## **Faculty Achievements details for the year 2015-16**

### **Computer Engineering Faculty Achievement 2015-16**

- 1. Dr.Dhananjay Kalbande has written a book on "Human Machine Interaction" published by Wiley.
- 2. Prof Reeta Koshy received Minor Research grant Mumbai University 2015-16.
- 3. **Dr.Dhananjay Kalbande is** Currently doing Clinical Trial of the Post-doctoral research in Skin Image Analysis and Recognizing skin diseases at the early stage at Seth G.S.Medical College and KEM Hospital ,Parel Mumbai under the guidance of Dr.Uday Khopkar,Professor and Head,Dept.of Skin and VD,KEM Hospital.He has also made an MoU with Skin and VD Dept.,KEM Hospital.
- 4. Dr.Dhananjay Kalbande has also worked and delivered the "MIS Application development for Skin and VD Department, KEM Hospital, Parel, Mumbai.".
- 5. Dr.Dhananjay Kalbande has conducted "2 days workshop on SOFT COMPUTING (NEURAL NETWORK & FUZZY LOGIC) AND ITS PRACTICES on 10th and 11th July 2015 at S.P.I.T."
- 6. The following faculty members successfully defended their doctoral theses and were granted the Ph.D degrees in the year 2016:

Dr. Sudhir Dhage - Associate Professor, Computer Department

Dr. Anant Nimkar - Assistant Professor, Computer Department.

## **Faculty Publication details for the year 2015-16**

## Total: 17 paper in International conference and 2 in International Journal and 4 Patents.

- Manjusha Ghadge, Dheeraj Pandey and Dhananjay Kalbande, "Machine LearningApproach for Predicting Bumps on Road", in International Conference on Applied and Theoretical Computing & Communication Technology(iCATccT), 29th and 30thOctober 2015, BIET, Davangere, India.
- Dheeraj Pandey, Dhananjay Kalbande and Vijaya Kamble, "Ameliorate Lifetime of Wireless Sensor Networks" in International Conference on Next Generation Computing Technology, IEEE sponsored NGCT 2015, 4th and 5th September 2015, Dehradun.
- **3. Reeta Koshy** and **Kiran Gawande**, "Scalable Product Recommendation using Hadoop", in 4<sup>th</sup> International Conference on ICRITO, Sept. 2-4 2015, AIIT, Amity University, UP, Noida.
- **4. Jyoti Ramteke**, Khushal Thakur, Vinayak More, Supriya Walkunde and Supriya Walkunde, "Android based Maximum Discount Finder", in International Journal of

- Recent and Innovation Trends in Computing and Communication, Volume 3, Issue 9, September 2014.
- **5. Anant V. Nimkar** and Soumya K. Ghosh, "Router Framework for Secured Network Virtualization in Data Center of IaaS Cloud" in proceedings of 3<sup>rd</sup> International Conference on Advanced Computing, Networking and Informatics, Volume 44, pp. 475-483, 3<sup>rd</sup> Sept. 2015.

### **Total No. of patents are: 4.**

1.Filed a patent for Research Protocol "Skin Image Analysis Software for Skin Diseases" dated 24/02/2016 Time: 17:02:14, Docket No.4737.Application No.:201621006433

Status:published

2.Filed a patent for Research Project "AUTO-WALAS: An App for Vehicle Management" dated 21/03/2016 Time: 16:03:00, Docket No. 7129, Application No.: 201621009763
Status:published

3. Filed a patent for Research Project :THEORITICAL CONCEPT OF "BUSINESS PROCESS FRAMEWORK IN AN ENTERPRISE ARCHITECTURE AS PER THE ARCHITECTURAL LEVEL" dated 30/03/2016

One more patents is there: by Dr.Prachi Madam and students.

#### **Books written 2:**

1.SPCC by Anand Godbole ,Wiley Publication :2014-15 2.HMI by Dr.D.R.Kalbande, Wiley Publication : 2015-16

MoU with Seth G.S. Medical College and KEM Hospital, Mumbai for clinical Research.

