Introduction to Image Processing using MATLAB"	9-Sep-13
		3	1082p 1.2: Hands-on Workshop on "Introduction to Image Processing using MATLAB"	17-Sep-13
		4	Popular talk on "Space exploration for a safer Earth" by Dr. Kamalesh Lulla, NASA	20-Oct-13
		5	Workshop on "Data analytics: Applications in modeling, control and signal processing"	25 to 26 October 2013
9	ADIT, VV Nagar	1	Workshop on Multi-tier Architecture in .Net	19-Apr-13
		2	Workshop on Game Development using Flash and HTML 5	14-15 Sept 2013
		3	Expert Lecture on Artificial Intelligence	2-Apr-13
		4	STTP on "Recent Treads in Computational Intelligence	1-5 July 2013
10	MBICT, VV Nagar	1	BE THE BRAIN {QUIZ}	22/02/13
		2	EXPERT LECTURE: SOFTWARE COMPUTING & ITS	9/3/2013

			APPLICATION IN ENGG OPTIMIZATION	
		3	EXPERT LECTURE: EMBEDDED SYSTEMS USING MICROCONTROLLER WITH ITS APPLICATION	11/3/2013
		4	EXPERT LECTURE: DIGITAL SIGNAL & PROCESSING	2/8/2013
		5	EXPERT LECTURE: SWARM INTELLIGENCE	6/8/2013
11	B.H. Gardi, Rajkot	1	Immaculate'13	Mar-13
		2	Adwitiya'13	Oct-13
		3	AVR hands-on workshop	24/06/13 to 29/06/13
		4	C workshop	17-18/06/13
		5	Long hour Matlab Coding	9/8/2013
		6	DSP Application workshop	31/08/13 to 1/09/13
12	SCET, Surat	1	1 day event on Image Processing and Pattern Recognition	9/3/2013
		2	1 day event on Introduction to Soft Computing	16/03/2013
		3	2 days event on Introduction to NS2	5/04/2013 to 6/04/2013
13	SVNIT, Surat	1	Sundeeep Memorial Project Competition (SMPC)	23/02/13
		2	Expert Lecture on Energy Band Diagram	24/08/13
14	NIT Surat	1	Expert lecture on Robotics	Mar-13
		2	One day Robotics event	Apr-13
		3	Analog and Digital circuit Design	Jul-13
		4	Workshop of Machine Vision, Image Processing August'13	
		5	Workshop of Simulation of circuit and Device	21-Oct-13
		6	Idea presentation	Nov-13

Taken from https://meetings.vtools.ieee.org/meeting_report/list

B.5 Affinity Group Activities

- **GOLD**

There is a major practical problem in Gujarat because of which it is too difficult to start GOLD affinity group here. Since Gujarat is not a hot destination for IT and communication related industries and professionals, students who graduate from Gujarat get employment in other states which fall under different sections but Gujarat. So despite our sincere drive to identify GOLD members, we could not succeed.

- **WIE**

We have three very active WIE affinity groups at i) DA-IICT student branch, ii) Nirma student branch and iii) LDRP student branch. These affinity groups have won various laurels and awards in previous years for their impact towards the objective. These are: 2010 WIE Affinity Group of the Year Award for DA-IICT SB and 2011 R10 WIE Student Branch Affinity Group of the Year for Institute of Technology, Nirma University SB. Recently our GCET student branch has applied for the affinity group of WIE.

- **Life Member**

There is no Life Member affinity group in the section.

B.6 Awards & Recognition Activities

- **Award constituted by the section**

1. The Best Student Branch Award was won by DA-IICT Student Branch.
2. The Best Branch for Membership Growth during year 2012 was bagged by GCET.
3. Best Project in PG category: Patel Ronak (citation and an award of Rs. 5000)

