

Inside this Issue

- FROM THE DIRECTOR'S DESK
- ACHIEVEMENTS
- CAMPUS NEWS
- CAMPUS CALENDAR FOR JANUARY

From the Director's Desk



"New Partnerships" was the theme for December. The highlight was the formal signing of MoU with NIMHANS - an Institute of National importance. The MoU was the outcome of a number of joint projects between several departments of NIMHANS and our EHRC, coordinated by Profs. T. K. Srikanth, Amit Prakash, and Jaya Sreevalsan Nair. Profs. Madhav Rao, Subajit Sen, Neelam Sinha, and G. Srinivasaraghavan are working on many of these projects. One of our joint work, PUSH-D (a mobile App to help people with psychological problems) has been making front page news in "The Hindu." We expect many more exciting developments on this front, with the MoU in place.

Yet another partnership is the one proposed by Central University of Rajasthan. This partnership is being coordinated by Prof Amit Prakash.

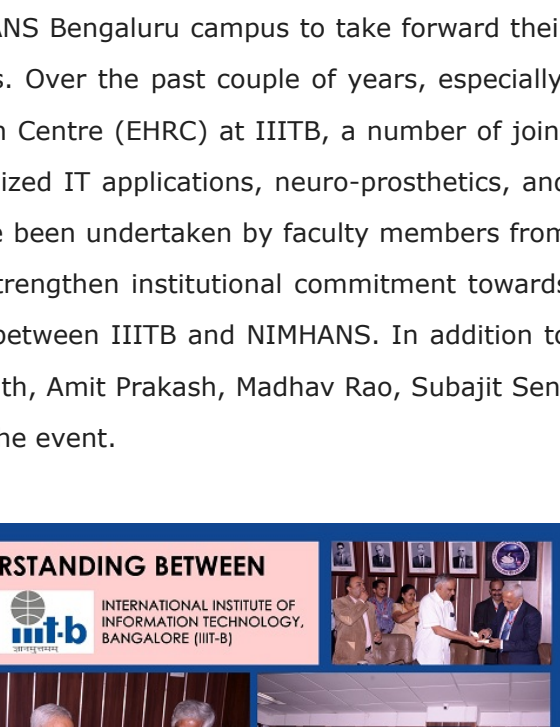
Overall, the Institute was winding down for the semester in December. You may find more details in this edition of IITB Newsletter. Let me use this opportunity to wish each and every member of IITB family a great New Year 2017 ahead!

-----HAPPY READING!-----

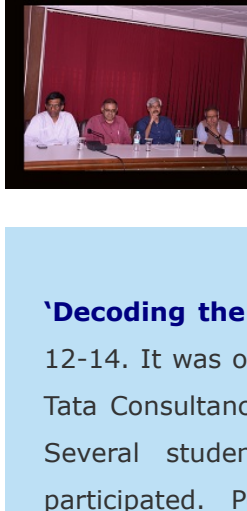
Achievements

Indu Ilanchezian (IMT2014024) has been selected for the **Adobe Research Women-In-Technology Scholarship Honorable Mention** for the year 2017. The award, worth USD 2,000/-, also includes a Creative Cloud subscription membership for one year; and mentorship from an Adobe Researcher. This award is quite competitive, where last year winners includes recipients from universities such as CMU, Stanford, Georgia Tech.

Bhargav Sridhar (MT2015093) and Pradeep (MT2015077) **won the Table Tennis Doubles at the Origins Cup** organized by the Sports and Adventure Club of Symbiosis School of Media and Communication, Bengaluru held during December 11- 12.

