IEEE Pune Section Report - 2014

(Please replace above heading with your Section name)

Please use the following format to submit your Section's annual report to Region 10. Please note that the annual reports are used for selecting the outstanding Sections in the region and reports submitted after the annuanced due date will not be considered for the award. Please do not include more than 3 photographs and preferably put them on additional pages attached to the report (please delete this paragraph in your report).

PART A - SECTION SUMMARY

A.1 Executive Summary –

• Section Executive Committee Member List for year 2014

Designation	Name	Email
Chair, IEEE Pune Section	Dr. Rajesh Ingle	ingle@ieee.org
Immediate Past Chair, IEEE Pune Section	Dr. Dattatray J. Doke	dattadoke@hotmail.com
Vice-Chair,IEEE Pune Section	Dr. G. S. Mani	gsmanihome@yahoo.com
Secretary,IEEE Pune Section	Mr. Gorakhnath Ghadage	gorakhnath_vg@ieee.org
Treasurer,IEEE Pune Section	Prof. Mandar J. Khurjekar	mandarjk@gmail.com
Member	Dr. Yogesh Dandawate	yhdandawate@gmail.com
Member	Dr.Madhuri Joshi	punemajoshi@gmail.com
Member	Dr. Y. P. Nerkar	ypnerkar@yahoo.com
Chair – Signal Processing Chapter	Dr. K. R. Joshi	krjpune@gmail.com
Chair - PES/IAS Chapter	Dr. Mrs. G.A. Vaidya	
Chair – Comsoc Chapter	Prof. Vivek Deshpande	vsd.deshpande@gmail.com

Organiser/ chair EDS Chapter	Dr. A. D. Shaligram	adshaligram@gmail.com
Chair, Computer Society Chapter	Mr. Girish Khilari	gkhilari@cdac.in
Women In Engineering Affinity Group	Mrs.Rajeshree Jain	rajashreejain@gmail.com
Member	Mr. Nitin Mahajan	nitin_mahajan@infosys.com
Member	Dr. Yashwant Chavan	myilu@indiatimes.com
Member & Student Activity Coordinator	Mr. Sachin Shelar	sachinut@yahoo.com
Member	Mr. Nilesh Deshmukh	nilesh@udaradhi.com
Member	Prof. Ashok Gaikwad	ashokagaikwad@yahoo.co.in
Member	Mr. Sebastian Gracias	s_gracias@yahoo.com
Member	Mr. Madhav Sawant	Madhav.Sawant@sungard.com
Member	Mr. Girish Tatke	girish.tatke@hotmail.com
Member	Mr. Nitin Mahajan	nitin_mahajan@infosys.com
Member	Dr.Anil Tavildar	astavildar@rediffmail.com
Permanent Invitee	Dr. Avinash Joshi	dr.avinash.joshi@ieee.org
Member & Industry Relationship Chair	Dr. Pradeep Chatterjee	pchats2000@yahoo.com
Permanent Invitee	Dr. Bharat S. Chaudhari	bsc@ieee.org bharatc@isquareit.edu.in

Permanent Invitee	Dr. Vijay Bhatkar	vijaypbhatkar@gmail.com
Permanent Invitee	Mr. Digambar M. Tagare	mcpl60@bsnl.in
Permanent Invitee	Mr. Arun Bahulkar	arun.bahulkar@tcs.com
Permanent Invitee	Dr. Pradeep Kumar Sinha	

• Section Highlights

Pune, one of the largest urban agglomerations of India, is located in western Indian State of Maharashtra. The city is one of the biggest industrial towns in India and an important educational, industrial, and cultural center. Pune hosts several universities and well-known institutions, and research organizations. The city also houses large number of industries in the field of Information and Communication Technology (ICT), automobile, electrical, electronics, forging, foundries and other engineering Industries. More than one hundred thousand skilled engineering professionals are working in and around the city. The strength of students studying in various disciplines in the city exceeds two hundred thousand.

IEEE Pune Section (R0 01 20) was established on June 26, 2010 with terrestrial boundaries confined to Pune Metropolitan City (Postal Code: 411001 to 411999). The Section falls under the jurisdiction of Asia Pacific Region (R-10) of IEEE, prior to that it was a subsection of IEEE Bombay Section since June 20, 2003 till its formation. At present, the Pune Section has more than 300 professional members and over 1100 other members, including student members.

IEEE Pune Section has 4 Chapters under its umbrella

- o Communication Society
- Computer Society
- o PES/IAS Society
- Signal Processing Society

In year 2014 two more chapter were included in IEEE Pune Section

- o EDC Society
- o Instrumentation Society

IEEE Pune Section had 19 Student Branches at start of year 2014. In year 2014, 2 more student branches added to IEEE Pune section. So now IEEE Pune section is having 21 Student Branches under its umbrella.

The Section interfaces with the industries and academia through various technical and humanitarian activities. Section organizes various activities throughout the year, which are helpful to the professional members as well as for student's community for their skill set up gradation. The Section and its student branches endeavour to contribute to the advancement of the knowledge of its community through activities that provide professional information exchanges and stimulate technological innovations. Meetings of the Section officers, interactions with the Student Branch Counselors and representatives are held on regular basis to discuss the ideas and plans for activities.

• Major Events (International, National)

IEEE INDICON 2014

IEEE Pune Section had the privilege of organising IEEE INDICON 2014 at MDC, YASHADA, Pune. It was scheduled from 11th Dec - 13th Dec 2014. INDICON is annual conference conceptualized by IEEE India Council in the field of Computer Science and Engineering, Electrical Engineering, and Electronics and Communication Engineering in general. Over the past few years, INDICON has emerged as a well-recognized and an eagerly anticipated event in the country because of its high quality technical sessions and the networking opportunities it provides.

We are happy to report to you that this year we received over 1600 high quality submissions for possible presentation at INDICON from more than 22 different countries. The papers were reviewed and the technical program committee finally selected 164 papers for oral presentation and 178 papers for poster presentation. Technical program of INDICON 2014 consists of 4 plenary sessions, 8 keynote address, 7 technical tracks, 35 special sessions and 6 tutorials. We have also introduced researcher's symposium this year with an objective to provide an opportunity for researchers and aspirants to showcase/ discuss their in-progress research / research problems identified/ state of the art and idea incubation.

