



Inside this Issue

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

From the Director's Desk

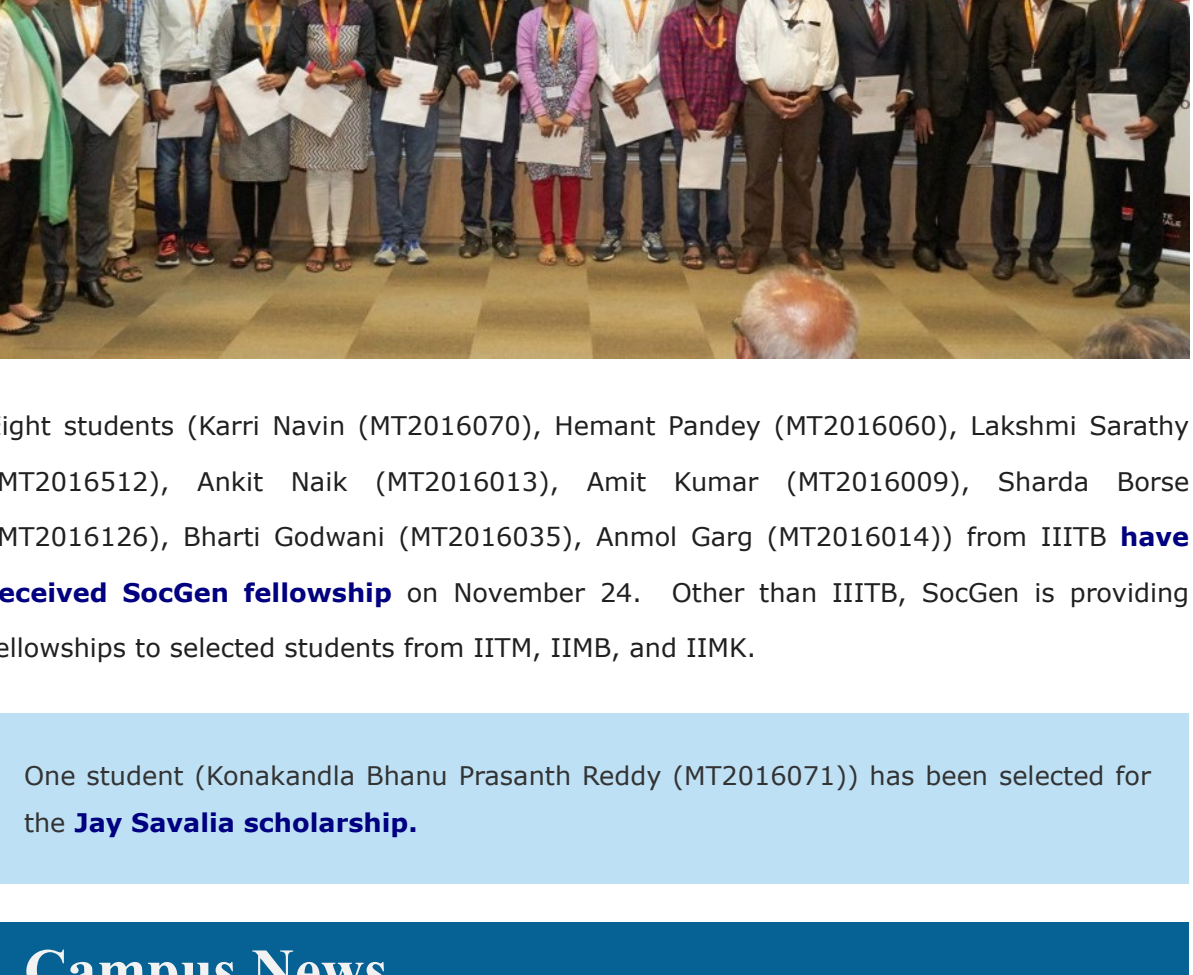


We have seen several "history-changing" events occurring around the globe in November 2016, such as the USA presidential elections, demise of the Cuban revolutionary, Fidel Castro, and demonetization in our country. Equally, we at IIITB had an eventful month, some insights follow:

We launched the Centre for Cyber Security Education & Research (CCSER), Prof. Janaki Srinivasan co-organized an erudite workshop on "Digital Financial Platforms and Inclusion," two of Prof. Prasanna's patents have been granted, and Prof. Srinath Srinivasa and his lab participated in the Web Science Trust broadcast WebScience@10, which was broadcasted worldwide. IIITB has the only Web Observatory in Asia; kudos to Prof. Srinath Srinivasa for making this happen.