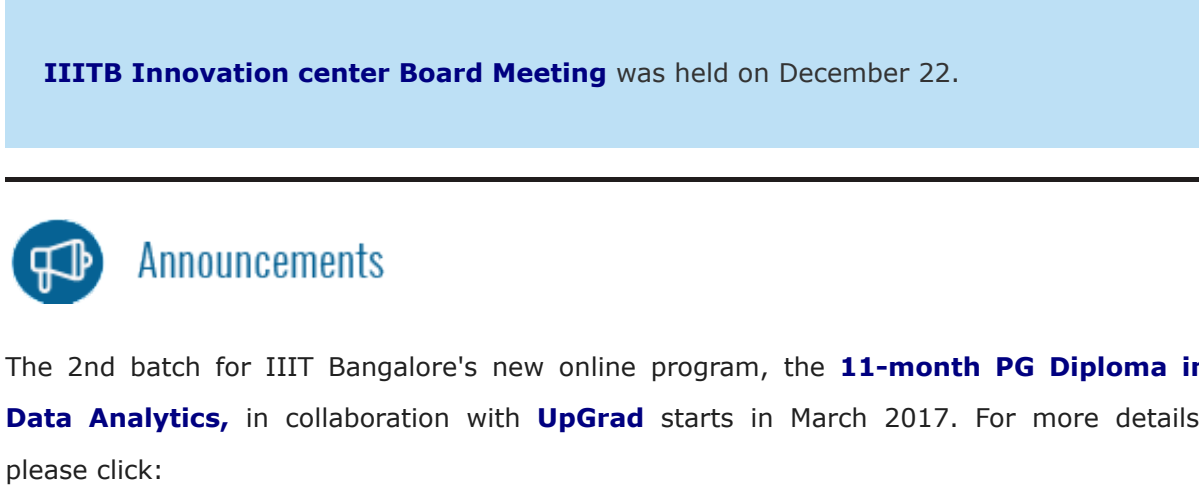
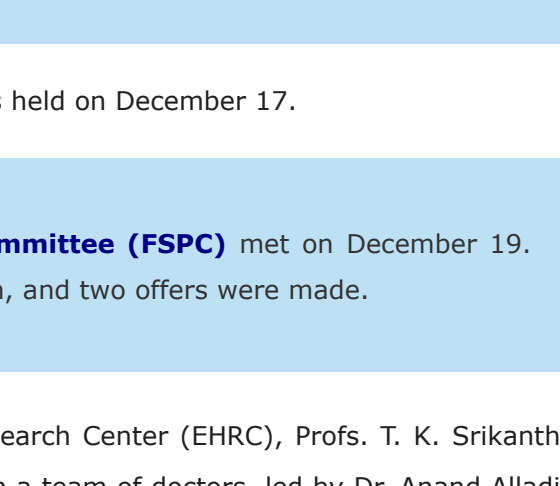
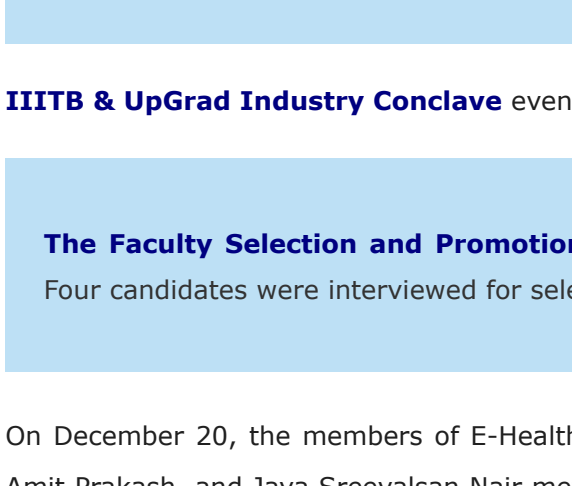


Campus News



Prof. V. N. Muralidhara took charge as **Coordinator of the Sponsored M.Tech. Program with Samsung**, on December 1. Prof. S. Rajagopalan is the outgoing coordinator.