The conference was inaugurated on 11th December 2014, Dr. Rajkumar Buyaa, Director of Clouds and Distributed Systems Laboratory, University of Melbourne, Australia, Dr. Thomas Conte, 2015 IEEE Computer Society President, Dr. Vijay Bhatkar Chairman of ETH Research Lab, Dr. Rajat Moona Director General C-DAC, , Dr. Rajesh Ingle Chairman, IEEE Pune Section, Dr. D.J Doke and Prof G.S. Mani were present for the function.





Tutorials were conducted on Reliable Real Time Embedded Systems, Emerging Trends in Robotic Development in India al, Smart Grid: Secure and Sustainable Energy for all forever, An Overview of High Performance Computing, and Grid & Cloud Computing 5: Introduction of Mathematical Modelling.

This year's INDICON also witness keynote presentations by Dr, V. K. Saraswat, former Secretary, Department of Defence R&D, Scientific Adviser to Raksha Mantri & Director

General of DRDO & ADA, J. Roberto de Marca,IEEE President and CEO, Dr. Rajkumar Buyya, Director of the Cloud Computing and Distributed Systems (CLOUDS) Laboratory at The University of Melbourne, Australia, Dr. Vijay Bhatkar, Bhatkar Chairman of ETH Research Lab, Dr. Vidyasagar Potdar, Curtin University, Australia and Dr. Thomas Conte, 2015 IEEE Computer Society President. Cultural program organised by PICT IEEE Student Branch and Art circle PICT was well appreciated.

The conference valedictory function was held on 13th December 2014, Dr. Andre Obler was present for the function and delivered the talk on social network security.



We would like to express our sincere appreciation to members of IEEE India Council and volunteers of various committees and reviewers of INDICON 2014. The conference with such scale will not be possible without everyone's strong commitment, efforts and support from partners. Last but not the least, our sincere gratitude goes to all the authors and invited speakers, for their participation and providing the intellectual sharing on experiences.

World Telecom and Information Society day

World Telecom and Information Society day was celebrated on jointly by IEEE, IETE, IEI @ IEI Shivajinagar Pune. Dr Ramanuj Kashi was keynote speaker & KK Sinha was Chief Guest. The theme for this year is "Broadband for sustainable development".

Prof Kukjin Visit

Prof Kukjin from Seoul National University and IEEE Region 10 Award chair delivered lecture at PICT on Micro Sensors and Actuators based on MEMS technology. He interacted with EXECOM members during working lunch.



• Major Chapter Activities

WESI 2014

An IEEE Workshop on Electrical Safety in India (WESI 2014) was held during 19-21 November 2014 at Pune, India by IEEE IAS/PES Chapter, Pune Section. Industry Applications Society IEEE, USA was a technical cosponsor. In the past four similar workshops were organized since 1998 in various IAS Chapters in India all of them with IAS as a technical cosponsor.

Blake Lloyd, IAS President participated and spoke in the inaugural session of the WESI 2014 in Pune. There were 16 presentations with 164 attendees, 15 % being women. Topics of presentations included protection against shock, arc flash, safety audits, grounding, regulations and recommended practices, safe work practices and case studies. A souvenir with abstracts and exhibits of products and services were arranged with 16 advertisers and exhibitors. There was good interaction among the attendees, presenters and exhibitors. The workshop's discussions and presentations were summarized during the panel discussion at the concluding session. Main problems and measures for reducing accidents in India were listed and prioritized. The list included lack of qualifications, training, poor maintenance, non-implementation of simple safe work practices, public awareness campaigns and inadequate enforcement of existing standards and regulations.

Power Grid Collapse Workshop

Workshop on Power Grid Collapse organized, by PES/IAS chapter on 07 March at PVG College of Engineering, Pune. Mr B.L. Sonavane from MERC given the lecture 100 Students and 20 IEEE members participated in event.

Lecture Series

The lecture was conducted by Vivek S Deshpande on "QoS and Design issues for Wireless Sensor Networks" on 30th Jan 2014.

On 12 Apr Dr D.M. Borkar delivered the lectute on Avionics & communication at IETE Global Hall.

Dr Atul Negi gave talk on Computational Intelligence in PCCOE Akurdi , PICT on 07 April

Major Student and Affinity Group Activities

AICSSC 13-14 DEC 2014

The All India Computer Society Student Congress 2014, the third IEEE CS Student Congress in India was organised by IEEE Pune Section in association with PICT IEEE Student Branch at Pune on 13 th and 14 th December 2014. The event was held collaterally with INDICON 2014, the flagship conference event of IEEE, in India. The venue of the event was the picturesque Yashada, Raj Bhavan Complex, Baner Road, Pune.

AICSSC 2014 witnessed participation from sections all over India, the highest participation being from Kerala. We had students from IEEE Bombay Section, IEEE Pune Section, IEEE Gujarat Section and from IEEE Madras Section. We also had students of

CDAC (Centre for Development of Advanced Computing) institute attending the event. Despite each section having their exams during this period, we managed to pull a crowd of 80-odd students nationwide. The theme of the Congress this year was 'Internet of Things'. IoT is a trending technical topic in industries today and grabs everyone's attention of students and academicians alike. The theme was well-received on social media.

Day 1 of the Congress was kick-started by talks delivered by our dignitaries. Mr. Thomas Conte (IEEE CS President 2015) spoke about the unexplored territories of Rebooting Computing and shared information on how best to create a career path in the same domain. Ms. Angela Burgess (Executive Director, IEEE CS) enlightened us all about IEEE CS and the multi fold benefits a student can draw from being a member. Mr. Girish Khilari (Chair, IEEE CS Pune Section) addressed the students as well and thanked the dignitaries for gracing the Congress.





A pre-Congress workshop was arranged based on our theme 'Internet of Things' after the talks on Day 1. It was conducted by eminent professionals from DataTorrent Inc. Mr. Sandeep Deshmukh spoke about Hadoop Ecosystems, Mr. Ashish Tendulkar about Data Mining while Mr. Parikshit Mahale briefed everyone about IoT. Students got an opportunity to explore the concepts of Big Data, Hadoop and IoT in great depths. Before breaking up for lunch, we had an interaction session for the members of different sections. Everyone showed great enthusiasm and shared their experiences and activities from their respective Student Branches and Sections. Post-lunch Dr. Suresh Kothari delivered a gripping talk that was apt for wrapping Day 1.