## **Electronics & Telecommunication Department Faculty Achievements 2015-16**

1. Dr. Preetida Jani received Minor Research grant of Mumbai University for the year 2015-16

# Paper Publication By Faculty in various National International Conferences and Journals Year 2015-16: Total 34 Research papers

- **1.** Dr. Y. S. Rao: Title of the paper: Influence Algorithm' IEEE sponsored Fifth International Conference on Recent Trends in Information Technology ICRTIT 2016, April 08-09 2016.
- 2. Dr. Y. S. Rao: Title of the paper: `Implementation of a digital controller using DSP TMS320F28335 for frequency and power tracking of load resonant inverters', IEEE International Conference on Industrial Technology ICIT 2016, National Taiwan University, March 14-17, 2016
- **3.** Dr. Y. S. Rao: Title of the paper: "Design of Digital Signal Processor TMS320F28335 Stand Alone System for Real Time Application", "International Conference on Electronic Devices, Circuits, Applied Electronics and Communication Technology", (EDCAECT 2015), Gauhati University, Gauhati, Assam, India, on 8th, 9th and 10th October, 2015.
- 4. Dr. Y. S. Rao: Title of the paper: "DSP Based Control for Single Phase Induction Heating System using Sinusoidal PWM Technique", "International Conference on Electronic Devices, Circuits, Applied Electronics and Communication Technology", (EDCAECT 2015), Gauhati University, Gauhati, Assam, India, on 8th, 9th and 10th October, 2015.
- **5.** Dr. Y. S. Rao: Title of the paper: "Energy-Efficient Method for Handover in LTE Femtocell Networks", IEEE International Conference on Energy Systems and Application DYPIET Pimpri, Pune India, 30 October to 01 November 2015.
- **6.** Dr. Preetida Jani : Title of the paper : Compressed sensing for VAV swarm for search mission, 16 19 Dec, 2015.
- 7. Dr. Preetida Jani: Title of the paper :OMP and KLT : A comparative performance analysis of compressive spectrum sensing in cognitive radio, International journal of wireless and information networks, 2016
- **8.** Dr. Preetida Jani: Title of the paper: Secure localization of wireless devices with application to sensor networks stenography, 1<sup>st</sup> international conference on information security and privacy ICISCP on 11-12 Dec, 2015.
- **9.** Dr. Preetida Jani : Title of the paper : Improving channel performance of multimedia wireless sensor network using MIMO properties, 4<sup>th</sup> International conference on

- Advances on Computing Communication and Informatics IACCI 2015) on 29-30 March 2016
- **10.** Dr. Preetida Jani: Title of the paper : Analyze and Predict crime using data mining on Aug 2015
- **11.** Prof. Dayanand Ambawade: Title of the paper: Reducing power consumption in smart device by proper management of wakelocks, IEEE International Advance Computing Conference (IACC), Bangalore on 13-14 June, 2015.
- **12.** Prof. Dayanand Ambawade: Title of the paper: Securing 3GPP WLAN authentication protocol based on EAP-AKA. IEEE International Advance Computing Conference (IACC), Bangalore on 13-14 June, 2015
- **13.** Prof. Dayanand Ambawade: Title of the paper: Query Language Framwork For Presilicon Debu, International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT 2015) Dayangere, Karnataka, India on 29 31 October 2015.
- **14.** Prof. Dayanand Ambawade: Title of the paper: Enhancing Performance of Security Log Analysis using Correlation-Prediction Technique ICT4SD Springer Conference, Ahamadabad on 2015
- **15.** Prof. Reena Sonkusare: Title of the paper: Implementing a cloud based Xilinx ISE FPGA design platform for integrated remote labs, International conference on advance in computing, communications and informatics (ICACCI), Kochi on August 2015.
- **16.** Prof. Manish Parmar: Title of the paper: Optically transparent graphene patch antenna at microwave frequency, Indian Antenna Week 2016 at Madurai, IEEE applied on 2016.
- **17.** Prof. Anand Mane: Tile of the paper: LASAR: spectrum aware routing protocol for cognitive radio wireless network, International conference on communication, information and computing technology (ICCICI) on Jan, 2015.
- **18.** Prof. Anand Mane: Tile of the paper: Sleeve monopole antenna with top load for breast cancer detection, IEEE sponsored 3<sup>rd</sup> International Conference on Innovations in Information Embedded and communication (ICIIECS) on 17-18 March, 2016
- **19.** Prof. Vijaya Kamble: Title of the paper: Ameliorate Life time of wireless sensor network., 1<sup>st</sup> International conference on next generation computing technologies(NGCT 2015) on 4-5 September, 2015. (Appeared on IEEE xplore).
- **20.** Prof. Vijaya Kamble: Title of the paper :Comparative analysis of carrier sense multiple access and carrier sense multiple access with shortest first, International conference on Global Conference on Communication Technologies (GCCT), 2015(Appeared on IEEE xplore) 23 Apr 24 Apr 2015.