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

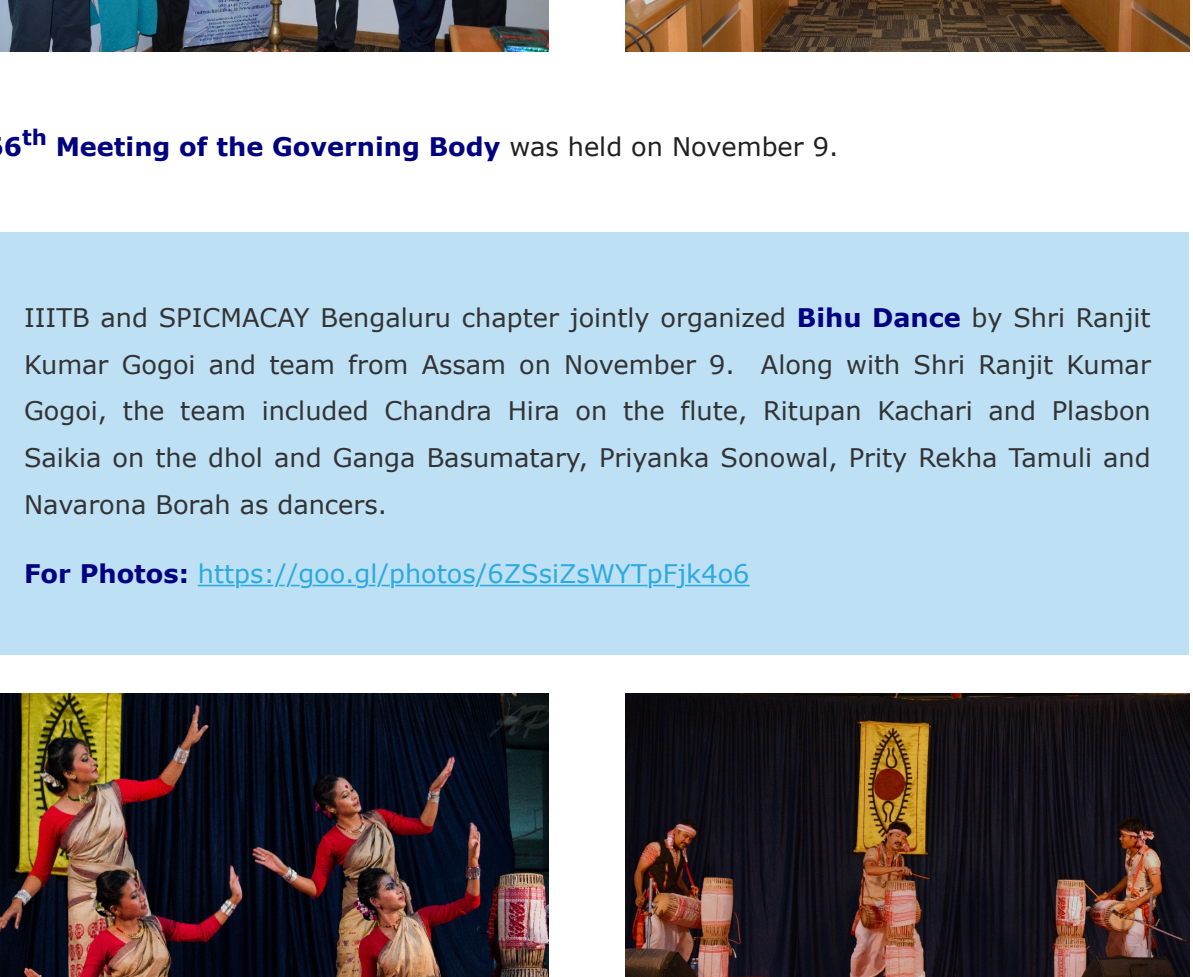
Achievements



Two patents, where Prof. G. N. Srinivasa Prasanna is the inventor, **have been granted** in November 2016, by the Intellectual Property India, Government of India. The inventions are "Broadband HF/VHF/UHF Communications on Power Lines" (Patent Number 277528) and "Powerline Communication System at VHF/UHF" (Patent Number 277599).