The Congress was inaugurated on Day 2 in the presence of the following dignitaries - Dr. Rajesh Ingle (IEEE Chair, Pune Section), Dr. Satish Babu (Director, International Centre for Free and Open Source Software), Dr. Andre Oboler (CEO of the Online Hate Prevention Institute, Asia and Pacific Coordinator for the IEEE Computer Society and Chair of the Society's Students Award Committee globally), Dr. M. Ponnavaiko (Chair, IEEE India Council and Vice Chancellor, Bharath University, Chennai), Mr. Girish Khilari (Chair, IEEE CS Pune Section) and Mr. Rajat Moona (Director General, Centre for Development of Advanced Computing (C-DAC)).





During 12- 22 Feb "Credenz Tech Dayz" organized at PICT by IEEE Student branch, show casing guest seminars by reputed industry cognoscenti on trending technologies of today and tomorrow, across a wide horizon of topics.

The following seminars were conducted under Credenz Tech Dayz.

- 1. 12th February 2014: Introduction to GPU computing by Mr. Sanjeev Satoor from NVIDIA.
- 2. 13th February 2014: IT in health care by Mr. Mahesh Shinde from Syntel.
- 3. 17th February 2014: Robotics by Mr. Jayesh Jain from Whitespark.
- 4. 17th February 2014: Information Security by Mr. Anshul Abhang from Fluxonix.
- 5. 18th February 2014: Windows App Development by Mr. Nishant Rana from NVIDIA.
- 6. 20th February 2014: Career Guidance by Mr. TG Param from TIME.
- 7. 22nd February 2014: Search Engine Optimization by Mr. Anil Wangi from Maven Systems.
- 8. 22nd February 2014: Drivers by Mr. Gopal Krishna Tiwari from Red hat.

WOMEN's Day Celebration

International Women's Day was celebrated in PICT by the Women In Engineering (W.I.E.) Affinity Group of IEEE. IEEE members from other colleges were invited to the college. Discussion regarding the WIE chapter of IEEE took place and ideas to enhance the chapter were put up.

Some of the ideas which could be implemented were:

- 1) Introduction and establishment of WIE chapter in all colleges in Pune.
- 2) Initiative for conduction of panel talks and meetings with eminent women engineers.

WOMEN Techmakers Day

IEEE WIE Affinity Group Pune in collaboration with Google organized event "Women Techmakers day 2014" on 16th March 2014. Distinguished personalities like Lila Poonawala, Trupati Virat, Sukanaya, Aprana Joshi gave away motivational talks to audience. Around 70 women participated in the event including 12-15 women entrepreneurs.

UG Project Competition

Project Competition for UG Students was organized by IEEE Communication Society on 24 March, the competition center was distributed across PVG, IOIT, Cummins, RSCOE colleges.

The SCOE Project Competition

The Phase II Communication based project competition was held at Sinhgad College of Engineering, Pune on June 3, 2014..Out of 15 Project groups participated, top 6 were selected for first round and out of 6 project groups top 3 groups were nominated as winners.

The sponsorship for the first prize was provided by Mr. Ashok Karva, Mechatronic Systems Pvt. Ltd and the Second prize for the sponsorship was given by Dr. Vishwas Udpikar, Wavelet Pvt. Ltd, Pune.

Name of college	Rank	Name of student	
Modern COE	1	Meeta Rasal , Ashwini Patil	
VIIT, Pune	2	Sumit S Bhilare , Abhishek Binniwale	
JSCOE,	3	Atharv Kekare, Pranit Huddedar,	
Pune			
		Rohit Bagde	

The prize distribution ceremony of project competition held on Friday 08-08-2014, 6:00 p.m. at Institution of Engineers, Shivajinagar, Pune. All the students were present for the same. The Third prize was given by Prof. Vivek Deshpande, Chairman IEEE ComSoc Chapter, Pune section, Second prize by Dr. Rajesh Ingle, Chairman IEEE Pune section and First prize by Mr. Karwa, Mechatronics Systems Pvt. Ltd, Pune.

The function ended by a vote of thanks proposed by Mr. Makarand Jadhav, Secretary ComSoc Chapter, Pune section. Prof. Mandar Khurjekar and Dr. A. S.Tavildar - Ex - Chairman ComSoc chapter were present to grace the functions along with parents and office bearers of IEEE Pune section.

RF/IC Analog & Digital Design Workshop

JSCOE IEEE Student branch organized a two day workshop on "RF/IC ANALOG AND DIGITAL DESIGN" on 1st & 2nd August 2014 in Jayawantrao Sawant college of engineering Pune.

Prof.G.S.Mani, Vice chairperson IEEE Pune Section presided over the inaugural function which was attended by Dr.M.G.Jadhav, Principal JSCOE and heads of Departments of the college. During his speech Prof.G.S.Mani talked about the role of such workshops in taking up design challenges. He also elaborated on the efforts of IEEE in nourishing better carrier for students. Prof.V.M.Sardar congratulated the continuous efforts taken by IEEE counselor & all IEEE student branch office bearers for their untiring efforts. Mr.Rohit Bagde and other students, who had brought glory to the college in the IEEE Communication Project Competition 2014 were congratulated. While giving vote of thanks, Prof.Tushar Mote, IEEE Student Counselor mentioned that there are 57 student members as on that date.

The workshop was conducted by Mrs. Renuka Wekhande, Mr.Ajay Sahale & Mr.Gaurav Sune of S.M. Technologies, a sister Concern of RFIC Solutions Inc., USA and S.M. Wireless Solutions Pvt. Ltd, Nagpur. The two day workshop covered the following topics: Introduction and applications of Microwind, Design and Implementation of Inverter, Implementation of different types of Gates, Introduction to differential Amplifiers using Microwind and Introduction and Implementation of Advanced VLSI Circuits. As part of the workshop demonstrations of Low Noise Amplifier and RF Oscillator were arranged on a Spectrum Analyser.