4. Best Project in UG category: Naman Turakhia (citation and an award of Rs. 3000)
 5. Best Student Branch Volunteer Award - 2013
 - i. Udit Seth & Jineet Doshi (IEEE Student Branch, DA-IICT - Gandhinagar)
 - ii. Smit H. Majithia (IEEE Student Branch, DDU - Nadiad)
 - iii. Vivek Gupta (IEEE Student Branch, GCET - V.V.Nagar)
 - iv. Vibhav Katre & Laya Das (IEEE Student Branch, IIT Gandhinagar)
 - v. Ankit Patel & Nispand Mehta (IEEE Student Branch, LDRP - Gandhinagar)
 - vi. Keyur A. Kaneriya & Kaushal Ambasana (IEEE Student Branch, Marwadi College - Rajkot)
 - vii. Dishita Shah & Aarti Singh (IEEE Student Branch, MBICT - Gandhinagar)
 - viii. Vinit Shah & Kinara Shah (IEEE Student Branch, NIRMA - Ahmedabad)
 - ix. Dharendra Pratap Singh Raghuwansh & Saruch Rathore (IEEE Student Branch, PDPU - Gandhinagar)
 - x. Pankaj Vinubhai Sakariya (IEEE Student Branch, UVPC - Kherva)
 6. Appreciation Award for the Membership Growth efforts from IEEE MGA – R10 SAC.
 - i. Kavan Joshi (GCET IEEE, SB)
 - ii. Shreya Rajani (MFEGI IEEE, SB)
- **Award(s) received from R10**
 1. 2013 Outstanding Volunteer Award - Mr. Arup Dasgupta
 2. 2013 Outstanding Branch Counselor Award - Prof. Rakesh Patel (IEEE GCET SB)
 3. IEEE Student Enterprise Award 2013 - Support of \$1000 to IEEE Student Branch, DA-IICT - Gandhinagar for the project entitled "ICT based solutions for education in rural India".
 - **Award(s) received from IEEE Societies**
 1. Zucker Travel Award - Brijesh Kumar and Saksham Gupta (IEEE Student Branch, DA-IICT - Gandhinagar)
 2. Best Presentation Award in 2nd all India IAS Workshop - IEEE Student Branch, DA-IICT - Gandhinagar.
 3. Outstanding Young Chapter (IAS) 2013 award to IEEE Student Branch, DA-IICT - Gandhinagar.
 4. Web Chapter Contest (IAS) - First prize to IEEE Student Branch, DA-IICT - Gandhinagar.
 5. Most Happening Chapter Contest (IAS) - Third prize to IEEE Student Branch, DA-IICT - Gandhinagar.
 6. Myron Zucker Travel award (IAS) - IEEE Student Branch, PDPU - Gandhinagar.
 - **Award(s) received from IEEE HQ**
2012 MGA Leadership Award - Dr. Anil K. Roy

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

- Newsletter (name and number of issues in the year)
Section had a print version of news letter 'Krimakshak' which was published quarterly. Now section has discontinued the print version and have started electronic version 'e-newsletter'. 'e-newsletter' which have page from each student branch and chapter. The periodicity of the newsletter is monthly. The content creation and posting of this e- newsletter is being improved now and hence currently it is withdrawn. The feature that we are trying to incorporate is that in this e-newsletter each SB will be given one page content space on this e-magazine template that could be uploaded by them within a cut-off time frame using the assigned login/password feature and after the cut-off date, it will get published automatically in the pdf form. This cut-off date is kept the first date of the month. We are hoping that from April 2014 we will re-start this newsletter.
- Home Page of the section (give the URL and frequency which it is updated)
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. The site is developed on WordPress CMS platform.

For the convenience of all SBs and chapters, and for the sake of data currency we are also introducing some unique features in this website, such as, i) Facility for Student Branches to update their event calendar using some login/password facility, ii) Auto updation of the upcoming events and their archival, iii) Same facility for chapters also to maintain their event calendar, iv) a password protected page to archive all our minutes of meetings, financial reports and other historical information.

Some of our SB and chapter also do have their own websites. DA-IICT's website, <http://ieee.daiict.ac.in/>, won the Best Website Design award in 2009 at R10 level and since then they have been maintaining their site in a very professional way.

Besides these the following 5 student branches do maintain their websites regularly updated.