Dr. Mandar Vijay Kulkarni has been awarded **the UK-based Regional Studies Association's Travel Grant for the year 2016** to present a paper in the Young Scholars Initiative (YSI) Plenary: Piecing Together a Paradigm.

The paper titled **"Asynchronous Video Interviews vs Face-to-Face Interviews For Communication Skill Measurement: A Systematic Study"** by Sowmya Rasipuram (PH2014008), Pooja Rao (MS2015009), and Prof. Dinesh Babu J. received the **Best Student Paper Nomination at the 18th ACM International Conference on Multimodal Interaction (ICMI), 2016**. Sowmya had received a SIGCHI travel grant worth USD 2000 for the travel.



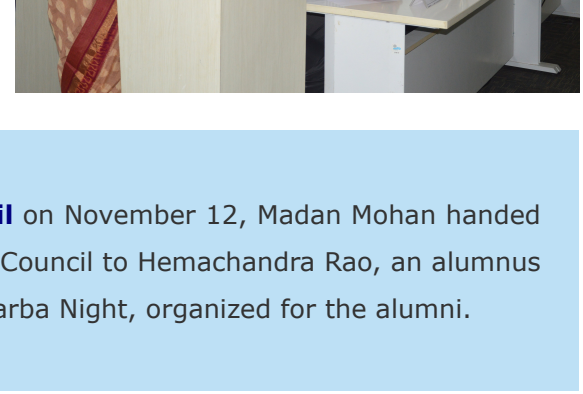
Eight students (Karri Navin (MT2016070), Hemant Pandey (MT2016060), Lakshmi Sarathy (MT2016512), Ankit Naik (MT2016013), Amit Kumar (MT2016009), Sharda Borse (MT2016126), Bharti Godwani (MT2016035), Anmol Garg (MT2016014)) from IIITB **have received SocGen Fellowship** on November 24. Other than IIITB, SocGen is providing fellowships to selected students from IITM, IIMB, and IIMK.

One student (Konakandla Bhanu Prasanth Reddy (MT2016071)) has been selected for the **Jay Savalia scholarship**.

Campus News

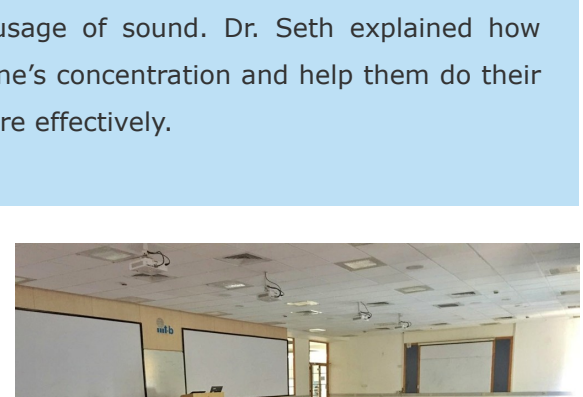
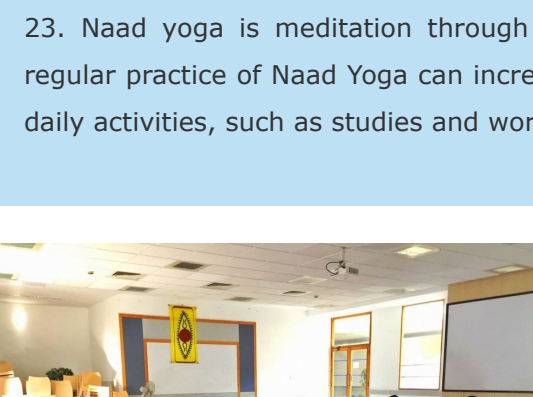
Events

Workshop on Mobility in Societies: Joint road forward was held during November 3-4. Prof. S. Rajagopalan organized the workshop, the goal of which was to bring people from different sections of the society – government, industry, academia and community organizations – to understand and develop the future of mobility needs for all sections of society.