- **21.** Prof. Sukanya Kulkarni : Title of the paper: Iterative ICI Cancellation in MIMO OFDM WiMax system with LDPC coding., Conference name /Journal Name: CICN 2015 Jabalpur on 12-14 December 2015.
- **22.** Prof. Sukanya Kulkarni: Title of the paper: Analysis of MIMO OFDM based WiMax system with LDPC, 6<sup>th</sup> International conference on advances in computing and communication(ICACC)2015.Ragajiri-Kerala Appeared in IEEE xplore. On 6<sup>th</sup> International conference on advances in computing and communication(ICACC)2015.Ragajiri-Kerala Appeared in IEEE xplore.
- **23.** Prof. Sukanya Kulkarni: Title of the paper: Analysis of peek to average power reduction technique in presence of nonlinear distortion, 7<sup>th</sup> International conference and workshop MULTICON in 2016, ICWET 2016(Selected for upload to digital library of IET) on 26-27 February 2016.
- **24.** Prof. Aayesha Hakim: Title of the paper: . Electronic portal Image Processing for high precision R.T, IEEE Sponsored 4<sup>th</sup> international conference on computation of power, energy, information and communication ICCPEIC 2015 Chennal on 2015
- **25.** Prof. Aayesha Hakim: Title of the paper: Effective processing and analysis of radiotherapy images, Signal and image processing: an international journal (SIPIJ) April 2015
- **26.** Prof. Aayesha Hakim: Title of the paper: Determination of patient setup error in RT using feature based multi modal rigid image registration, IEEE Bombay section Symposium 2015 on September 2015.
- **27.** Prof.Pratiksha S. Patil: Title of the paper: Reducing power consumption in smart device by proper management of wakelocks, IEEE International Advance Computing Conference (IACC), Bangalore on 13-14 June 2015.
- **28.** Prof.Pratiksha S. Patil: Title of the paper: .Implementing a cloud based Xilinx ISE FPGA design platform for integrated remote labs., International conference on advance in computing, communications and informatics (ICACCI), Kochi on Aug 2015.
- **29.** Prof. Nishant Kumar: Title of the paper: Frequency reconfigurable Micro strip antenna for cognitive radio Application, IEEE, ICCSP conference in Chennai 2015 on 2015.
- **30.** Prof. Nishant Kumar: Title of the paper: Hexagonal DRA antenna for cognitive radio application, IEEE, ICCSP conference in chennal 2015 on 2015
- **31.** Prof. Nishant Kumar: Title of the paper: Dual port tunable micro strip antenna for cognitive radio application, JMICRO journal of microwave engineering in 2016

- **32.** Prof. Prashant Priyadarshni: Title of the paper: Design of DSP TMS 320F28335 standalone system for real time application., International conference on electronic devices, circuits, applied electronics and communication technology on 2015.
- **33.** Prof. Prashant Priyadarshni: Title of the paper: DSP based control for single phase induction heating system using SPWM technique, Dept.of EXTC central university of Gauhate, Assam November 2015.
- **34.** Prof. Prashant Priyadarshni: Title of the paper: Biometric voting system with centralized database., International organization for scientific research journal of electrical and electronic engineering essn-2278-1676,P-ISSN-2320-3331 Vol.10,Issue-4 August 2015.