The closing function was held on 2nd August when certificates were distributed to all 30 participants including 4 staff members. All participants expressed happiness on the conduct of the workshop and thanked the organizers and resource persons. The IEEE Pune Section sanctioned the amount Rs 10,000 for the workshop. Due to these support IEEE students as well as staff members gets benefited.

On 08 Feb "Unravel" (Technical Treasure Hunt) was organized at PICT by IEEE Student branch 60 teams participated in it.

• Awards

Bank : Bank of India A/c Name : IEEE Pune Sect	ion Branch: Swargate Pune 411009	
Description of Charges Total Amount in		
Conference / meeting charges	4,02,227.00	
Membership/ awards	46,076.00	
Supportexpenses to Society chapter/student branches	3,85,311.00	
Travelling expenses	1,60,142.00	
Rent for meeting rooms and Workshop Halls	12,797.00	
Legal / professional charges	17,647.00	
Total Expenditure	10,24,200.00	
Total Incoming from GIEEE and other Sponsorships	15,09,239.35	
BALANCE ON HAND	4,85,039.35	

IEEE Pune Section got R10 MGA Award

Dr Rajesh Ingle Chairman IEEE Pune section got R10 Outstanding Branch Counselor Award

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

• Summary (as per submitted L50)

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

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

Member Title	Number
Fellows	02
Life members	01
Senior members	41
Members	352
Student members	679
Affiliate members	09
Associate members	93
Total	1177

Summary

IEEE Pune Section took initiative of Student Awareness Program which is being organized by IEEE Pune Section Student Branches of various Engineering Colleges in Pune, in order to create awareness about IEEE amongst Student.

During INDICON 2014, stall was placed for IEEE Membership development initiative, where in the professionals and students were informed about IEEE. Also offer was presented them for on spot registration would get them 1 society free.

B.2 Chapter Activities

• Total number of Chapters in the Section

IEEE Pune Section is having 6 chapters till end of year 2014.

• Number of Chapters formed in the current year

Two new chapters were added newly in IEEE Pune Section EDC Society and Instrumentation Society

• **Number of active Chapters** (Chapters who have reported required number of meetings during the year)

All the chapters have been active and have reported required number of meetings during this year except the chapters which are newly formed, as they were formed in later part of year.

• **Summary of Chapter activities** (Chapter wise with attachment table/information)

IEEE Computer Society Chapter

January 2014 –

- 1. New committee is formed for the year 2014. Assumed responsibilities of Computer Society, Pune Section.
- 2. Met with earlier committee members as well as Execom members of Pune Section to decide course of action for 2014

February 2014 –

- 1. Dr Rajeev Joshi, research staff member at T. J. Watson research center, IBM visited India this month. His lecture on Technology Circuit Co-Design for Nano-Scale Era in VLSI organized at C-DAC. It was well received as 83 members attended it. It was also organized at Fergusson College and Science / Electronics students took full advantage of this opportunity.
- 2. It was decided that All India Computer Society Student Congress (AICSSC) 2014 will be organized by Computer Society Pune Section alongside INDICON 2014. USD 2500 were approved for this event.
- Also discussed that CDAC and Computer Society will organize one day Workshop for PG students

March 2014 -

- 1. The core organizing committee (EXECOM) formed, the committee comprised of Dr. D.J. Doke, Dr. Rajesh Ingle, Dr Y.P Nerkar, Dr Mandar Khurjekar, Mr. Gorakhnath Ghadage, Dr G S Mani, Mr Girish Khilari and Dr. Yogesh Dandawate and few others.
- 2. Chair IEEE Computer Society, Pune Section, informed Execom that they are planning Student congress at the time of Indicon2014. Also are participating in the IEEE Computer society SWEBOK (Software Engineering Body of Knowledge) India initiative. This initiative is about evolutions in software engineering processes.
- 3. TechFest event was organized in CDAC on 30-31 March 2014.

April 2014 –

- 1. A guest Lecture on COMPUTATIONAL INTELLIGENCE" under the IEEE student Branch was organized by Department of Electronics and Telecommunication for IEEE members, ME faculty and students of PCCOE on 7th April. 2014. About Fifty participants attended the guest lecture by Prof. Atul Negi (Ex.chair,IEEE Hyderabad section). In his session, he discussed and explained various technical and research aspects of Computational intelligence. It created awareness about technological challenges & opportunities in the area of Computational intelligence.
- 2. Similar lecture was organized at Pune Institute Of Computer Technology by IEEE student branch. Both the lectures at PCCOE and PICT were technically sponsored by IEEE Computer Society of Pune Section

1. Computer society office bearer were met to discuss way forward for the society and also decided planning activity for AICSSC -2014

June 2014 -

- 1. IEEE Computer society to organize the student congress where K Shankar's paper presentation to be arranged.
- 2. There was a request from CSI to collaborate with ICACCI 2014, Execom approves the technical sponsorship. Girish Khilari from IEEE Cumputer Society Pune section to coordinate on this with CSI.
- 3. Dr Suraj Kothari Professor at Department of Electrical and Computer Engineering from IOWA State University addressed CDAC gathering. He also addressed students and staff members of SYMBIOSYS on model-based software engineering using Atlas. Both events were organized by Computer Society Pune chapter.
- 4. Dr Vidyasagar Potdar, Senior Research Fellow at Curtin University Australia, conducted a lecture at CDAC on How much money do spammers make from your website? A study to find out spammers revenue

July 2014 -

1. The first meeting of IEEE Computer Society and Student Congress organizing committee was organized at YASHADA. The planning for student congress was discussed in details. Plan was made and PICT Student branch was involved in executing the plan.

August 2014 -

- 1. Meeting with PICT student branch members to take a stock on Student congress activities
- 2. Reviewed action items with organizing committee of AICSSC 2014

September 2014 –

- Chairman, Pune Section informed Execom that India Council has reservation on including the doctoral symposium in IEEE INDICON 2014. It was resolved by Execom upon detailed discussions that Doctoral Symposium to be the concurrent event, organized by IEEE Pune Section and will not be in scope of INDICON 2014. It will be part of Student Congress.
- 2. Attended CREDENZ 2014 at PICT and met branch members to discuss the progress of Student Congress

October 2014 –

1. IEEE INDICON 2014 committee and Student Congress committee have been meeting every Saturday to access the progress of organization, administration of the events. The chairs of publicity, program, tutorials discussed about the strategies to be followed. The Organizing committees are synchronizing and monitoring all the activities upon discussion among themselves. The organization of IEEE INDICON 2014 and AICSSC 2014 were on track.