The Chairman of the Board, Mr. Kris Gopalakrishnan, launched the IIITB **Centre for Cyber Security Education and Research** on November 9. The Centre will promote awareness about cyber security as well as conduct research in related topics as well as develop tools and techniques for security monitoring and provisioning. The first certificate program is slated to begin in Jan 2017 in collaboration with Forensics Intelligence Surveillance and Security Technologies Pvt. Ltd.

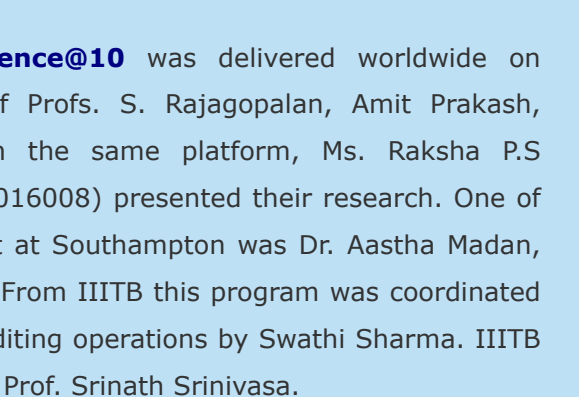
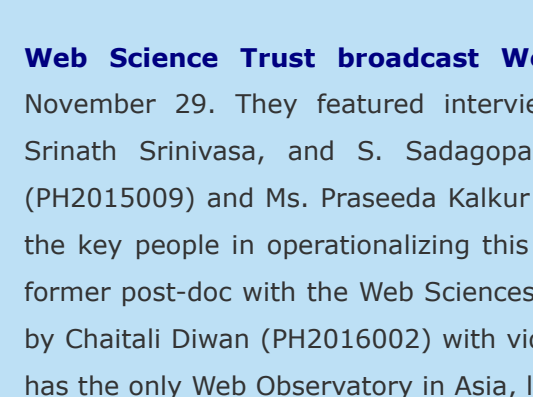
For Photos: <https://goo.gl/photos/m4ehX9YY7ehndGnL8>



66th Meeting of the Governing Body was held on November 9.

IIITB and SPICMACAY Bengaluru chapter jointly organized **Bihu Dance** by Shri Ranjit Kumar Gogoi and team from Assam on November 9. Along with Shri Ranjit Kumar Gogoi, the team included Chandra Hira on the flute, Ritupan Kachari and Plasbon Saikia on the dhol and Ganga Basumatary, Priyanka Sonowal, Prity Rekha Tamuli and Navarona Borah as dancers.

For Photos: <https://goo.gl/photos/GZSsiZsWYToFk4o6>

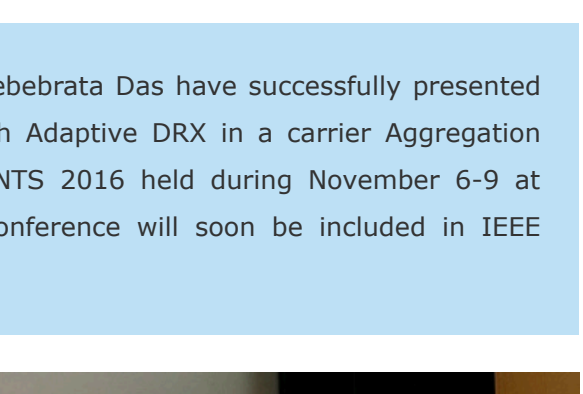
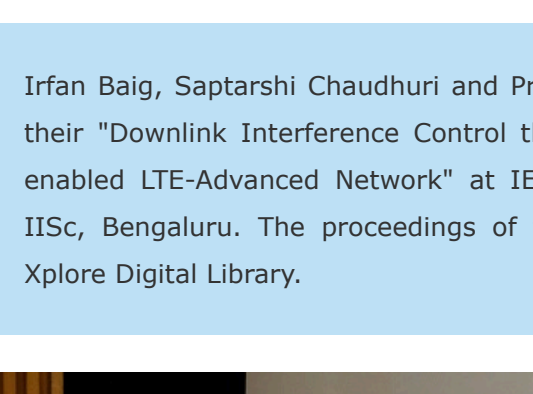


