

Maharshi Karve Stree Shikshan Samstha's

Cummins College of Engineering for Women, Pune

An Autonomous Institute affiliated to Savitribai Phule Pune University KARVENAGAR, PUNE- 411052, India.

(University affiliation No. PU/PN/ENGG/087/1991, INDIA) Approved by All India Council for Technical Education (AICTE) National Assessment & Accreditation Council (NAAC) Grade-A



E & TC DEPARTMENT PRESENTS

TARANG

Volume - 12 | June 2017

Various Activities of the Department

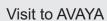
Lecture by Mr. Sunil Desai





Mr. Milind Jape addressing SE Students

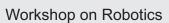








Visit to Doordarshan Kendra







Discourse

It gives us immense pleasure to present new edition of TARANG at the kickoff of new academic year!!

TARANG is a platform for our students whose minds are occupied by all technological things; yet they love to roam free in the realm of imagination and experience, to create a world of beauty in words. The articles 'Lady, Go Get It' and 'Quantom Computers' are the best example of this!

This issue of TARANG is indeed a reflection of the efforts taken by our ever enthusiastic staff members and students, in the past academic year 2016-17. We have tried our best to cronicle departmental activities as well as achievements of our students!

We heartily express our gratitude to Dr. Prachi Mukherji (HOD, E&TC) her valuable support and guidance. We are also grateful to all our readers and the contributors for all their support and making TARANG- a success.

Prof. Manasi Pathade
Prof. Preeti Shenolikar

Communiqué from HOD

It is indeed a pleasure that I write a few words about our Departmental Activities in the new and fresh edition of TARANG – a report of last full academic year 2016-17.

First of all, my congratulations to all the faculty members who completed their doctorates. In the past academic year, our faculty members arranged many workshops, seminars and guest lectures covering a wide variety of topics, thus enriching themselves and the students. BCUD sponsored National Seminar on 'Cyber Security and Evolving Technology', ISTE approved Short term training program on 'CMOS, Mixed Signal Radio Frequency VLSI Design' and IET mini project competition, are the key examples. Many industrial visits were also organized to bridge the gap between industry and academia. I appreciate the efforts taken by all faculty members for successful coordination of these events!!

My special congratulations to all students for not only proving their mettle in academics but also enthusiastically participating in different competitions and winning prizes.

Dr. Prachi Mukherji (HoD)

LADY, GO GET IT!

Vaishnavi Balambeed B.E. (E & TC A)

man interrupts you as you're trying to explain an idea at work. You sit down at a meeting only to be told by a male superior that you're best suited to take notes. You somehow are always the one who gets stuck organizing the office birthday party and running around trying to find good cupcakes. You worry that asking for a raise will come off as selfish or greedy or entitled.

Each one of these situations is an example of subtle sexism in the workplace. Taken in isolation, none of these things are life ruiners. But add them all together? You're looking at a long career full of wage losses, "mommy tracking," men getting credit for women's ideas, and women pitted against each other for the last seat at the table.

Sexism in education is clearly associated with sexism in the workplace. When women are expected to "stay in the home," they are unable to access the necessary educational resources to compete with men in the job market. If by chance they are able to secure a position, women may be less prepared educationally for the task, and thus draw lower wages.

In recent decades more women have entered the United States workforce. After WWII (from about 1947), about 30 percent of women were employed outside the home; today, at the start of the 21st century, the figure is well over 50 percent. (Some estimates approach 75 percent if "part time" jobs are included.) Yet women are far from treated equally on the job. Typically, they hold lower paying, lower status jobs than men. In fact, women may account for only 25 percent of the upper level managers in large corporations. And although half of the employees in the largest, most prestigious firms around the United States may be women, perhaps as few as 5 percent or less actually hold senior positions.

In general, women are underrepresented in the higher status, higher paying occupations, such as university teaching, law, engineering, and medicine. In contrast, women are over represented in the lower paying occupations, such as public school teaching, nursing, and secretarial work. In stereotypical female jobs, referred to as **women's ghettos**, women are subordinate to the positions of men. For example, executives supervise secretaries who are likely to be women, and lawyers supervise paralegals, who are also likely to be women.

Feminist Fight clubs

every month or so, a dozen of women in their 20s and 30s would gather and talk about their jobs. It was a fight club, except without the fighting and without the men.

The rules were simple: what was said in the group stayed in the group. Membership was based not on merit but on vagina. Once they were in, they were in: embraced and respected, encouraged with fist bumps and cat videos, but no cattiness. These were smart, ambitious women striving to "make it" in New York, a city that eats the soft alive. We had grown up in the era of girl power, when it was expected that

girls could be and do whatever they wanted. The gender war, they thought, was a battle won long ago. And yet each of them was stumbling into gender landmines at seemingly every turn, often ones we didn't even know existed.

When we pair the psychological evidence with the economic facts, the argument for gender equality is overwhelming. Research consistently shows that groups perform to a higher standard if the gender balance is even, or when women outnumber men. For example, Catalyst research found that companies with high-level female representation on boards significantly outperformed those with sustained low representation by 84% on return on sales, 60% on return on invested capital, and 46% on return on equity. The Women's Business Council predicts that we could add 10% (that is over £150bn) to our GDP by 2030 if all the women that wanted to work were employed.