1. DDU SB has its own Branch Website: <http://www.ddu.ac.in/ieee/>,
2. GCET has Branch Website: <http://www.gcetieeesb.in>,
3. Nirma SB has Branch Website: <http://ewh.ieee.org/sb/gujarat/nit>,
4. LDRP SB has Branch Website: <http://www.ieee.ldrp.ac.in>,
5. SCET SB has Branch Website: <http://www.scet.ac.in>,

The newly formed GRSS chapter is also very dynamic in sense of disseminating their information through their own website, <http://www.ieee-grss-gujaratsection.org/> and sharing their activities through their e-newsletter, <http://www.ieee-grss-gujaratsection.org/#!newsletter/c24x3>.

- 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.
 - d. We have our well-maintained and updated history page also available at http://www.ieeeighn.org/wiki/index.php/IEEE_Gujarat_Section_History

B.8 Industry Relations

- Membership growth and retention

For last two years we have been trying to outreach to the industry professionals to bridge the gap. But so far we have not conceptualized any method for membership development for industry people.

- Activities for/with industrial members

Industry Day 2013

IEEE Gujarat Section organized the Industry Day 2013 on 5 Oct 2013 at St. Larn Towers, Ashram Road, Ahmedabad with a purpose to enhance the interface between IEEE and Indian Industries. The theme of this event was "Synergy between IEEE and Indian Industries - Issues and Challenges". This event wished to push the collaboration of IEEE with Indian standard formulating bodies and Indian industries that would ultimately lead to contribution towards formation of IEEE standards. A panel discussion was planned in pursuit of the above goal and to search for opportunities to create a synergy between industry professionals and IEEE professionals. A panel discussion on the theme was central attraction of the event besides the informal networking during and after lunch. The distinguished panelists included The ensuing panel discussion on the theme was extremely enriching. The panelist were:

Sunil Parekh (Advisor, Zydus Cadilla), Jaimin Shah (CEO, Dev Infotech), Pankaj Gupta (Business Head, Tata Consultancy Services, Gujarat), B.B. Mishra (Chief General manager, Alstom), Dr. Shrinet (GM, ERDA). Shri Arup Dasgupta, former Chair of IEEE GS was the Moderator of this panel discussion.

The key findings of the Panel discussion were: a) Collaboration with PAN IIT (Body of IIT alumnus) for various programs, b) Website link between Gujarat Electronics and Software Industries Association (GESIA) sharing information, c) Creating an think tank of personnel's from Industry, GESIA and IEEE GS for identifying problems specific to Industry and possible solution, d) IEEE GS offering Lectures on State-of-the-Art topics to young employees of organizations, e) IEEE GS inviting proposal for Industry project competition specifically targetting younger generation of employees below 35, f) Industry offering support for conducting meeting on their premises with next IEEE Industry Day celebration on the premises of industry, g) Inducting Industry Liaison officer in the execom of IEEE GS. Program ended with vote of thanks networking among participants.



Penalists in Industry Day



Participants in Industry Day

B.9 Humanitarian Technology Activities

We have a very active SIGHT, named 'Disha', here in our section. This is one of the earliest SIGHT formed worldwide. We have been doing three projects for humanitarian challenges:

1. Sustainable Technology for Empowering People (STEP) – This is to bring clean and safe drinking water for the resource-crunched people in developing nations. However, the idea of treating water to make it drinkable or potable looks sodden, but any effort is a miniscule effort against the scale it is needed for the world community. Over 50% of world population remain mired in extreme poverty that results into poor healthcare facility, acute scarcity of clean drinkable water, no power, ravaging sanitation, no education and what not. The water-management industry is a \$400-billion-a-year industry. Water covers more than 70 percent of the Earth, but only 1 percent can be consumed without processing, filtering or melting polar ice caps. That supply appears to be dwindling as the global population grows and industry and agriculture require more and more water besides the contamination and pollution sources increasing exponentially over years.
2. The other project was in name of 'KinectoTherapy'. This is targeted towards rehabilitation support for motor skill deficient persons. We developed a working product. This work was presented as a research paper in - Anil K. Roy, Yash Soni and Sonali Dubey, "Enhancing Effectiveness of Motor Rehabilitation Using Kinect Motion Sensing Technology", accepted in *IEEE Global Humanitarian Technology Conference -SAS 2013* (www.ghtc-sas.org) to be held on 23-24 August 2013 at Technopark, Trivandrum (India).
3. This year we have taken up another very interesting yet challenging project, 'MedGuide'. Our project MedGuide aims to solve the crucial problem of regulating and monitoring the medical regimens of pregnant women especially in rural and remote areas. In rural areas due to illiteracy and negligence, people are unaware as how important it is to take medicines according to prescription. It is the malpractices in taking medicines on time and regularly that result in high infant mortality rate and maternal death due to many complications. According to World Health Organization, every day approximately 800 women die from preventable causes related to pregnancy and childbirth where women living in rural areas and among poorer communities are more susceptible to it.