## **Electronics Engineering Department Achievements:**

- 1. AICTE Approved 2 week FDP on Electronic System Design: From Devices to Application
- 2. EduVance conducted 2-day faculty development workshop on Embedded System design using ARM method and Cypress PSOC.
- 3. ISTE approved one week STTP on network and Cyber Security with Hands on Lab.
- 4. Skill development workshop for non-teaching staff
- 5. Prof. Govind Haldankar gave an interview on Vedic Maths for the program 'Vishesh Mulakat' on Radio Madhuban 90.4FM.
- 6. Prof Prashant Kasambe received Minor Research grant of Mumbai University for the year 2015-16.
- 7. Gauri Dalvi ,Samiksha Gupta ,Karan Shah from BE ETRX secured 1 st Position in Technomania'16 IEEE (Bombay Section)-technical paper presentation
- 8. Shashank Rane,Kritika Sabharwal,Aditya Menon B.E. Etrx secured 5th position in Wolf of Chalk Street by ChalkStreet.
- 9. Kritika Sabharwal B.E. Etrx Engg secured 1<sup>st</sup> position Inter-college debate competition Fever College Clash fever 104 FM..
- 10. University representation at All India Inter-University Yoga Tournament(Choudhary Ranbir Singh University, Jind)-Shreyas Palande(S.E. ETRX).

#### **Publication Details for the year 2015-16**

14 papers published in international conferences,4 in National Conferences, 3 journal publications and 5 patents.

#### **Journal Publications**

- **S. S. Rathod** and D. R. Kalbande "Improving Laboratory Experiences in Engineering Education," *Journal of Engineering Education Transformations, Special Issue, Jan 2016*, pp. 485-492, Jan 2016. (*ISSN 2349-2473, eISSN 2394-1707*)
- D. R. Kalbande and **S. S. Rathod**, "Software Development for Course and Program Outcome Attainment," *Journal of Engineering Education Transformations, Special Issue, Jan 2016*, pp. 711-715, Jan 2016. (*ISSN 2349-2473, eISSN 2394-1707*).
- Deepak Chaturbhuj Karia, Vaibhav Godbole, "ACO-based biology inspired routing protocol for ad hoc networks", International Journal Of Swarm Intelligence, Vol.1, No.4 ,2015.

#### **International Conference Publications**

- 1. **Kiran Talele**, Ayesha Hakim "Determination of Patient Setup Error in Radiotheropy using Feature-Based Multimodal Rigid Image Registration",IETE Bombay Section Signature Symposium (IBSS2015), September10-11,2015.
- Pawankumar Fakatkar, Uday Pandit Khot, N.A.Bhagat, "Low Power Current-mode Frequency Shift Keying (FSK) Transmitter" in proceedings of the Sixth International Conference on Computer and Communication Technology 2015 (ICCCT15), pp. 394– 397, 2015. DOI: 10.1145/2818567.2818680
- 3. Praful Prajapati, Anand Dhuriya, Priyanka Shelar, **Payal Shah**, "Atmosphere Tracking System Using AVR Controller",3rd International Conference on Electronics & Computing Technologies'16, (ICONECT '16), March 10-11,2016.
- 4. Pooja Gupte, Mrs. **Payal Shah**, Raymond Pinto, "Range Doppler Algorithm for Ground Based FMCW X-band Synthetic Aperture Radar", IEEE sponsored 3rd International Conference on Innovations in Information, Embedded and Communication Systems, (ICIIECS'16), March 17-18, 2016.
- 5. Ashish Mohanan, Sheryl Tuscano, Raj Shah, **Manisha Bansode**, "Smart Attendance System",3rd International Conference on Electronics & Computing Technologies'16, (ICONECT '16), March 10-11,2016.

- 6. **G. T. Haldankar**, Y. S. Rao, Harshal Vashi, "Reduction of Fuel Consumption in Engine using HHO Gas", in International conference on Recent Innovations in Science, Engineering and Management on 27th Feb. 2016. ISSN 978-81-932074-1-3
- 7. **G. T. Haldankar**, Harshal Vashi, Jagdish Sarode "Audio Frequency Analyser using Expeyes and Raspberry Pi", in International conference on Recent Innovations in Science, Engineering and Management on 27th Feb. 2016. ISSN 978-81-932074-1-3
- 8. **D. C. Karia,** ; B. B. Dhengale ; S. A. Goswami, "A 1??2 array circularly polarised Microstrip antenna with a high Gain for RFID applications", International Conference on Computing and Network Communications (CoCoNet)16-19 Dec. 2015.
- 9. **D. C. Karia,**; B. B. Dhengale; S. A. Goswami, "A compact wideband antenna for wireless applications using rectangular ring",1st International Conference on Next Generation Computing Technologies (NGCT), 2015,4-5 Sept. 2015.
- 10. **D. C. Karia,**; B. B. Dhengale; S. A. Goswami, "A compact wideband antenna for wireless applications using rectangular ring",1st International Conference on Next Generation Computing Technologies (NGCT), 2015,4-5 Sept. 2015.
- 11. R. M. Pandurang, **D. C. Karia**, "A mapping-based podel for preventing Cross site scripting and sql injection attacks on web application and its impact analysis",1st International Conference on Next Generation Computing Technologies (NGCT), 2015,4-5 Sept. 2015.
- 12. B. B. Dhengale, **D. C. Karia**, "A high gain 2-element Microstrip array antenna with Circular Polarisation for RFID Applications", Advances in Computing, Communications and Informatics (ICACCI), 10-13 Aug. 2015.