In the long term encouraging women to participate in the labour market is vital to ensure economic growth at both micro and macro level. As we face an increasingly ageing population and the resulting shortage of skilled workers, it is fundamental that we also depend on high female employment and high wage returns in order to manage the skills deficit.

We are taking bigger and bigger steps towards providing more flexible workplaces, better parental leave policies and more chances for women to get back into the workplace. But these opportunities are wasted if our stereotypes and biases distort the way we evaluate others, and often to their disadvantage.

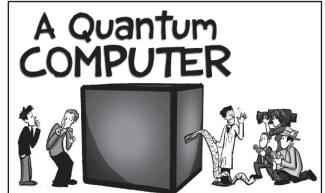
P.S Most part of this article are the actual excerpts picked from the research papers of various (glorious) women leaders, active feminists and wonder women!

Understanding Qubits and Quantum Computers

Aastha Vijay TE E & TC A (E & TC A)

ccording to definitions and terminologies this term might seem too complex to understand and

not a cup of tea of a normal layman isn't it? But, wait, I've got it on a simple platter for you and in a easy way! If the statement caught your attention, fasten your seatbelts as I take you on a ride to understand one of the most amazing inventions by far. If you're regularly updated with the know-hows of current technology, you'll be well aware that the advancements in the thinking capacity of humans has led to computer components of a size that equals the size of an atom. Now since we're talking computers, we know that the data processed by this great



machine deals with bits. Coming to bits, we'd enthusiastically utter that it's nothing but either '0' or '1'. But to put it more appropriately, 'bit' is the way of representing the output information of a simple transistor (as a switch with states viz. On and Off) which forms the basis of the logic gates which form as the basic foundational unit of registers, and the development continues. Ah! These very structures deal with combinations of such bits and that's how transaction of data/ information takes place on the device where I'm typing this article. But the speciality of the output of a transistor or let's say a logic gate is deterministic and not a random variable with a sample space. What I meant is that, output of an AND gate if both its inputs are 1, is predetermined to be 1 and so on! As the typical scale of a transistor today, is just about 14 nanometers, which is 500 times smaller than a blood cell. It'd not be very easy for an electron flow to be controlled by the transistor, considering that the size of the transistor switch just shrunk to the size of an atom. Voila! The electrons find themselves on the other side of the transistors (transistor switching power, just not on point anymore!), through Quantum Tunneling. It becomes ¹ very easy to crack passwords and rob bank accounts this way! "In realms of Quantum physics, bits are not at all relevant and our day to day computers make NO SENSE!"

To overcome these security and privacy barriers, scientists started to incorporate the usage of Qubits, as they've proven to be a game changer leading to Quantum Computers. A gubit is way ahead than a normal bit as its state is not deterministic, called as a 2 level quantum system whose state. whether '1' or '0' can't be predicted until measured. Also, the proportions of the system output, to turn out to be on a level '1' or '0' are neither equal nor deterministic. This is called superposition. In short, A Qubit is a complete system in itself, which when travelling can be polarised in any state (a superposition) until the instant it is measured. More surprisingly, if a 4 bit system can store 16 combinations of information, a qubit system can have all these 16 combinations at once. And guess what, this number grows exponentially with an addition of each extra Qubit. Quantum computers deal with qubits AND Quantum gates, which have a mind bending characteristic to give out a totally unique set (new superposition) of combinations when a set of qubits are passed through these gates! Using the property of entanglement and the quantum gates, i.e. finding out the state of one of the partners in the system, looking at the final state of one qubit, it's possible to make zillions of calculations all at the same time!!² But can measure only one result at a time, but very very accurately as there are no trial and error methods involved in Quantum computers like the traditional computers. Recall the incident where you have to make Siri, cortana etc to understand what you said for at least 2-3 3 times? This bug is striked out.

^{1 *}In physics, a quantum (plural: quanta) is the minimum amount of any physical entity involved in an interaction or in simpler terms, a photon packet.

² So taking you back to transistors, it can be seen upon as a switch that passes or blocks flow of electrons and a computer is basically made up of units which can be considered as similar to a group of 6 yr old children solving unit's place maths! Amazing, isn't it? These children can add, and thus subtract and since they can do these, they can multiply. Once, you can MULTIPLY, any darn thing on this earth is possible. Think!

³ Personal assistants by Apple Inc, Microsoft respectively.

* Department Activities *

We are very happy to congratulate you for getting rewarded a Ph.D. !!