November 2014 –

1. Promotional activities for All India IEEE Computer Society Student Congress are conducted. The AICSSC to be conducted in the same venue of INDICON 2014 during 13-14 Dec 2014. Earlier 13th event / Work-shop was planned at Physics department in Pune University.

2. Thomas Conte, Andre Oboler and Angela Burgess are going to be there for the inauguration of **AICSSC** 2014

December 2014 –

- 1. All India Computer Society Student Congress (AICSSC) 2014 took place quite successfully on 13th and 14th Dec 2014 at YASHADA Pune. More than 100 students from all parts of India registered for the event. Tom Conte, Chairman Computer Society 2015, Angela Burgess Executive Director Computer Society and Andre Oboler DLP, Melbourne Australia, Prof Dr Suresh Kothari from IOWA state University were some of the prominent speakers for the event. One day workshop on IoT by Industry experts was conducted and well received by students.
- 2. Year ended on a high note with eventful and successful year with plenty of technical events and activities with prominent personalities from all over globe and participants from all over INDIA.

IEEE PES/IAS Chapter

Date	Description / Title	# of Attendees Total / PES	Type (Tech., Admin. Social, other)
Mar 07, 2014	Lecture on Power System Dsiturbance	150/06	Technical
May 26, 2014	Lecture on Development of LED Bulbs	40/12	Technical
July 17 2014	Lecture on Power Quality	120/8	Technical
Aug 1-2 2014	FDP on Power Quality Monitoring and Mitigation	100/15	Technical
Nov 19- 21	2014 IEEE Workshop on Electrical Safety in India	164/30	Technical

IEEE Singal Processing Chapter

Activity No. 1.

Name of event: Introduction to Matlab GUI and Simulink (Hands on Session)

Date of event: 20/09/14

Time of the event: 10.00am to 5.00pm

Guest Attendance : 25 ; IEEE Member Attendance : 10

Objective of the event

To encourage students to build Matlab GUI and use of Simulink
 To help the students to improve their graphical presentation

Summary of the detailed event

On 20th Sep'14, "Introduction to Matlab GUI and Simulink" workshop was organized by IEEE Signal Processing Society Chapter, Pune Section and PES's Modern College of Engineering, Pune.

Mr. Nachiket Kulkarni from Idea delivered a session on basics of Matlab GUI, how to design it, what are the different tools available and how it is useful in the application.

Mr. Shounak Sharangpani from TwinTech Control System delivered a session on Simulink and its applications.

Students learnt the theoretical aspects of GUI and Simulink along with the hands on experience.

The workshop was organized for the Post Graduate students. Workshop benefitted students for overall understanding of Matlab GUI and Simulink.

Activity No. 2:

Name of event: Emerging trends in Nano Electronics for VLSI Applications

Date of event: 14/08/14

Time of the event: 11.00 to 13.00

Guest Attendance: 30; IEEE Member Attendance: 15

Objective of the event

To encourage students to build interest in Nano Electronics
To help the students to apply their ideas in Nano research

Summary of the detailed event

On 14th Aug'14, a guest lecture on "Emerging trends in Nano Electronics for VLSI Applications" was organized by Signal Processing Society Chapter, IEEE, Pune Section. Mr. Amit Gokhale from Sasken delivered a session the topic of "Emerging trends in Nano Electronics for VLSI Applications". He made the student know about the basic ideas of VLSI and its fabrication techniques in Nano electronics. He talked about those technologies essential for Single electron transistor. He also guided the students to fabricate Nano electronics device by using various Nano materials like insulators, semiconductors.

Activity No. 3:

Name of event: Expert talk on "Problem Solving techniques in Image Processing using Fuzzy Logic"

Date of event: 15/07/14

Time of the event: 12.00 to 2.00

Guest Attendance : 40 ; IEEE Member Attendance : 10

Objective of the event

To encourage students to build interest in Fuzzy Logic

• To help the students to apply this logic in image processing applications

Summary of the detailed event

On 15th July'14, expert talk on "Problem Solving techniques in Image Processing using Fuzzy Logic" was organized by IEEE, Pune Section and PES's Modern College of Engineering, Pune.

Mr. Jayesh Akole from Wipro delivers a session the topic of "Problem solving techniques in Image Processing using Fuzzy logic". He delivers a talk on fuzzy logic concepts, algorithms and its applications like Mining, Speech processing and Image Processing.

Activity No. 4:

Name of event: 2 days workshop on "Machine learning and computer vision"

Date of event: 22/09/14 to 23/09/14 **Time of the event**: 10.00 to 5.00

Guest Attendance : 40 ; IEEE Member Attendance : 12

Name of the Speaker: Prof. Dr. Y. Dandawate, VIIT college, Pune

Date: 22/09/14

Topic Name: Introduction of Computer Vision

Description: In this session, the speaker introduced about the subject Computer

Vision in brief. The session covered

- > Difference between computer vision and human vision.
- ➤ All real world applications of computer vision.
- Challenges in computer vision.
- Connections of computer vision to other disciplines. The session concluded with the scope of computer vision from research perspective.

Name of the Speaker: Mr. Mandar Kulkarni, Touch Magix Media, Pune

Date: 22/09/14

Topic Name: Approaches and Applications in Range Imaging

Description: The session covered below topics in brief by the speaker:

- ➤ Introduction to Binocular Disparity and other methods of depth perception.
- > Types of Range Imaging approaches.
- ➤ Basics, advantages and disadvantages of various types of Range Imaging approaches.

Name of the Speaker: Mr. Jitesh Butala, IFM EnggPvt. Ltd., Pune

Date: 22/09/14

Topic Name: PMD 3D technology and its applications

Description: The session focused on the topics listed below:

- ➤ Different 3D technologies, their principles, pros and cons.
- > PMD cell basics and PMD cell construction.
- > Depth measurement techniques in PMD.
- > Applications of PMD.