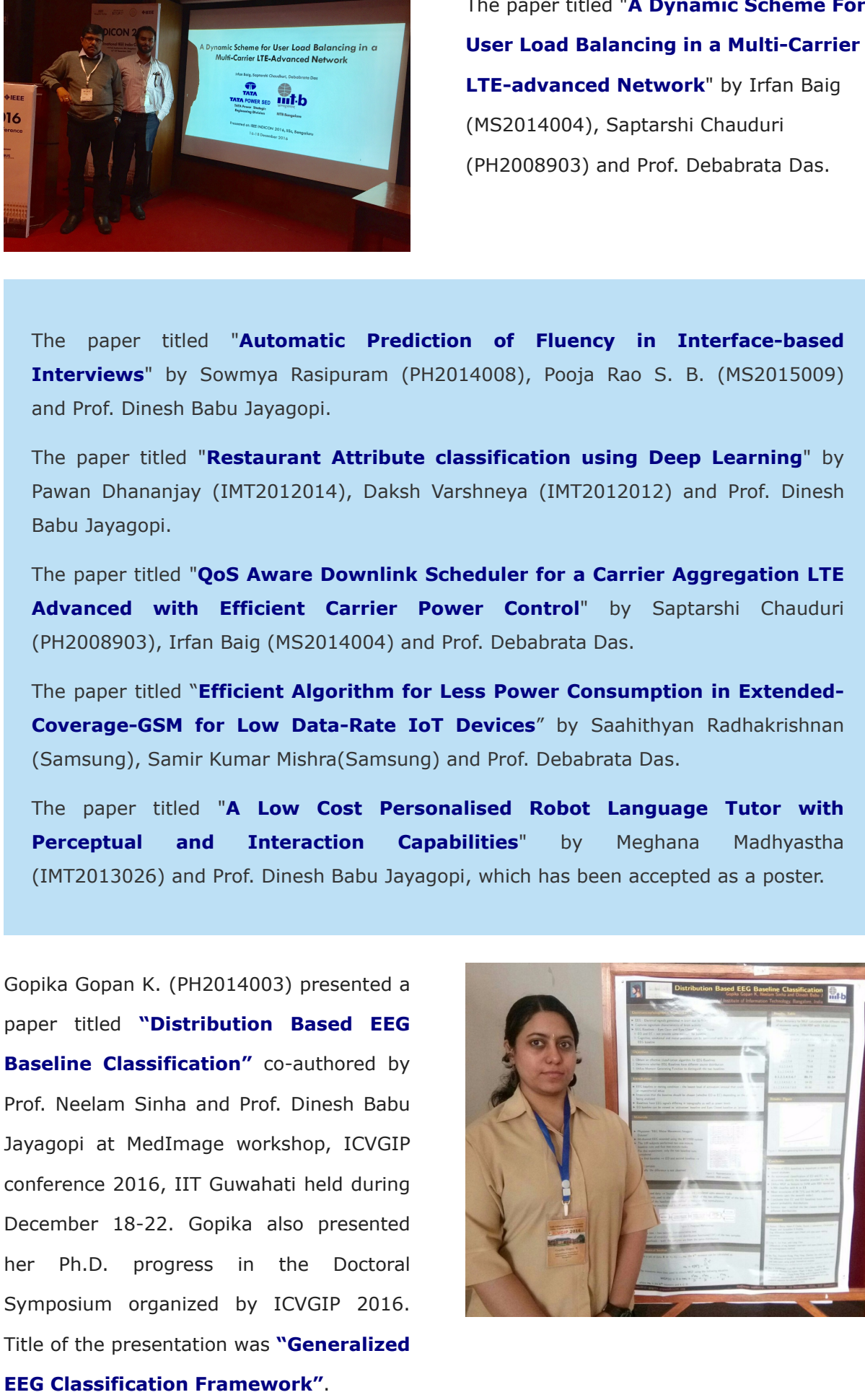
One hundred students and twenty teachers of various **Navodaya Vidyalayas** located in South India (Southern Region Schools) visited IITB on December 2. The visit was an event organised as part of National Science Congress. The students visited the various laboratories of IITB and they had interactive sessions with Profs. S. Sadagopan, Debabrata Das, Jyotsna Bapat and R. Chandrashekar.



Final examinations of Term I (2016-17) were conducted during December 5-10. The term break was during December 11-31.

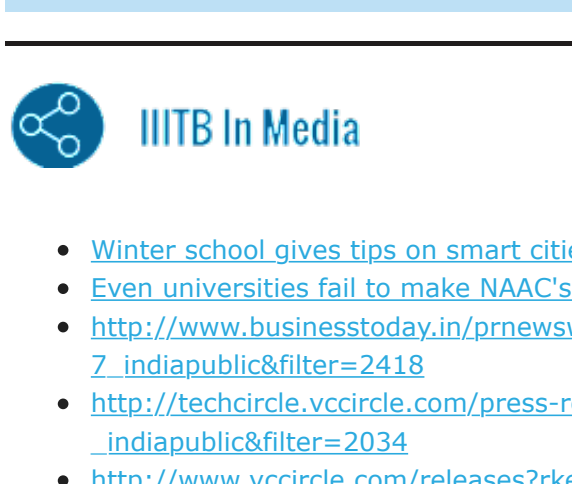
The Directors of IITB and NIMHANS (National Institute of Mental Health and Neurosciences, an institute of national importance) signed a Memorandum of Understanding on December 5,

at the NIMHANS Bengaluru campus to take forward their ongoing collaboration on joint research activities. Over the past couple of years, especially, after the establishment of the E-Health Research Centre (EHRC) at IITB, a number of joint research projects involving the design of specialized IT applications, neuro-prosthetics, and other medical devices, animal research etc. have been undertaken by faculty members from both the Institutes. The MoU seeks to further strengthen institutional commitment towards joint scientific research and academic program between IITB and NIMHANS. In addition to the Director and the Registrar, Profs. T. K. Srikanth, Amit Prakash, Madhav Rao, Subajit Sen, and G. Srinivasaraghavan represented EHRC at the event.