- ⋆ Dr. Sharda Ohatkar
- ⋆ Dr. Shubhangi Choudhary
- ⋆ Dr. Bageshree Pathak
- ⋆ Dr. Mrudul Dixit
- ⋆ Dr. Anita Patil

• Research Publications

Sr. No	Author Name	Paper Title	Name of Journal / Conference Proceedings	Volume, Issue No., & Page no.	Year of Publication	ISSN / ISBN No.
1	Dr. M. B. Khambete	Camouflaged Target Detection and tracking using thermal infrared and visible spectrum imaging	Springer series book - Advances in Intelligent Systems and Computing	Vol-530	September 2016	Scopus/DOI:10.1007 / 978-3-319-47952-1_15
2	Dr. M. B. Khambete	No-Reference Perceived Image Quality algorithm for Demosaiced Images	International Journal of Advanced Computer Science and Applications (IJACSA)	Vol. 7, No. 1 pp:285-289	2016	DOI: 10.14569/ IJACSA.2016.07013
3	Dr. M. B. Khambete	Using Differential Morphological Profiles for Microaneurysm Detection in Diabetic Retinal Fundus Images	IConSIP 2016		2016	
4	Dr. M. B. Khambete	Perceived No- Reference Image Quality measurement for chromatic aberration	Journal of Electronic Imaging	Volume- 25, Issue 2	March 2016	DOI: 10.1117/ 1.JEI.25.2.023004
5	Dr. Prachi Mukherji	Improved Microstrip Patch Antenna with Enhanced Bandwidth, Efficiency and REduced Return Loss Using DGS	IEEE International Coference WISPNET	Pp: 2509- 2512	2017	

Sr. No	Author Name	Paper Title	Name of Journal / Conference Proceedings	Volume, Issue No., & Page no.	Year of Publication	ISSN / ISBN No.
6	Dr. S. N. Ohatkar	ABC and TLBO Technique for Evaluating Data rate in Wireless Network"	International Conference on Smart Trends for Information Technology and Computer Communications, Jaipur, 6-7th August 2016	pp. 390 – 399	2016	DOI: 10.1007/978- 981-10-3433-6_47
7	Dr. S. N. Ohatkar	Interference Minimization for Hybrid Channel Allocation in Cellular Network with Swarm Intelligence	The 2nd International Conference on Information and Communication Technology for Intelligent Systems (ICTIS 2017), Ahmedabad, India.		March 25 - 26, 2017	
8	Dr. B.V. Pathak	Analysis of Speech Signals Using Excitation Source Information	International Conference on Micro-electronics and Telecommunication Engineering, Calcutta, ICME- 2016			978-1-5090-3411-6.
9	Dr.B.V. Pathak	Comparison between CAPTCHA Techniques for Text based, Graphics based and Audio based Text based, Graphics based and Audio based and Audio based methods.	IJEECS International Journal of Electrical , Electronics and Computer System	vol:05 issue 1	2017	
10	Dr. B.V. Pathak	Application of three different Artificial Neural Network Architectures for Voice Conversion	Information Systems Design and Intelligent Applications Volume 434 of the series Advances in Intelligent Systems and Computing	Volume 2, pp 237-246	February 2016	Print ISBN 978-81-322-2750-2 Online ISBN 978-81-322-2752-6 Springer DOI: 10.1007/978-81- 322-2752-6-23

Sr. No	Author Name	Paper Title	Name of Journal / Conference Proceedings	Volume, Issue No., & Page no.	Year of Publication	ISSN / ISBN No.
11	Prof. A.R. Khedkar	Root Raised Cosine Pulse Shape Based ICI Suppression in OFDM System for Rayleigh Multipath Channel	International Journal of Engineering and Technology	Volume 8 Issue 6, pp 2795-2799	2016	ISSN: 0975-4024
12	Prof. S.L. Sahare	Novel Approach for Designing Step Frequency Continuous Wave Ground Penetrating Radar For Soil Quality Measurement using Simulation Tools	6th IEEE International Conference on Communication and Signal Processing, Chennai		6th-8th April 2017	
13	Dr. M.A. Dixit	Network Traffic Intrusion Detection system using Fuzzy Logic	International Conference on Internet of things Next generation Networks nad cloud computing, SKNCOE, Pune		2017	BEST PAPER AWARD
14	Prof. M.K. Pote	Improved Microstrip Patch Antenna with Enhanced Bandwidth, Efficiency and REduced Return Loss Using DGS	IEEE International Conference WISPNET, Chennai	2509-2512	2017	978-1-5090-4442-9/17
15	Prof. M.V. Pathade	Moving Object Detection, Tracking, People Counting and Speed Measurement	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering	Volume 4 Issue 7	2016	ISSN (Online) 2321 – 2004 ISSN (Print) 2321 – 5526
16	Prof. S.A. Potdar.	Interactive Interface Between Human and Computer Through Pattern Recognition	International Engineerng Research Journal	Volume 2, Issue 3 & Pages 1092- 1097	2016	2395-1621
17	Prof. Padma Hirve.	Comparison between CAPTCHA Techniques for Text based, Graphics based and Audio based Text based, Graphics based andPhonemic restorationn effect methods.	4th National Cnference on Advancement in Communication ,Computing and Electronics Technology at Modern College Pune		2nd-3rd March 2017	