IIITB conducted a one-day workshop on digital and financial inclusion called **"No Cash, No Intermediaries? Different Scenarios for a Digital Economy"** on November 11. The November 8 demonstration, gave rise to many interesting discussions at the workshop which featured speakers and participants from academia, corporates, non-profits and the government. The idea for this workshop originated in research that Prof. Janaki Srinivasan and co-PI Elisa Oreglia from SOAS University of London have been carrying out on digital money platforms in Myanmar and India. Both this research and the workshop were supported by the University of California Irvine's Institute for Money, Technology and Financial Inclusion (IMTFI).

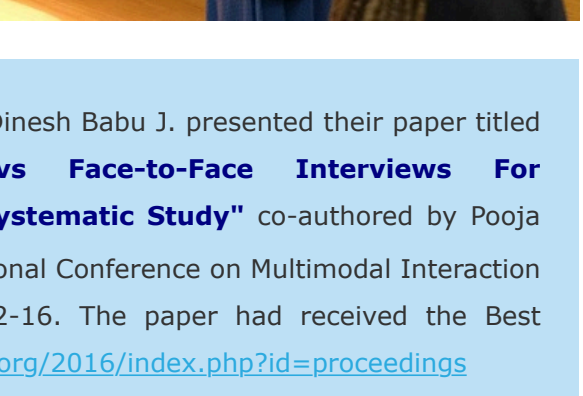
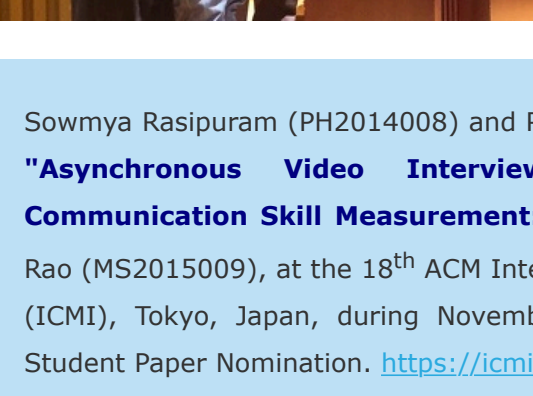
The workshop overview and schedule are available on the CITAPP website:

<http://citapp.iitb.ac.in/news-and-events/conferences-workshops/workshop-on-digital-financial-platforms-and-inclusion/>

For Photos: <https://goo.gl/photos/zupamHYHs7c5Xo96>

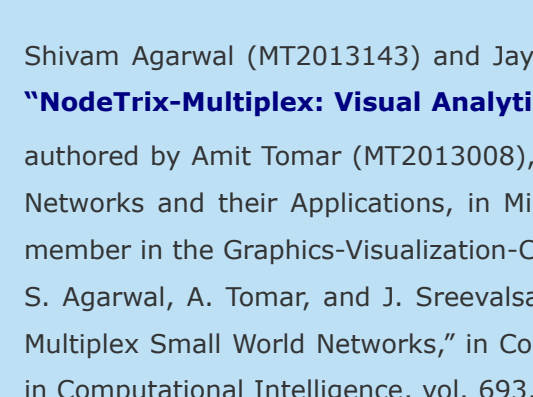


During the meeting of **IIITB Alumni Council** on November 12, Madan Mohan handed over the charge as President of IIITB Alumni Council to Hemachandra Rao, an alumnus from the 2001 batch. This was followed by Garba Night, organized for the alumni.



In the week of November 21, interviews and on-campus domain-specific written examinations for **admissions to research programs** (Master of Science by Research and Doctor of Philosophy) in Term 2, 2016-17, were conducted.

SPICMACAY Bengaluru chapter hosted a session on **Naad Yoga** by Dr. Kiran Seth (founder, SPIC MACAY) and Vid. Vani Sateesh (Naadic vocalist) at IIITB on November 23. Naad yoga is meditation through the usage of sound. Dr. Seth explained how regular practice of Naad Yoga can increase one's concentration and help them do their daily activities, such as studies and work, more effectively.