"Decoding the Digital", a 3-day Winter School, was held at IITB during December 12-14. It was organized by Centre for IT and Public Policy (CITAPP) and supported by Tata Consultancy Services. The main themes were **Smart Cities** and **Social Media**. Several students, professionals and academicians from all over the country participated. Positioned at the intersection of social science and information technology, the winter school provided a sneak peek into interdisciplinary perspectives to understand different aspects of the emerging digital society. It drew upon IITB's research in the area of IT & Society and its pioneering Masters Programme in Digital Society. The Winter School program consisted of lectures, interactive discussions, video screenings and group activities. Besides IITB faculty members, few sessions were held by guest speakers such as, Hasit Kaji (Digital Impact Square, TCS), Sruthi Krishnan (Fields of View) and Kiran Jonnalagadda (HasGeek). At the end of the 3-day program, the participants presented a poster on a specific aspect of the digital society discussed around the two specific themes. More details about the workshop can be found at: <http://citapp.iitb.ac.in/news-and-events/conferences-workshops/the-winter-school-decoding-the-digital/>

For photos: <https://goo.gl/photos/q4vGvGUXPlbQRnVPA>



The **54th Senate Meeting** was held on December 14.

On December 15, there was a **follow-up internal faculty meeting for brainstorming on Strategy 2020**.

IITB & UpGrad Industry Conclave event was held on December 17.

The **Faculty Selection and Promotion Committee (FSPC)** met on December 19. Four candidates were interviewed for selection, and two offers were made.

On December 20, the members of E-Health Research Center (EHRC), Profs. T. K. Srikanth, Amit Prakash, and Jaya Sreevalsan Nair met with a team of doctors, led by Dr. Anand Alladi, at Bangalore Medical College (BMC), to brainstorm on joint projects between EHRC and BMC.

IITB Innovation center Board Meeting was held on December 22.

Announcements

The 2nd batch for IITB Bangalore's new online program, the **11-month PG Diploma in Data Analytics**, in collaboration with **UpGrad** starts in March 2017. For more details, please click: <http://www.iitb.ac.in/programs.php?pid=PG-Diploma---Data-Analytics>

Publication Including Presentations

The paper titled **"Designing Item Banks in Alignment with Course Outcomes for Engineering Courses"** by Shilpi Banerjee (PH2012002), Prof. N. J. Rao and Prof. R. Chandrashekar was presented at IEEE Technology for Education Conference, IIT Bombay, Mumbai during December 2-4.

The paper titled **"OAES: Scalable and Secure Architecture for Online Assessment and Evaluation System"** by Prof. R. Chandrashekar, Shilpi Banerjee (PH2012002) and Prof. N. J. Rao was presented at IEEE MOOC's Innovation, Technology in Education Conference, TCE, Madurai during December 9-10.

The article titled **"Design logic in digital, less-cash age needs reality check"** by Prof. Amit Prakash has been published in the Deccan Herald in its op-ed page on December 12. The article can be accessed at <http://www.deccanherald.com/content/586119/design-logic-digital-less-cash.html>

The article titled **"The changing face of Indian IT"** by Prof. V. Sridhar has been published in the Financial Express on December 15. The same can be accessed at: <http://www.financialexpress.com/opinion/indian-it-undergoes-transformation-as-nimble-startups-take-over-from-larger-rivals/474732/>

Several papers and a poster were accepted and presented at the 13th International IEEE India Conference (INDICON) 2016, held at IISc during December 16-18. The papers will be shortly published in IEEEExplore.

The contributions are:



The paper titled **"A Dynamic Scheme For User Load Balancing in a Multi-Carrier LTE-advanced Network"** by Irfan Baig (MS2014004), Saptarshi Chaudhuri (PH2008903) and Prof. Debabrata Das.