Sr. No	Author Name	Paper Title	Name of Journal / Conference Proceedings	Volume, Issue No., & Page no.	Year of Publication	ISSN / ISBN No.
17	Prof. Padma Hirve.	Comparison between CAPTCHA Techniques for Text based, Graphics based and Audio based Text based, Graphics based and Audio based methods.	IJEECS International Journal of Electrical, Electronics and Computer System	Vol:05 issue 1	2017	ISSN ONLINE :2347- 2820
18	Prof. S.A. Mangale	Camouflaged Target Detection and tracking using thermal infrared and visible spectrum imaging	springer series book -Advances in Intelligent Systems and Computing	Vol-530	September 2016	Scopus/DOI:10.1007/ 978-3-319-47952-1_15
19	Prof. M.M. Dewasthale	Adaptive Filtering Algorithm for Acoustic Echo Cancellation in Hands Free Communication system	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (JJIREEICE)	Vol. 4, Issue 9,	September 2016	2321 – 5526
20	Dr. Ashwini Deshpande	Implementation of Melody Extraction Algorithms from Polyphonic Audio for Music Information Retrieval	IEEE International Conference on Advances in Electronics, Communication and Computer Technology (ICAECCT-2016)			
21	Mrs. Rajwade Kishori	Wearable Sensors Based Pilgrim Tracking and Health Monitoring system	International Conference on Computing Communication Control and automation (ICCUBEA 2016)		2016	978-1-5090-3291-4

• Faculty as Resource Persons:

- 1. Prof.Mrs.S.N.Ohatkar was invited as Session chair for 'International Conference on Recent Trends in Engineering and Technology(VISHWACON 2017 at Vishwakarma Institute of Information Technology(VIIT) Pune) on 17th February 2017.
- 2. Prof.Mrs.M.V.Pathade was invited as Resource Person Faculty Orientation Workshop on SE E&TC Revised Syllabus-2015 Course at DYP, Akurdi on 16 December 2016.
- 3. Prof.Mrs.M. V.Pathade, Prof. G. R. Padalkar & Prof. M. K. Pote conducted Latex Workshop for ME E&TC students at CCOEW, Pune on 10th December 2016.
- 4. Dr. Ashwini Deshpande was invited as Resource Person National Seminar on New Trends in Signal Processing organized by IEEE Gujarat Section, SVNIT, Surat 20-21 October 2016.

• Faculty as participants in Faculty Development/Training Activities/STTPs

Name of Faculty	Category	Торіс	Duration
Dr. Prachi Mukherji	1 day workshop	T.E. E&TC syllabus Revision structure Finalization, at PES' Modern College of Engineering,Pune	7 th October, 2016
	2 days workshop	Workshop on effective teaching & learning, at BITS pilani KK Birla Goa, campus.	10 th & 11 th february,2017
	1 day workshop	Open CV-Python,at CCOEW.	17th August, 2016
Dr. A.S. Patil	1 day workshop	T.E. E&TC syllabus Revision structure Finalization, at PES' Modern College of Engineering, Pune	7 th October, 2016
	2 days workshop	Internet of Things: Towards smart furure, at MMCOE, Karvenagar, Pune.	15 th -16 th December, 2016
Dr. S. N. Ohatkar	1 day workshop	T.E. E&TC syllabus Revision structure Finalization, at PES' Modern College of Engineering,Pune	7 th October, 2016
Dr. Seema Rajput	1 day workshop	Future trends in VLSI design, at university of Pune.	30th August 2016
	2 days FDP	Arduino Basics, Applications & hands on practice, at MMCOE, Karvenagar, Pune	13 Th & 14 th December 2016
	2 days FDP	Arduino, at MMCOE, Pune	29 th & 30 th November 2016
	Two week ISTE STTP	"CMOS,MIXED SIGNAL RADIO FREQUENCY VLSI DESIGN" IIT Kharagpur	26th Jan 2016 to 4th Feb 2017
Prof. A. R. Khedkar	1week (6 days) STTP	Design, Testing, Performance Evaluation & Applications of Microwave Antennae 2016, at VIIT, Pune	21st to 26th November 2016
Dr. Anita Jain	1 day workshop	Future trends in VLSI design, at university of Pune.	30th August 2016
	1 day workshop	Open CV-Python,at CCOEW.	17th August, 2016
	Two week ISTE STTP	"CMOS,MIXED SIGNAL RADIO FREQUENCY VLSI DESIGN" IIT Kharagpur	26th Jan 2016 to 4th Feb 2017

Name of Faculty	Category	Торіс	Duration
Dr. A. M. Deshpande			17 th August 2016
	3 days Faculty Orientation Workshop	S.E. E&TC Revised Syllabus 2015 Course for the Subject- Integrated Circuits at DYP COE, Akurdi	15th to 17th Dec. 2016
	3 days Faculty Orientation Workshop	Embedded System Design using MSP430 at MIT, Pune	4th to 6th Jan. 2017
Dr. Reena Kulstreshtha	One day workshop	Open CV-Python,at CCOEW.	17th August 2016
	Three Days FDP	faculty Orientation workshop on S.E (E & TC/Elex) Revised Syllabus for "Analog Communication" at MAEER's MIT College of Engineering, Pune	15th-17th Dec 2016
	Two week ISTE STTP	"CMOS,MIXED SIGNAL RADIO FREQUENCY VLSI DESIGN" IIT Kharagpur	26th Jan 2016 to 4th Feb 2017
Dr. M.A. Dixit	2 days conference	IEEE International WIE Summit 2016, Pune	23 and 24 Sept. 2016
Prof. P.P. Kamble	3 days FDP	Control System Syllabus Revision at NBN sinhgad college of Engg. pune	15-17 dec 2016
Prof. M. V. Pathade	2 days Workshop	EPICS- Engineering Projects for Community Services, at Hydrabad	4th to 5th July 2016
Prof. M.K. Pote	1week (6 days) STTP	Design, Testing, Performance Evaluation & Applications of Microwave Antennae 2016, at VIIT, Pune	21 st to 26 th November 2016
Prof. S. A. Potdar	1 day workshop	Open CV-Python, at CCOEW.	17th August, 2016
	Two days workshop	Quality Evaluation in video Processing	6th to 7th March 2017
	3 months Course	Certificate course in Computer Vision	7th January 2017 till March 2017
Prof. P. Hirave	3 Day Workshop	Revised syllabus for control system, with sppu at NBN, COE, Pune.	15-17 dec 2016
	2 Days national Seminar	Cyber Security and Evolving Technology" at ccoew 2017.	2nd and 3rd February
Prof. S. A. Vanarase	2Days National Seminar	Cyber Security & Evolving Technology	2 & 3 Feb 2017
	3 Days FDP	SE E&TC Revised syllabus for the subject "Analog Communication", at MIT COE, Pune	15-17 December 2016
	3 Days TEQIP	Embedded System Design' at Bharati Vidyapeeth college of engineering,Pune	20-22 Oct.2016

