



Thadomal Shahani Engineering College
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EXTC EXPRESS



Department of Electronics and Telecommunication

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The latest in EXTC

What is IoT?

Internet of Things (IoT) is an ecosystem of connected physical objects that are accessible through the internet. The 'thing' in IoT could be a person with a heart monitor or an automobile with built-in-sensors, i.e. objects that have been assigned an IP address and have the ability to collect and transfer data over a network without manual assistance or intervention. The embedded technology in the objects helps them to interact with internal states or the external environment, which in turn affects the decisions taken.

Why IoT?

An article by Ashton published in the RFID Journal in 1999 said, "If we had computers that knew everything there was to know about things - using data they gathered without any help from us - we would be able to track and count everything, and greatly reduce waste, loss and cost. We would know when things needed replacing, repairing or recalling, and whether they were fresh or past their best. We need to empower computers with their own means of gathering information, so they can see, hear and smell the world for themselves, in all its random glory." This is precisely what IoT platforms do for us. It enables devices/objects to observe, identify and understand a situation or the surroundings without being dependent on human help

How can IoT help?

IoT platforms can help organizations reduce cost through improved process efficiency, asset utilization and productivity. With improved tracking of devices/objects using sensors and connectivity, they can benefit from real-time insights and analytics, which would help them make smarter decisions. The growth and convergence of data, processes and things on the internet would make such connections more relevant and important, creating more opportunities for people, businesses and industries.

Accolades to Faculty's Accomplishments

- Dr Ashwini Kunte and Dr. Mani Roja have been appointed as members of Staff Co ordination Committee, TSEC.
- Dr. Ashwini Kunte has chaired a session in “International Conference” organized by PVPPOE on 26th October, 2017
- Dr. Mani Roja has delivered a lecture on “Modern Communication Techniques” in Atharva College of Engineering on 20th September 2017.
- Prof. Anuradha Rao attended two days workshop on Image Processing at SPIT, Mumbai on 16th & 17th of March 2018
- Prof. K.Y. Rajput attended orientation program for the subject Optical Communication.
- Prof. Medhda Somalwar attended the orientation program on EDC-I. She has served as BOS for the subject TV Video Engineering.
- Dr. Mani Roja , Prof. Medha somalwar, Prof Anushree Gupta, Prof. Uttara Bhatt and Prof. Manoj attended a workshop on “ Solar Panel Design” on 10th April at Nasik
- Prof. Anushree Gupta has attended Orientation programs on EDC-I and EDC-II. She has been appointed as a member of IIPC of TSEC.
- Prof. Vijayalakshmi organized an orientation program for the subject CTL as a member of BOS.
- Prof. Uttara Bhatt attended orientation program on signals and systems
- Dr. Mani Roja and Prof Anushree Gupta arranged an Industrial visit to Copper Track Industries, Nasik on 10th April 2018

Special Accolades to Students' Accomplishments

- Our TE Student Karan Sharma won Gold Medal in National level Tennis Tournament Organized by COEP, Pune.
- Our BE students, Karan Kamaraj, Naik Naresh and Danish Shaikh won second Prize for their project “Transliterating Gloves” in national level project competitions organized by RGIT and SFIT
- Our Student Divyashree Shinde became scientist in ISRO by securing AIR3 in 2017

Industrial workshops/Visits for Students

- Android Application Development work shop by John Britto, SPIT on 7th October 2017
- IOT by Elijah Zac Mathew, Neebal on 7th October 2017
- Solar Panel Design Workshop , Nasik on 10th April 2018