The paper titled **"Automatic Prediction of Fluency in Interface-based Interviews"** by Sowmya Rasipuram (PH2014008), Pooja Rao S. B. (MS2015009) and Prof. Dinesh Babu Jayagopi.

The paper titled **"Recurrent Attribute classification using Deep Learning"** by Pawan Dhananjay (IMT2012014), Daksh Varshneya (IMT2012012) and Prof. Dinesh Babu Jayagopi.

The paper titled **"QoS Aware Downlink Scheduler for a Carrier Aggregation LTE Advanced with Efficient Carrier Power Control"** by Saptarshi Chaudhuri (PH2008903), Irfan Baig (MS2014004) and Prof. Debabrata Das.

The paper titled **"Efficient Algorithm for Less Power Consumption in Extended-Coverage-GSM for Low Data-Rate IoT Devices"** by Saahithyan Radhakrishnan (Samsung), Samir Kumar Mishra (Samsung) and Prof. Debabrata Das.

The paper titled **"A Low Cost Personalized Robot Language Tutor with Perceptual and Interaction Capabilities"** by Meghana Madhyastha (IMT2013026) and Prof. Dinesh Babu Jayagopi, which has been accepted as a poster.

Gopika Gopan K. (PH2014003) presented a paper titled **"Distribution Based EEG Baseline Classification"** co-authored by Prof. Neelam Sinha and Prof. Dinesh Babu Jayagopi at MedImage workshop, ICDGIP conference 2016, IIT Guwahati held during December 18-22. Gopika also presented her Ph.D. progress in the Doctoral Symposium organized by ICDGIP 2016. Title of the presentation was **"Generalized EEG Classification Framework"**.

The Article titled **"2017 outlook: The Top Five technology and business trends for India"** by Prof. V. Sridhar and Prof. T. K. Srikanth has been published in Your Story on December 27. This is also a pre-event article for Mobile India 2017

The same can be accessed at: <https://yourstory.com/2016/12/2017-outlook-business-trends/>

Prashant K. Wali (PH2012005) and Debabrata Das, **"Optimal Time-Spatial Randomization Techniques for Energy Efficient IoT Access in LTE-Advanced"**, Accepted in December 2016, IEEE Transaction on Vehicular Technology.

Parthiban A. (PH2016007), Jyotsna Bapat and Debabrata Das, **"Constellation Constraining-Based Coverage Enhancement Technique for MTC Devices in LTE-A"**, IEEE Wireless Communication Letter, Volume: 5, Issue: 6, pp 596-599, December 2016. <http://ieeexplore.ieee.org/document/7556315/>

Prashant K. Wali (PH2012005) and Debabrata Das, **"Enhanced-Power Saving Semi-Persistent Scheduler for VoLTE in LTE-Advanced"**, IEEE Transaction on Communication, Vol. 15, No. 11, pp 7858-7871, November 2016. <http://ieeexplore.ieee.org/document/7565559>

IITB In Media

- [Winter school gives tips on smart cities, social media](#)
- [Even universities fail to make NAAC's high grade, only Nehru centre bags A++](#)
- http://www.businesstoday.in/prnewswire/index.jsp?rkey=20170103enIN2017010375977_indiapublic&filter=2418
- http://techcircle.vccircle.com/press-releases/rkey=20170103enIN2017010375977_indiapublic&filter=2034
- http://www.vccircle.com/releases/rkey=20170103enIN2017010375977_indiapublic&filter=5485
- http://www.pibnews.com/press-release/22065_press-subIIT-B-and-UpGrad-Announce-the-Largest-Initiative-to-Build-Awareness-on-Data-Analytics--A-Career-of-the-Future--Reaching-out-to-Over-30-000-Profe
- http://businesshighlights.in/prnewswire/?rkey=20170103enIN2017010375977_indiapublic&filter=7053

Faculty and Staff

Prof. Amit Prakash delivered the keynote address titled, **"Impact of Net Neutrality on Digital Society/India,"** at the 'National Seminar on Net Neutrality and Free Data for Making Digital India' organized by the Makhnallal Chaturvedi National University of Journalism and Communication (MCNUJS), Bhopal on December 3.

Prof. T. K. Srikanth made a presentation on **"3D Printing and other applications of IT"** at the Conference of Indian Association of Paediatric Surgeons -State Chapter on December 10.