Name of Faculty	Category	Торіс	Duration
	2 Day Workshop	Recent Trends in VLSI Technology using Microwind EDA Tool,at CCOEW.	22n-d & 23rd July 2016
Prof. P. C. Shenolikar	2 days workshop	Internet of Things: Towards smart furure, at MMCOE, Karvenagar, Pune.	15 th -16 th December, 2016
Prof. A.S. Divekar	1 day workshop	Open CV-Python,at CCOEW.	17th August, 2016
Prof. S. A. Mangle	1 day workshop	Open CV-Python,at CCOEW.	17th August, 2016
Prof. P. P. Waghmare	1 week (6 days) STTP	MATLAB & SIMULINK, at SKN COE, Pune.	5 th to 10 th December, 2016
Prof. R.R. Borhade	1 week (6 days) STTP	MATLAB & SIMULINK,at SKN COE, Pune.	5 th to 10 th December, 2016
Prof. M.M. Dewasthale	1 day workshop	Open CV-Python,at CCOEW.	17th August, 2016
	2 days FDP	Arduino Basics, Applications & hands on practice, at MMCOE, Karvenagar, Pune	13 Th & 14 th December 2016
	4 days workshop	Image & Speech Processing, at RSCOE, Pune	24 th to 27 th August,2016
Prof. R.T. Suryawanshi	1 day workshop	Future trends in VLSI design, at university of Pune.	30th August 2016
	Two week ISTE STTP	"CMOS,MIXED SIGNAL RADIO FREQUENCY VLSI DESIGN" IIT Kharagpur	26th Jan 2016 to 4th Feb 2017
Prof. H. V. Khedlekar	1 day workshop	Open CV-Python, at CCOEW.	17th August, 2016
	3 days FDP	SE E&TC Revised syllabus for the subject "Signals and Systems", at SAE Kondhwa	9th - 11th June 2016
	3 days FDP	SE E&TC Revised syllabus for the subject "Object Oriented Programming", at MESCOE	15th - 17th December, 2016
	2 days state level FDP	"IOT, Analytics, computing Techniques & Tools for smart cities"	17 th – 18 th February, 2017
Prof. Sonal Patel	3 days FDP	SE E&TC Revised syllabus for the subject "Object Oriented Programming", at MESCOE	15th-17th Dec 2016
Prof. T. K. Kadam 3 days FDP S.E. E&TC Revised syllabus for the subject "I structures and algorithms", at I2IT Hinjewadi		S.E. E&TC Revised syllabus for the subject "Data structures and algorithms", at I2IT Hinjewadi	9th to 11th June 2016
	2 days state level FDP	"IOT, Analytics, computing Techniques & Tools for smart cities"	17 th – 18 th February, 2017

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• Industrial Visits Organized:

Sr.	Name of the	Date of the Visit		Class		Teacher Coordinator
No.	Industry/Govt.Organisation		S.E.	T.E.	B.E	
1	Avaya India Pvt. Ltd., Magarpatta, Pune.	29 th July 2016	-	-	DivC	Prof. Mrudul Dixit
2	Tachometric Controls,Narhe, Pune-41	9 th August 2016 & 14 th March 2016	E&TC Div A & Mech students	_	_	Prof. Mugdha Dewasthale & Dr. Seema Rajput
3	Minilec (India) Pvt. Ltd., Pirangoot pune-11	27 th Sep. 2016		DivC		Prof. Seema Dole
4	Avaya India Pvt. Ltd., Magarpatta, Pune	1 st Sep. 2016			Div. A&B	Prof. S.S. Vanarase
5	GMRT, Khodad, Narayangoan, Pune	9th Sep. 2016			Div. A,B,C	Dr. Anita Jain and Prof. A.R. Khedkar
6	GMRT, Khodad, Narayangoan, Pune	17 th March 2017	-	Div A,B,C	-	
7	Doordarshan Kendra Studio, Pune	14 th and 15 th March, 2017.	-	- A,B,C	Div	Prof. Anuradha Fukane and Prof. B. V. Pathak
8	1) Radio city 91.9 Music Broadcast Private Limited, Vega center, Pune-37	22 nd March 2017 to 23 rd march 2017.	Div. A,B,C	-	-	Dr. Reena Kulshrestha Prof. G. R. Padalkar
	2) Radio One 94.3, C/O Radio Mid Day West Ltd.,Gaurav Jaan Mohammad Street, Camp, Pune-01					