Name of the Speaker: Mr. Prithviraj Jadhav, Image Provision Technology, Pune

Date: 22/09/14

Topic Name: Image Processing in Industrial Technology

Description: The speaker discussed about various image processing application areas with details

- > Pharmaceutical industry
- > Agricultural research
- Medical science
- ➤ 3D Image Analysis
- Industrial vision

Name of the Speaker: Mr. Amit Kale, ViAN Technologies, Pune

Date: 23/09/14

Topic Name: Machine Learning Algorithms and OCR

Description:In this session, the speaker introduced about the machine learning algorithms for multiclass object detection and OCR. The session covered:

- ➤ Basics and formulation of Boosting Algorithm
- Multiclass Boosting Algorithm
- Multiclass object detection
- > Feature extraction
- > Challenges
- > Future work

Name of the Speaker: Prof. M.T. Jadhav ,VIIT ,Pune

Date:23/09/14

Topic Name: Camera Caliibration

Description: The session covered below topics in brief by the speaker:

- > Camera basics
- > Transformation Between Frames
- ➤ Homogeneous co-ordinates system

Camera Matrix

Camera External Parameters

Name of the Speaker: Mr. Mandar Joshi, Mr. Ramkrishna Bodhula, Wavelet

Group

Date: 23/09/14

Topic Name: Demo On Real Time Image Processing Applications Using

DIPLAB

Description: In this session, the speaker introduced about the DIPLAB SOFTWARE and Image Processing Applications. The session covered:

➤ Introduction to WT-DIPLAB 1.0 Software

- ➤ ADSP-BF561 architecture
- Demos of Real Time Applications of Image Processing Based On Sobel Edge Detection
- > PTZ Camera
- > OTSU Thresholding
- Video Processor

Name of the Speaker: Dr.S.S. Kadam, CDAC

Date:23/09/14

Topic Name: Shape Representation And Description

Description: The speaker discussed about various Shape Representation And Description in Image Processing and their details.

- ➤ External And Internal Characteristics Of Representation
- ➤ Shape Representation Using Chain Codes and skeletons
- > Types Of Descriptors
- Classification Of Representation And Description

Activity No. 5:

Name of event: Guest lecture on "Signal Processing Techniques for Dynamic Spectrum Access in Cognitive Radio"

Date of event: Saturday, 29/09/2014 **Time of the event**: 11.00am to 1.00pm

Guest Attendance : 30 ; IEEE Member Attendance : 7

Resourse Person: Dr. Rishikesh Venkataraman, Technical Architect, Tech Mahindra, Pune.

Summary of Lecture:

In this lecture, Dr. Rishikesh Venkataraman given a brief overview of the different signal processing techniques for Dynamic Spectrum Access(DSA) in the Cognitive Radio Network(CRN). Initially he discussed about the need, importance and challenges for spectrum sensing in CRN at physical layer. Then he elaborated on few basic techiques giving the main priciple behind it. A comparion of various techniques elaborated on which techniques can be useful for accessing which spectrum band. While concluding the lecture, Dr. Venkataraman highlighted the various areas of research in this field.

The lecture was very useful for the PG students and Research scholors as it gave an ensight into the a new domain for research for signal processing PG students.

Activity No. 6:

Name of event: Guest Seminar on "A brief overview of NI USRP2920: A testbed for implementation of Software Defined Radio"

Date of event: Saturday, 26/07/2014 **Time of the event**: 12.00am to 2.00pm

Guest Attendance: 35; IEEE Member Attendance: 8

Resourse Person: Mr. Pranit Pol, Trident Tech Labs, Pune. Summary of the activity:

A Seminar on "A brief overview of NI USRP2920: A testbed for implementation of Software Defined Radio(SDR)"was arranged for PG students on 26/07/2014. The main objective was to give an awareness about the high end hardwares/softwares available for implementation of latest technology. In this seminar, Mr. Pol has introduced in detail the NI USRP2920 testbed which is a very useful hardware made available for testing, implementation, and experimentation of SDR. The is hardware is supported with the user interface using NI Labview software which makes it very easy to implement SDR and CR. The seminar was very interactive and students gained through it.

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

B.4 Students Activities

• Total number of Student Branches in the Section

There are 21 Student Branches in IEEE Pune Section

• Number of Student Branches formed in the current year

In the year 2014 2 new Student Branches were formed.

• **Section level student activities** (student congress, paper and other contests, awards etc)

IEEE Pune Section Organized All India Computer Society Student Congress on 13-14 Dec 2014. IEEE Student Branches in IEEE Pune Sections, Computer Society of IEEE Pune Section along with IEEE PICT Student Branch actively participated in organization of the student congress.

• **Number of active Student Branches** (Student Branches who have reported required number of meetings during the year)

This year IEEE Student Branches reported the required number of meetings and also reported on the activities performed by student branches, the following is the summary of the same.

• Summary of Student Branch activities (Student Branch wise with attachment table/information)

IEEE Student Branch - PVG COET

Total 3 technical activities where we conducted and participated in year 2014 are,

1. A lecture on Power System Disturbances was organized on 7th March 2014 by PES -IAS chapter IEEE Pune Section at PVG's College of Engineering &

- Technology, Pune. Shri. V.L. Sonavane, member, Maharashtra Electricity Regulatory Commission had delivered speech. Attendees 150 and 6 IEEE members.
- 2. Expert lecture on Power Quality Issues and Mitigation Methods was organized by Dept of Electrical Engineering PVG's COET on 17 July 2014. Dr. R. Venkatesh had delivered Speech. 120 participant and 8 IEEE members had attended the same.
- 3. 2014 Workshop on Electrical Safety in India was organized during 19-21 November 2014 at Hotel Le Meridien, Pune. The workshop was inaugurated by Dr. Blake Lloyd IEEE IAS President. 168 Participant have attendee the same.

IEEE Student Branch of S.C.O.E. Activity Report Year 2014.

Following activities were conducted during year 2013-14.