#### **National Conference Publications**

1. Karan Shah, Gauri Dalvi, Samiksha Gupta, Prashant Kasambe and Surendra Rathod, "Performance Analysis of MEMS microheater by optimizing coil design using CoventorWare, National Conference on Advances in Engineering, Technology and Applied Science, SPANDAN 2016 at Yashwantrao Chavan College of Engineering, Nagpur during 17<sup>th</sup>-18<sup>th</sup> March 2016.

2. , Karan Shah, Gauri Dalvi, Samiksha Gupta, Prashant Kasambe and Surendra Rathod, "Simulative study of a novel MEMS cantilever design using CoventorWare, National Conference on Advanced Trends in Engineering, NCATE2K16 at Datta Meghe College of Engineering, Mumbai during 12<sup>th</sup> -13<sup>th</sup> March 2016.

#### **Patents Publications**

- [1] Patent Title :DETECTION OF BLOOD ALCOHOL LEVEL BY BREATH ANALYSIS USING SEMICONDUCTOR SENSOR, Inventor : Mane Dhanashree , Shaikh Banafsha Nikhat , Avanish Balaji and **Talele Kiran**, Application No.1405/MUM/2013 A INDIA, Date of filing of Application :15/04/2013, Publication Date : **10/07/2015**
- [2] Patent Title: SYSTEM AND METHODS FOR GSM BASED SOIL MONITORING, Inventor: Patil Tushar, Gedam Mrunal, Gharat Adwait and **Talele Kiran**, Application No.1409/MUM/2013 A INDIA Date of filing of Application:15/04/2013, Publication Date: **10/07/2015**
- [3] Patent Title: A SYSTEM AND METHOD FOR HUMAN FACE IDENTIFICATION, Inventor: **Talele Kiran**, Bairathi Neha, Daga Rahul, Darji Jignesh, Panda, Rekha, Application No.1408/MUM/2013 A INDIA Date of filing of Application: 15/04/2013, Publication Date: **10/07/2015**

## MCA Department Achievements of faculties:

MCA Department in association with Mumbai University and IEEE Bombay Section had organized a workshop on Technical Research Paper Writing on  $5^{th}$  and  $6^{th}$  feb 2016.

- 1. Prof. Aarti Karande delivered a talk on business intelligence tool at STTP on Big Data Analytics at Thakur College of engineering, delivered a talk on orange tool at STTP At S.P.I.T, delivered a talk on FLC at 2 days' workshop on NNFL at S.P.I.T, delivered a talk on Evaluation method for Technical Paper for MCA at S.P.I.T. and published a research paper for ICICT 2016.
- 2. Got an admission for "Ph.D Technology" course in SPIT, MCA Department-Mayura R. Nagar, Assistant Professor, MCA Dept.
- 3. Prof. Harshil T. Kanakia has cleared PET of Computer Engineering of Mumbai University, 2016.
- 4. Prof. Harshil T. Kanakia has delivered a lecture on "Soft Computing" in Hiray College, he has published 5 research papers in 2016.

- 5. Prof. Harshil T. Kanakia has actively worked in the organization committee for "Research Paper and Patent" workshop.
- 6. Prof. Nikhita Mangaonkar has actively worked in the organization committee for "Research Paper and Patent" workshop.
- 7. Prof. Nikhita Mangaonkar has published 3 research papers in 2016.
- 8. Prof. Nikhita Mangaonkar has filed a patent on "A transmitter-receiver system that enables the visually challenged to cross roads having traffic signals safely".
- 9. Prof. Shaikh Sakina has published 1 research paper on "Prevention, Detection and Mitigation of Cross Site Scripting Attacks in Web Applications" in **IJSDR journal in 2016.**