Balaji Parthasarathy, with Yuko Aoyama (Clark University), co-authored the book **"The Rise of the Hybrid Domain: Collaborative Governance for Social Innovation"**. The book was published by Edward Elgar and released in December 2016. For more details, see: <http://www.e-elgar.com/shop/the-rise-of-the-hybrid-domain>

Jaya Sreevalsan Nair was the external thesis examiner for the thesis on **"Realistic Simulation and Rendering of Corroded Objects,"** by Ms. Nisha Jain, Department of Computer Science and Engineering, IIT Delhi. The thesis viva voce was on December 12 in the department.

Prof. Amit Prakash was invited to deliver a talk on **"Qualitative Research in Management/Information Systems"** during a Quality Improvement Program (QIP) organized by the Institute of Management, Christ University on December for its faculty members on December 14.

Prof. Amit Chattopadhyay gave an invited talk on **"Topological Data Analysis"** at Centre for Artificial Intelligence and Robotics (CAIR), Bengaluru on December 15.

Prof. Debabrata Das was the **General Chair of the 13th International IEEE India Conference (INDICON-2016)** during December 16-18. Prof. K V S Hari, General CoChair, of ECE, IISc was the General CoChair. Profs. Muralidhara V. N., Madhav Rao, and Neelam Sinha were the Technical Program Committee (TPC) co-chairs. The other co-chairs were Prof. G. Narayanan (IISc), Prof. Radhakant Padhi (IISc), Mr. Puneet Mishra (ISRO) and Dr. Sajal Das (Intel). At INDICON-2015, 1180 papers were submitted, where 224 were accepted for oral presentations (presented over 35 tracks) and 95 for poster presentations (6 tracks).

Prof. Shrishra Rao participated in a panel discussion on **Connecting Data, Machines, People & Processes: How to Deliver the Next Generation of Manufacturing** at the Disruptive Tech & Innovation Summit with the theme "Techno-Optimism: New Thinking In The Age Of Futuristic Technologies," on December 20, at Vivanta by Taj, M.G. Road, Bengaluru.

Balaji Parthasarathy delivered the keynote address titled **"Social innovation: Exploring new institutional and process design for 'wicked' problems"** at the workshop on Smart Cities, Big Data, the Internet of Things, and Digital Rights, at the Srishti Institute of Art, Design and Technology on December 21.

Ms. Ramadevi participated in the Year-end LIS Meeting on **"Newton's first Law of Librarians: Pushing the Libraries to the future"** organized by LIS Academy in collaboration with Department of Public Libraries, Government of Karnataka, on December 31.

Students

Kumaresh Krishnan (IMT2013021) was selected for the **"B4 Young Scientist Development Winter School"** conducted by Harvard University (USA) and IBAB (Bengaluru). This is a 2 week program from Dec 29 - Jan 11. The program, which was attended by 25 selected students, presented upcoming research in brain science, informing the students of new avenues for interdisciplinary research.

There are new faces and roles on campus. Details of their joining:

December 1: Ms. Parvathy, Research Associate [CITAPP, Faculty supervisor: Prof. Amit Prakash]

December 9: Mr. Harish Boya, Research Associate [Digital Identity in Emerging Markets project, Faculty supervisor: Prof. Janaki Srinivasan]

December 12: Dr. Saurabh Srivastava, Post-doctoral Researcher [Faculty mentor: Prof. Brijesh Kumar Mishra]

Academic Milestones

December 21: Thesis Oral Examination by Sumant Kulkarni (PH2013009) on **"Mining Labeled Semantics Across Terms And Documents In User Generated Text Corpora"**

Campus Visitors

December 2: Mr. Vaitheeswaran, startup mentor and founder-CEO - IndiaPiaza

December 9: Mr. Dominic McAllister, British Deputy High Commissioner to Karnataka.

December 12: Prof. Mohan Krishnamoorthy from Monash University

December 14: Mr. Gopala Krishna, MD, Maxim

December 19: A team from Continental Automotive GmbH, headed by Dr. Vivek Venkatarao and Mr. Ganesh S. Ra

Campus Calendar for January 2017

January 2: Term 2 started

January 2: Master of Science by Research and Ph.D. new batch admission

January 4: Joining of the 4th batch of Sponsored M.Tech. students from Samsung

January 9: Add/drop date for course registration