- 1) **LED Matrix Workshop** LED Matrix Workshop for S.E. and T. E. students was organized to introduce AVR Microcontroller and based application of LED Matrix. Entry fees was Rs. 1800/- and the students were given Microcontroller kit. It was organized on 18th and 19th January ,2014.
- 2) **C coding competition** C coding competition was organized for S.E. students. Ability to write C code was rested. There were two rounds, MCQ round and writing efficient C coding. 30 students have participated and Prizes of Rs. 300/- and Rs. 200/- were awarded. It was organized on 24th February,2014.
- 3) **Mini project Competition** To encourage good quality mini project, mini project competition was organized for T.E. students. All T.E. students have participated. Prizes of Rs. 500/-, Rs. 300/- and Rs. 200/- were awarded. It was organized on 24th, to 27th March, 2014.
- 4) "**Brain Twister** Quiz Competition" The Quiz (Technical and Nontechnical) has been organized for S. E. students. 28 Teams have participated. Entry fees for competition is Rs. 50/-. There were 3 rounds, MCQ round, General question and Logo round and rapid fire round. It was organized on 19th August, 2014.

IEEE Student Branch of J.S.C.O.E. Activity Report Year 2014.

"IEEE Communication Based Project Competition 2014"

Every year IEEE Communication Society under IEEE Pune section organizes a Communication Based Project Competition. This year various engineering colleges participated for the same. The total participated groups were around 65. Three phases of evaluation was done. The selection of total sixty five groups is done solely on communication based projects. In phase –I evaluation done at three different engineering colleges at RSCOE ,PVG & AISSPMS on 9th April 2014, were total fifteen groups shortlisted for Phase –II Evaluation. On 3rd June Phase –II evaluation did under industry & Academic experience persons. The three projects shortlisted as winner team. The Jayawantrao Sawant College of Engineering (JSCOE) grabs the third winning position along with Rs 3000 cash prize. The Students from E&TC department of JSCOE presented the project "Bridge Health Monitoring System". The participated students are Mr.Pranit Huddedar, Mr.Atharv Kekare & Mr.Rohit Bagde from BE E&TC of JSCOE. The Campus director Dr.K.N.Barbole, Principal Dr.M.G.Jadhav,HOD Prof.V.M.Sardar, Mentor Prof.M.B.Tadwalkar , JSCOE IEEE Counselor Prof.T.S.Mote congratulated the winning team.

The prize distribution held at IETE centre, Shivajinagar, Pune on 8th August 2014. The Chairperson for IEEE Pune section Dr.Rajesh Ingle congratulated & distributed prize for winning team. The All IEEE Pune section executive members were present for prize distribution.



IEEE Student Branch of DYPMCA. Activity Report Year 2014.

January - December 2014

Meetings conducted in the academic year.

	Weetings conducted in the deddenine year.				
Sr.	Date	Important Points Discussed			
No.					
1		Discussion of various activities conducted by DYPIMCA-IEEE Student Branch for the			
	12/02/2014	year 2013.			
		Renewal of Student Membership of the branch for the year 2014.			
2.	24/04/2014	Discussion for improving the utilization of IEEE journals subscribed by the institute			
		Planning for various technical events to be organized in association with IEEE Pune			
		Section.			
3.	03/11/2014	Planning of IEEE Conference to be held in 2016.			
		Planning to have meeting with Dr. Rajesh Ingle, Chair, IEEE Pune Section.			
		Seminar pertaining to how to organize IEEE Conference.			

Activities organized in the academic year: Workshop on Mobile Computing:

Workshop on Mobile Computing was organized from 6th January to 10th January 2014 with the objective to keep faculties and students updated with fundamental as well as core knowledge of Mobile Computing. The Institute invited experienced resource persons Mr. Sandip Chaudhari and Mr. Yogesh Mahajan from, Beacon Edutech, Pune. Both the trainers were highly experienced in Mobile Communication and Mobile computing. The workshop provided knowledge about what is mobile computing, how it can be used to develop simple application for Android.

Workshop on Mobile Computing by Mr. Sandeep Chaudhari, Mr. Yogesh Mahajan, Beacon Edutech

National Conference on Recent Trends in Management & Computing (RTMC 2014)
Padmashree Dr. D. Y. Patil Institute of Master of Computer Applications organized
National Conference on Recent trends in Management and Computing on 17th & 18th
January, 2014 at its Akurdi, Pune campus. The conference aims to bring together
researchers, academicians, scholars and students to exchange and share their experiences
and new ideas about all aspects of recent trends in management, information technology
and computers.

Resource persons:

Mr. Rajesh Aggrawal Dr. E. B. Khedkar Secretary, Department of IT, Govt. of Maharashtra Dean, Faculty of Management, University of Pune

Mr. Shekhar Sahastrabuddhe Dr. Rajesh Ingle Dr. Harold Andrew Patrick Dr. R.K. Jena Dr. Debajyoti Mukhopadhyay Dr. B. M. Ghodeswar

Dr (Capt.) (Retd.) C M Chitale

Dr. Anil Keskar Ms. Padmini Sundaram Regional Vice President, CSI, Maharashtra & Goa Chairman, IEEE Pune Section Professor & Head – OB &HRM, Christ University, Bangalore Associate Professor, IMT, Nagpur Dean – R & D, MIT Group of Institutions, Pune Professor, National Institute of Industrial Engineering[NITIE], Mumbai

Dean, Faculty of Management, Professor at Department of Management Sciences (PUMBA), University of Pune Dean Academics, Symbiosis University

Former Banker, Associate Sapient Wealth Advisors and Brokers Pvt. Ltd National Core Team member CII-Young Indians (Innovations and Entrepreneurship) Independent Financial and Behavioral Trainer

Technical Event- Kalavrutti – Magazine Cover Page Designing Competition:
Computer have touched each aspect of our lives. It is essential that we value and recognize artist's contributions to our cultural life, and give them the support they need to create their work. With this idea, the institute has organized "Kalavrutti- 2014" as Technical Event from 7th August – 8th August 2014 to foster student to explore their talent. Quiz competition and Magazine Cover Page design competitions were organized.