• Workshops Organized

Sr. No.	Name of Workshop	Date	No. of Participants	Workshop Trainer	Co-ordinator (s)
1.	Mobile Robotics	21-01-2017 and 22-01-2017	50 (UG)	Mr. Shubham Gupta	Dr. S. Rajput, Prof. N.G. Palan, Prof. P. C. Shenolikar, Prof. T. S. Kadam
2.	Raspberry Pi	29-08-2016 and 30-08-2016	30 (UG)	Mr. Mohan Kondle (Vedam Labs)	Dr. R. Kulshrestha, Prof. S. G. Dube
3.	Open CV-Python	17-08-2016	41 (UG + PG Faculty)	Mr. K. G. Gunale (MITCOE)	Prof. M. Dewasthale, Prof. A. Divekar
4.	Latest trends in CMOS VLSI Design using Microwind	22-07-2016 and 23-07-2016	27 (UG)	Mr. Shrikant Atkarne (NI Logic, Pvt.Ltd, Pune)	Dr. S. Rajput, Prof. A. Khade, Prof. R. Suryawanshi
5.	Scilab Introduction	28-9-2016	16 (PG) +1 faculty	Prof. Kirti Agarwal	Dr. Prachi Mukherji

Sr. No.	Name of Workshop	Date	No. of Participants	Workshop Trainer	Co-ordinator (s)
6.	Fire Fighting System & equipment demonstration	18-08-2016	18 (PG)	Mr. Anup Aphale	Prof. Seema Shah
7.	LATEX for effective Technical documents	10-10-2016	10 (PG)	Prof. M. V. Pathade Prof. M. K. Pote Prof. G. R. Padalkar	Prof. M. V. PathadeProf. M. K. Pote Prof. G. R. Padalkar
8.	ISTE STTP on CMOS, Mixed Signal and Radio Frequency VLSI Design (MHRD, Govt. Of India)	30-01-2017 to 04-02-2014	22 (Faculty)	Dr. T. K. Bhattacharya, Dr. Indrajit Chakrabarti, Dr. Mrigank Sharad	Prof. A. S. Khade

• IET Mini Project Competition

The IET Pune LN and Cummins College of Engineering for Women, Pune organized a Mini Project competition on 25th March 2017 which was coordinated by Prof. A. S. Khade.

The objective of competition was to provide a platform for students up to 3rd year to showcase their projects. The competition is one of the scheduled activity of IET YP Pune LN.

More than 100 student participated in this competition (39 groups), which were judged by juries from industry as well as education institutes.

The competition was blessed by the presence of Dr. Shilpa Metkar, Chair IET Pune LN and Dr. M.A. joshi, Ex-Chair IET Pune LN whereas speech by Dr. Ganesh Kakandikar, YP Chair IET Pune LN at valedictory function gives insight of IET to audience.

• Two weeks ISTE approved Short Term Training Program:

E&TC department organized two weeks ISTE approved Short term training program on "CMOS MIXED SIGNAL RADIO FREQUENCY VLSI DESIGN". This program was conducted online by IIT Kharagpur during 26th Dec 2016 to 4th Feb 2017. Approximately 20 faculty membrs from different institutes participated in this program. The program was successfully coordinated by Prof. A. S. Khade.

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National Seminar on Cyber Security and Evolving Technology

Two days National Seminar on Cyber Security and Evolving Technology was organized by the E &TC department on 2nd -3rd February 2017. The seminar was sponsored by BCUD, SPPU, Pune. Dr. Prachi Mukherji was Program Convener and Dr. Mrudul Dixit was the Program Co-ordinator for the seminar. 41 participants from industry and academia registered and attended the seminar. Out of 41 participants, 31 were from Maharashtra state while 10 were from outside Maharashtra state. The IEEE student members also registered and attended the seminar

Total 7 sessions were conducted by the industry experts and the last session was panel discussion "Cyber security need of hour".

The inauguration of the seminar was done by Dr. P.V.S. Shastry, Secretary, Maharshi Karve Stree Sikshan Samstha, Pune.

The details of the speakers along with the topic and industry / company they belong are as follows:

Day 1: Thursday 2 nd Feb. 2017		Speakers	Company / Industry
Session 1	Basics of Cyber security	Mrs. Pradnya Kashikar	Talentpro consultancy, Pune
Session 2	Security of Mobile and Net Banking, E-wallet and online shopping	Mr. Niranjan Reddy	Founder & CTO – Net Conclave Systems, Pune
Session 3	Cyber security Concepts	Mr. Dinesh Bareja	Founder: Open Security Alliance; Indian Honeynet Project, India Watch
	Day 2: Friday , 3 nd Feb. 2017		
Session 1	Process controls : vulnerability management and penetration testing	Mr. Akash Upadhaya Mr. Chandan Sharma	Amdocs, Pune Amdocs, Pune
Session 2	IOT based devices and Cloud Security	Mr. Sangeet Chopra	Cyber Cure Technologies Pvt. Ltd., Delhi
Session 3	Adoption of Evolving Technology	Mr. Manish Dusad, Mr. Parag Mulay	Avaya India Pvt. Ltd, Pune
Session 3 Panel discussion on Cyber security need of hour Mr. Manish Dusad Mr. Parag Mulay, Mr. Akash Upadhaya, Mr. Chandan Sharma			• •