Publications from Faculty and Students

- B. Thakur and A. Kunte, "Compact dual-band patch antenna using triangular complimentary split ring resonators for WiMax/WLAN," *2018 International Conference on Communication information and Computing Technology (ICCICT)*, Mumbai, India, 2018, pp. 1-4.
- B. Thakur and A. Kunte, " Compact Dual Band Patch Antenna using Meandered Complementary Split Ring Resonators" 2018 3rd International Conference for Convergence in Technology, Mumbai, India, 2018.
- B. Thakur and A. Kunte, "A Survey of Antenna Miniaturization Techniques Using metamaterials", IEEE (Bombay Section) Sponsored "4th International Conference on Innovation and Research in Technology and Engineering (ICIRTE) 2017" .
- Mamta Kurvey, Ashwini Kunte, " Harvesting RF Energy- A Review," in Asian Journal of Convergence in Technology, Volume III, Issue III, ISSN No.:2350-1146 Mamta Kurvey, Ashwini Kunte, "Design and Optimization of Stepped Rectangular Antenna for RF Energy Harvesting," 2018 International Conference on Communication, Information & Computing Technology (ICCICT), Feb. 2-3, Mumbai, India, . Mamta Kurvey, Ashwini Kunte, "RF Energy Harvesting System," International Conference On Smart City And Emerging Technologies, (ICSCET 2018) 2018, 5th Jan , Mumbai, India,
- Mani Roja, John Britto, "Gaussian Noise Analysis in ECC Encrypted Images", IEEE International Conference on Intelligent Sustainable Systems, 2017
- Archana, Vrinda, Priyanka and Mani Roja," Digital dermatology", ICICCS 2017
- Sejal Mane, Rohan Nalvade, Akash khemani and Mani Roja,"Five Fingered Prosthetic Arm", IEEE EECCMC, on 28th and 29th Jan 2018
- Sanjay, Saurab, Vrunal and Mani Roja," Digital Authenticator", IEEE-ICPCSI, 21st and 22nd Sept 2017
- Vijayalakshmi Badre, Pankaj Agarwal, Sameer Chavan, Pranav Kabra, "Smart Fire Fighting Robot", IJSRCSEIT | Volume 2 , Issue 3, pp:96-99.
- Mani Roja and John Britto, " Audio watermarking with encryption", IJERT, Vol:6, Issue 9, Sept 2017, PP:344-347.
- Shristi Bhatia, A.S. Kunte, " Adaptive Power control Scheme to mitigate cross tier Interference in two tier Femtocell Network", Dec 2017.
- Siddharth, Shubham , Mangesh. , Kunal and Amit Hatekar," Object Detection And Tracking Using Image Processing ", IJERA, ol. 8, Issue 2, (Part -1) February 2018, pp.39-41
- Prof. K.Y Rajput and Prof. Amit Hatekar published many articles on operational Amplifiers and Micro controllers in Exponent Group of Journals.

Scholastic Accomplishments

Second Year (2016-2017)

<u>Semester III</u>	<u>GPA</u>	<u>Semester IV</u>	<u>GPA</u>
Bansal Naman	10	Shivangi Tanvi	10
Jamsandekar Gauri	10	Porwal Avish	10
Porwal Avish	9.69	Jamsandekar Gauri	10
		Kadam Pallavi	10

Third Year (2016-2017)

<u>Semester V</u>	<u>GPA</u>	<u>Semester VI</u>	<u>GPA</u>
Biwalkar Anujaa	10	Sheikh Danish	9.29
Naik Naresh	10	Nadar Karan Kamraj	9.29
Nalavade Rohan	10	Nair Vijayalakshmi	9

Final Year (2016-2017)

<u>Semester VII</u>	<u>GPA</u>	<u>Semester VIII</u>	<u>GPA</u>
Purva Kulkarni	9.85	Khan Farhan	9.54
Khan Farhan	9.56	Purva Kulkarni	9.42
Naik Ketki	9.11	Rane Omkar	9.04
Rane Omkar	9.11	Yadav Bhavesh K	9.04

B.E Topper (2013-2017)

<u>Name</u>	<u>CGPA</u>
Purva Kulkarni	9.74
Khan Farhan	9.61
Rane Omkar	9.49
Naik Ketki	9.49



Editor
Dr. Mani Roja.M.Edinburgh