Our system aims at maintaining the regimens of pregnant women prescribed by the doctor and monitoring the same. All monitoring will be done at the health care center, through a network setup between the dispenser kit and a base station in form of a health care center. Based on the problem stated above, we have divided the whole system in three parts.

- a. System Division:
- b. Dispenser kit
- c. Network system
- d. Information Hub (Central Collection of data)

How it works?

When pregnant women visits health care center, she would be provided with a prepared dispenser kit. This kit will help in regularizing the medicine regimen of the patient. It provides regular notification alerts and weekly transmits the stored information about how the schedule is followed. Once this data reaches the Information Hub, this is collected and stored in a database which is open to interpretation by the concerned doctor/health care worker.

Convinced by the impact of this project, we got a support of USD 2000 for this project from HTA-HQ.

B.10 Community Activities

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

IEEE Day: Gujarat Section has been celebrating IEEE Day since 2009, the year it was formally incepted. We organize it on the first Saturday of Oct each year. This year it was held on 5 Oct 2013 at St. Lurn Hotel, Ahmedabad. This year we invited a distinguished physicist and speaker, Prof. Ajoy Ghatak, to give a popular talk on any topic of his preference on this occasion. Prof. Ajoy Ghatak did his M.Sc. from University of Delhi, PhD from Cornell University and was a Research Associate at Brookhaven National laboratory. He joined IIT Delhi in 1966 and has recently retired from there as Professor of Physics. He received the 2008 SPIE Educator award in recognition of "his unparalleled global contributions to the field of fiber optics research, and his tireless dedication to optics education worldwide.." and the 2003 OSA (Optical Society of America) Esther Hoffman Beller award in recognition of his "outstanding contributions to optical science and engineering education. He is also a recipient of the CSIR SS Bhatnagar award, 16th Khwarizmi International award, the International Commission for Optics Galileo Galilei award, IETE Wadhwa Gold Medal and the UGC Meghnad Saha Award for his research work in fiber optics and related areas. He is a Fellow of OSA & SPIE. He has authored over 170 research papers and several books including the undergraduate text OPTICS which has been translated to Chinese and Persian. His other books are Introduction to Fiber Optics & Optical Electronics (both co-authored with K Thyagarajan and published by Cambridge University Press), Quantum Mechanics (co-authored with S Lokanathan and published by Macmillan India and Springer, New York). His latest books are: Albert Einstein: A Glimpse of his Life, Philosophy & Science and Guided Wave Optics & Photonic Devices; the last one edited with Dr. Shyamal Bhadra. He received D.Sc. (Honoris Causa) from University of Burdwan in 2007. He has been a Visiting Professor at several European, US and Australian Universities.



Audience engrossed in listening to Prof. Ghatak



Award ceremony during IEEE Day

The title of his talk was "EINSTEIN & HIS YEAR OF MIRACLES". The talk was at an elementary level and did give a glimpse of Einstein's extra-ordinary life, his special theory of relativity, his famous equation $E=mc^2$, and briefly described the concept of the light quantum. It was rightly said by Roger Penrose that "In the twentieth century, we have been greatly privileged to witness two major revolutions. We have come to use the term 'relativity' to encompass the first of these revolutions and the term 'quantum theory' to encompass the second. It is particularly remarkable that a single physicist - Albert Einstein - had such extra-ordinary deep perceptions of the workings of Nature that he laid foundation stones for both of these twentieth century revolutions in the single year of 1905."

During this event we also announce our slate for the next year. The talk was followed by section level awards, felicitation of volunteers for their contribution. The event closed by a networking banquet.