• Guest Lectures Organized

Sr. No.	Date	Speaker	Topic	Coordinator	Audience
1.	15/7/ 2016	Sunil Desai, Maven Systems, Pune	Scope of Embedded Systems	Dr. A.S.Patil, Prof. S. G. Dube, Prof.P. C.Shenolikar	ΤΕ
2.	20/7/2016, 31/08/2016	Pradnya Kashikar, Talentpro Consultancy services, Pune	Data & Network security	Dr. M.A.Dixit, Prof. Padma Hirve, Prof. S. S. Vanarase	BE
3.	9/08/2016	Satish Tambe , Uro-Surgical clinic, Pune	Road Safety Management	Dr. Reena Kulstreshtha	SE
4.	12/08/16	Mr. Amit Sulakhe, Proprietor of Audio Logics, Pune	Applications of Signals and Systems	Dr. B.V.Pathak, Prof. H.V.Khedlekar	SE
5.	29/08/2016	Prasad Tasgaonkar, Task Compusys, Pune	Advance 'C' Language	Dr. M.A.Dixit	TE
6.	5/10/2016	Mr Sarang Gupta, Sr Engg, CIL, Pune	Advances in RF and Microwave Design	Dr. Anita Jain	BE
7.	2/9/2016	Vivek Arnake, VI.I.T. Pune	Brushless DC Motors & Ind. Applications	Prof. M. M. Dewasthale	SE
8.	19/9/2016	Nitin Patil, Save Pune traffic movement	Behavioral training for drivers for improving road safety	Dr. Reena Kulstreshtha	SE
9.	22/9/2016	Pramod Gunthey, Tata Consultancy, Pune	Road safty management	Dr. Reena Kulstreshtha	SE
10.	21/9/2016	Mr. Manu Batura, AVP Storage Practice, Agiliad	Applications of Graph	Prof. T. Kadam,	BE

Sr. No.	Date	Speaker	Topic	Coordinator	Audience
11.	27/9/2016, 29/09/2016	Ganesh Bhutekar, Paradigm Works Inc, Pune	Programable Logic Devices & semiconducters		SE & BE
12.	22/09/2016	Mr. Milind Jape, freelance Trainer, Mentor and Coach.	Semiconductor Evolution	Prof. M.V. Pathade	SE
13.	4/10/2016	Vishwas udpikar, IFM engg. Pvt. Ltd. Pune	Applications of DSP	Dr. Ashwini Deshpande	TE/ M.Tech
14.	25/01/2017	Amit Dixit , Startup firm	TQM & six Sigma		TE
15.	14/03/2017	Mr. Prasanna Deshpande, Mathworks, Pune	Model based development	Prof. M.S.Patankar	BE (elective AAE)
16.	15 /03/2017	Dr. Arwind Shaligram, SPPU, Pune	IC Technology	Dr. A. M. Deshpande	SE
17.	20/3/2017, 21/3/2017	Mr. Ujjwal Nagar, Endeavor Carrres Pvt.Ltd.	Laboratory of Entrepreneurship Motivation		TE
18.	12/08/2016	Mr. Amit Nahar, Audio Logistics	Applications of Digital Signal Processing	Dr. B.V.Pathak	BE
19.	27/03/2017	Mr. Manoj Soman, Cadence , Pune	Different Aspects of Circuit Design	Prof. M.V. Pathade	SE
20.	30/03/2017	Rajaswini Ukarande, TE connectivity India Pvt. Ltd., Shirwal	Instruction Detection system using Neural Network & Fussy logic	Dr. M.A.Dixit	BE (SC)
20.	7/9/2016	Prof. Ketan Raut VIIT, Pune	SPICE Programming	Dr. Seema Rajput	ME

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Give a Hear-Hear to THE VICTORIOUS TOPPERS in ACADEMICS

• S.E . E&TC 2016-17

Rank	Name	SGPA
1 st	Shivbhakta Viraja Uday	9.4
2 nd	Bankar Ankita Ramesh	9.3
2 nd	Udas Prajakta Ashish	9.3
3 rd	Ghasti Shivani Sunil	9.2
3 rd	Sharma Ritu Vijayanand	9.2
3 rd	Gawande Ragini Chandrakant	9.2
3 rd	Chikhalikar Purva Satishrao	9.2
3 rd	Kadoo Samiksha Sunil	9.2
4 th	Khollam Saraswati Ravindra	9.1
4 th	More Nikhita Sunil	9.1
4 th	Gawade Ankita Vilas	9.1
4 th	Khandelwal Akshata Nitin	9.1
4 th	Kumari Arpita Mangalam	9.1
5 th	Jadhav Shreya Shivaji	9.0
5 th	Sawant Jagruti Sandeep	9.0
5 th	Raje Meghna Sandip	9.0
5 th	Raut Shreya Prashant	9.0