Technical Event- Career Guidance at the time of Induction Program:

Prof. Rajesh Math, Director exhorted the students to be focused & develop work-specific skills for the time ahead. Prof. Neha Sharma's, Dy. Director emphasized the need of hard work and good performance throughout the curriculum so that the students can be transformed into dynamic professionals. Prof. Nilam Upasani, HoD, emphasized on the importance of technical skills and soft skills. Prof. Kavita Suryawanshi, Chairman, Student/ Staff Activity Body, informed about the various technical-non technical, co-curricular and Extra-curricular activities organized by the committee to help students to enhance their existing skills, to improve the personality and to expose the hidden talent among them. Prof Sushrish Toknekar, Placement Officer, shared that the mission of placement cell is not only to get a right job, but guides each of its students to get into the right career. It is very essential to inform the right career opportunities during the induction. Parents were also invited for this career guidance program.

Lamp lighting by parents

Technical Event- Improve it 2014: Improve it 2014 which comprised of sessions on Image Management, English communication skill and Advanced Technologies. Image Management- The session headed by Ms. Kuiljiet Uppal, CEO – Krea Enterprises, Pune on Image Management. Speaker started the session by giving definition to the image management as it is about creating authentic, appropriate, attractive and affordable image. She stressed that the key elements of one's image are dressing, grooming, etiquette, weight management, verbal & vocal communication. She suggested very effective and applicable tips on how to improve his/her self image and self confidence. She emphasized on self awareness, self esteem, and self assessment and to remove the internal barriers that keeps one from doing his/her best.

English communication skill - The session was taken by Dr. Himanshi Ochani, Founder, Think English Academy, Pune. She emphasized on the importance of English communication skill for all aspects of our life from professional life to social gathering. Speaker emphasizes some of the points on how to learn good English. The first and most important thing is needed to achieve the goal is incredible passion. To create passion, one need very compelling reasons to learn English like new job, dream house, dream car, dream life. The second key to super-fast learning and incredible intensity is to focus on English speaking and writing with correct vocabulary.

Advanced Technologies- Mr. Atul Kahate held session on Advanced Technologies and various career options available. He has started the discussion by giving overview of economical crisis in world wide as well as in India in forth coming years. He also discussed some advanced networking concepts like network security, hacking, testing and user interface development especially SMAC which is abbreviated as follows: S: Social media, M: Mobile Computing, A: Analytic data, C: Cloud computing.

IEEE Student Branch of BVDUCOE.
Activity Report Year 2014.

IEEE Event Calendar (2014)					
Sr No.	Event Name	Conducted By	Event Date		
1	IEEE Awareness Program	IEEE BVCOEP,Pune	Aug-14		
2	Cuestionario'15	IEEE BVCOEP, Pune	Oct-14		

B.5 Affinity Group Activities

- Young Professional (YP)
- Women In Engineering (WIE)

WOMEN's Day Celebration

International Women's Day was celebrated in PICT by the Women In Engineering (W.I.E.) Affinity Group of IEEE. IEEE members from other colleges were invited to the college. Discussion regarding the WIE chapter of IEEE took place and ideas to enhance the chapter were put up.

Some of the ideas which could be implemented were:

- 1) Introduction and establishment of WIE chapter in all colleges in Pune.
- 2) Initiative for conduction of panel talks and meetings with eminent women engineers.

WOMEN Techmakers Day

IEEE WIE Affinity Group Pune in collaboration with Google organized event "Women Techmakers day 2014" on 16th March 2014. Distinguished personalities like Lila Poonawala, Trupati Virat, Sukanaya, Aprana Joshi gave away motivational talks to audience. Around 70 women participated in the event including 12-15 women entrepreneurs.

• Life Member

B.6 Awards & Recognition Activities

• Award constituted by the Section

IEEE Pune Section got R10 MGA Award

• Award(s) received from R10

Dr Rajesh Ingle Chairman IEEE Pune section got R10 Outstanding Branch Counselor Award

Award(s) received from IEEE HQ

Prof. Mandar Khurjekar Treasurer IEEE Pune Section got Certificate of Appreciation for Notable Services and Contribution Award.

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

Newsletter

IEEE Pune Section Newsletter was published once in mid-2014 and next edition is under progress due to be published very soon.

• **Home Page of the Section** (give the URL and how often it is updated) http://www.ieeepunesection.org

It's generally updated monthly basis. Also when there are request by members / chapters to publish the contents.

• Other means of contacts with Section members

The Section members are generally communicated using the IEEE Lister Services via email.

The Annual general meetings and General Body Meetings

B.8 Industry Relations

- Membership growth and retention
- Activities for/with industrial members

B.9 Humanitarian Technology Activities

B.10 Community Activities

• IEEE Social activities

World Telecom and Information Society day was celebrated on jointly by IEEE, IETE, IEI @ IEI Shivajinagar Pune

International Women's day was celebrated by WIE, IEEE Pune Section in collaboration of PICT IEEE Student Branch.

PART C - OTHERS

C.1 Special Events

Can we add Nerd events here where under-previleges children are taught?

C.2 Relationship with National Societies

IEEE Pune Section supports the activities organized by CSI, IEI, IETE. Also actively participates in the activities organized by other national societies. Few of our execom members are active and office bearers in these national societies, i.e. Dr. Doke is Chair of IEI Pune Chapter, Dr. Rajesh Ingle, Secretary, Computer Society of India

C3. Collaboration with other IEEE Sections

IEEE Mumbai Section organized International Conference in Pune during earlier part of year 2014. IEEE Pune Section supported the conference, Chairman IEEE Pune Section represented IEEE Pune Section in this conference

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

IEEE Pune Section is Technical sponsors to the International/ National Conferences being organised in Pune Area. IEEE Pune Section is supporting and guiding the following conferences where IEEE Pune Section's Society/ societies is/ are involved.

IEEE Pune Section seeks the reports from all these conference on monthly basis and each conference is being discussed by Execom to assess the preparation of the conferences.

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

IEEE Pune Section is using IEEE Lister Service to communicate via email distribution lists. The DL have been created for EXECOM members and IEEE Pune Section members.

The EXECOM meetings are scheduled using google calendar which informs members in advance about meeting via SMS and email notification based on configurations.

C.6 Problems anticipated and 's for solutions, if any

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

- 1. Continuing the Awareness and Membership development Program
- 2. Continuing support and guidance to the conferences technically sponsored by IEEE Pune Section

D.2 Goals and Future Plans

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.