PART C - OTHERS

C.1 Relationship with National Societies

1. We had signed a MoU with Gujarat Electronics and Software Industry Association (GESIA) in 2013. It was a great landmark for us as GESIA comprises of over 500 Electronics and IT based companies. This is one way to reach out industry people in future.
2. We collaborate with many national professional societies such as CSI, IETE, IUPRAI, PREMI, Pan-IIT Association etc.

C.2 Special Events

All special events are described at appropriate places above.

C.3 Problems to be Anticipated

1. Scarcity of good, dedicated volunteers.
2. Funding situation to run a quality event.
3. Poor turn out in executive committee meetings

C.4 Best Practices of your section (which you would like share with other sections for the benefits of members)

PART D - GOALS AND PLANS

D.1 Continuation of Project/Activity in Progress and Their Implementation Plans

1. All the above mentioned HTA projects till these are well-implemented in the system.
2. Conduct "Welcome to Engineering" program for 1st semester UG engineering students.
3. Design and conduct "Child Innovator" program for pre-university kids.

D.2 Goals and Future Plans

Goals for 2014

	Key Result Areas	2013	2014	Growth (in %)	Chair's Comment
1	Member strength	1365	1650	15	Student (759/925), Professional (457/625), SM (52/65), Fellow (1/1), GOLD (0/5)
2	Chapters	9	10	10	CAS
3	Student Branch	21	21	0	make dormant branches active with section's support
4	Affinity Groups	WIE	GOLD		we will try to start one GOLD affinity group
5	DLP Speakers	0	2		One each in Communications and Signal Processing
6	Competitive SBs	3	6	100	Evaluation should encourage more competitive environment
7	Best B Tech Project contest	25	50	100	Participation must increase
8	Best PG Project contest	12	25	100	
9	Website				Must be extremely communicative.
10	Officer Training				Must hold exclusive F2F sessions on training besides CLE and other regular support
11	Reporting				training session on scheduling, reporting using vTools, e-meeting tools to be used for more frequent meetings, not necessarily F2F

IEEE Gujarat Section's Annual Event Report list for the year 2013

#	Event	Date	Description
SECTION LEVEL EVENTS			
1	Section ExCom Meeting - GUJARAT SECTION	06-January-2013	Show
2	Section ExCom Meeting - GUJARAT SECTION	08-April-2013	Show
3	Section ExCom Meeting - GUJARAT SECTION	15-August-2013	Show
4	Section ExCom Meeting - GUJARAT SECTION	15-September-2013	Show
5	Section ExCom Meeting - GUJARAT SECTION	15-November-2013	Show
1	Sampark 2013 - GUJARAT SECTION	17-February-2013	Show
2	Image Processing and Pattern Recognition - GUJARAT SECTION	09-March-2013	Show
3	Neuro Fuzzy concepts and applications - GUJARAT SECTION	15-March-2013	Show
4	Introduction to Soft Computing - GUJARAT SECTION	16-March-2013	Show
5	Computer Security and Ethical Hacking - GUJARAT SECTION	17-March-2013	Show
6	Introduction to NS2 - GUJARAT SECTION	05-April-2013	Show
7	Neuro fuzzy applications in Image Processing - GUJARAT SECTION	04-July-2013	Show
8	Leadership Program - GUJARAT SECTION	05-October-2013	Show
9	EINSTEIN & HIS YEAR OF MIRACLES - GUJARAT SECTION	05-October-2013	Show
10	Neural Network and Deep Learning approaches to Computer Vision - GUJARAT SECTION	18-December-2013	Show
11	NCVPRIPG 2013 - GUJARAT SECTION	18-December-2013	Show
12	Kinectic Vision – Looking deep into the Depth - GUJARAT SECTION	18-December-2013	Show
13	Video Synopsis - GUJARAT SECTION	18-December-2013	Show
14	High-fidelity 3D models for Cultural Heritage - GUJARAT SECTION	18-December-2013	Show
15	Image Denoising: Recent Trends - GUJARAT SECTION	18-December-2013	Show
16	Biometric Authentication: Technical Solutions to the Privacy Challenge - GUJARAT SECTION	18-December-2013	Show

Prepared and Submitted by
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26 Feb 2014