• T.E . E&TC 2016-17

Rank	Name	Per(%)
1st	Ghorpade Swapnali Satish	81.07
2nd	Pawar Ankita Kedari	78.27
3rd	Thusoo Damini Raj Kumar	77.60
4th	Saundankar Vaishnavi Kiran	76.40
5th	Mardhani Simran Sultan	75.73

• B.E. E & TC 2016-17

Rank	Name	Per(%)
1 st	Baraskar Anjali Kishor	81.47
2 nd	Halad Kaveri Appasaheb	80.00
3 rd	Koul Shriya Anil	79.60
4 th	Singh Surabhi Ashok	78.80
5 th	Magdum Divya Deepak	78.13

• B.E. PROJECT Inhouse Competition Winners:

Department of E & TC had arranged B.E. Project Exhibition cum Competition on 31^{st} March 2017. The result of assessment is as follows:

Title of Project	Student name	Sponsor	Subject Area	Guide	Rank
Classification of Hydrometeors Based on RADAR data characterization	Deeksha Sinha Aishwarya Chaubal Mohini Mohite	Indian Institute of Tropical Meteorology, Pune.	Signal Processing & Antenna Theory & Artificial Neural Networks	Prof. J.A. Mokashi	First Place
Android Based Marine Boundary Identification System	Madhura Nadgouda, Surabhi Singh, Shriya Koul	In-house	Embedded & IoT	Prof. S.S.Vanarase	Second Place
Object Tracing Using Camera Module	Ishmita Singh Sai Jagtap Ramani Giri	In-house	Embedded & Image Processing	Prof. M.K.Pote	Third Place
Detection and Classification of Brain Tumours using MRI scans.	Bhagyashree Nair Nisha Date Chinmayee Bhanu	Self	Image Processing	Dr. P. Mukherji	Fourth Place
Corrective Measures for Athelete Performance using Video Feedback as a Coaching tool in badminton	Prerana B. Chavan Prutha Ingawale Sayali Salunke	Simply Compete	Image Processing	Prof.Dr. R. Kulsreshtha	Fourth Place

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• T.E. Mini Project Inhouse Competition Winners:

Department of E& TC had arranged T.E. Mini Project Exhibition cum Competition on 31st March 2017. The result of assessment is as follows:

Name of The Students	Title of The Mini Project	Rank
Preeti P. Bagad. Reva M. Gandhi Nidhipriya Jha	Digital Audiometry using PIC 16F877	1
Shivani Pujari Anjali Shahapure Poonam Vachakal	Advanced power saver using PIC 18F4550	2
Snehal Saindane Sapna Sharma Sonali Wagh	Hardware based Braille keypad for blind person	3
Akanksha Singh Damini Thusoo	Postpaid Energy Meter using PIC18F4520	4
Pawar Priyanka Sarode Komal Shinde Akshata	Car Dashboard Monitoring for Fuel Leakage Indication	5

• Winners of PROJECT COMPETITIONS held in March 2016:

Sr. No.	Name of the Students	Event	Prizes/ Medals won
1.	Lawani Kundu	Innovation 2k16	First
2.	Oak Kalyani	Innovation 2k16	Second
3.	Mitha Tanzeela	Innovation 2k16	Second
4.	Surabhi Singh	Innovation 2k16	Third
5.	Shriya Koul	Innovation 2k16	Third
6.	Shreya Gupta	Inhouse Project Competition	First
7.	Thakar Pradnya	Inhouse Project Competition	First
8.	Thalwar Aishwarya	Inhouse Project Competition	First
9.	Ojha Siddhi	Inhouse Project Competition	Second
10.	Pallavi Srikanth	Inhouse Project Competition	Second
11.	R Subasini	Inhouse Project Competition	Second
12.	Chawandke Manasi	Inhouse Project Competition	Third

Sr. No.	Name of the Students	Event	Prizes/ Medals won
13.	Agarwal Isha	Inhouse Project Competition	Third
14.	Kulkarni Radhika	Inhouse Project Competition	Third
15.	Agrawal Konica	Inhouse Project Competition	Consolation
16.	Jayasri S	Inhouse Project Competition	Consolation
17.	Manisha Sharma	Inhouse Project Competition	Consolation

• GANDHAAR 2017

Sr. No.	Name of the Students	Event	Prizes won
1.	Shruti Khulpe, Kavita Wani	Rangoli	First
2.	Aishwarya Todmal, Hemangi Pati	Rangoli	Second
3.	Rucha and Ashwini	Cooking	Second
4.	Jagruti, Aditi	Mehendi	Third
5.	Apurva Amritkar, Tripti Chanda	Snap Hunt	Second
6.	Chinmayee Bhanu,Bhargavi Patil	HP Quiz	First
7.	Priya Pitale, Ananya Sharma, Darshana Padule	LAN Gaming	First
8.	SE ENTC A	Group Dance	Second
9.	Mayuri Bhosle	Sketching	Second
10.	Prajakta Udas	Sketching	Third
11.	Nikita Thorat, Shrutika Sanjay	Duet/Trio Dancing	First
12.	Disha Khedkar & Group	Duet/Trio Dancing	Second
13.	Chinmayee Bhanu, Isha Purandare	Fandom Quiz	First

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Glimpses of BCUD Sponsored National Seminar on Cyber Security









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