The inventions by G. N. Srinivasa Prasanna, namely, "Broadband HF/VHF/UHF Communications on Power Lines" (Patent Number 277528) and "Powerline Communication System at VHF/UHF" (Patent Number 277599) have been granted by the Intellectual Property India, Government of India, on November 23 and 24, respectively. The former invention is "a method of transmitting a broadband signal over a set of one or more conductors which can handle transmission at VHF/UHF, exemplarily over a ubiquitous medium voltage (MV) or low voltage (LV) power line network in TV/CATV channels, wherein the transmission channel is optionally divided into a plurality of sub-channels, each being separated from each other in time or in carrier frequency." The latter invention is based on the "unique characteristic of the MV power line at VHF/UHF [is] that it can radiate and transmit, simultaneously, resulting in a hybrid wireless-wireline channel, serving both high-speed broadband as well as ubiquitous mobility applications, including 3G/4G." For the latter, Prof. Kalluri R. Sarma (formerly with IIT Kanpur, and currently Professor of Eminence at IIIT Hyderabad) and the following students (from IIITB) are co-inventors: Mayank Raj, Ritesh Kumar Kalle, Manju Muthu Krishna, Ravikanth Vadalapudi, Sumit Kumar, Pramod KumarEnnumala, Rangaprasad Badasheshi, and Vidya Sagar.

Web Science Trust broadcast WebScience@10 was delivered worldwide on November 29. They featured interviews of Profs. S. Rajagopalan, Amit Prakash, Srinath Srinivasa, and S. Sadagopan. On the same platform, Ms. Raksha P.S (PH2015009) and Ms. Praseeda Kalkur (PH2016008) presented their research. One of the key people in operationalizing this event at Southampton was Dr. Aastha Madan, former post-doc with the Web Sciences Lab. From IIITB this program was coordinated by Chaitali Diwan (PH2016002) with video editing operations by Swathi Sharma. IIITB has the only Web Observatory in Asia, led by Prof. Srinath Srinivasa.

More details: <https://www.webscience.org/webscience10/>

The webcast is available in the archive at: <https://youtu.be/7BTkyl60DM>

Publication Including Presentations



Prof. V. Sridhar presented his paper titled **"Cross-border digital flows and its economic impacts"** at the 14th South Asian Network of Economic Research Institutes (SANET) Annual Conference, Kathmandu, Nepal, during November 7-8.



Irfan Balg, Saptarshi Chaudhuri and Prof. Debebrata Das have successfully presented their "Downlink Interference Control through Adaptive DRX in a carrier Aggregation Enabled LTE-Advanced Network" at IEEE ANTS 2016 held during November 6-9 at IISc, Bengaluru. The proceedings of the conference will soon be included in IEEE Xplore Digital Library.



Sowmya Rasipuram (PH2014008) and Prof. Dinesh Babu J. presented their paper titled **"Asynchronous Video Interviews vs Face-to-Face Interviews For Communication Skill Measurement: A Systematic Study"** co-authored by Pooja Rao (MS2015009), at the 18th ACM International Conference on Multimodal Interaction (ICMI), Tokyo, Japan, during November 12-16. The paper had received the Best Student Paper Nomination. <https://icmi.acm.org/2016/index.php?id=proceedings>

Prof. Subhajit Sen presented his paper titled **"CMOS Multi-phase Switched-Capacitor Step-Up DC-DC Converter,"** co-authored by Mahesh Zanwar (MS2014002), at the IEEE ICSEE conference at Eilat, Israel on November 17. The paper will be available in IEEE Xplore.

Gopika Gopan (PH2014003) presented her paper titled **"Statistical Feature Analysis for EEG Baseline Classification: Eyes Open vs Eyes Closed,"** co-authored by Profs. Neelam Sinha and Dinesh Babu J. at IEEE TENCON 2016, in Singapore during November 22-25.

Sridhar, Kala & Sridhar, V. (2007). Telecommunications Infrastructure and Economic Growth: Evidence from Developing Countries. *Applied Econometrics and International Development*, 7 (2), 37-56.

This paper has been listed in the **Social Science Research Network (SSRN)'s Top Ten download list** under **Infrastructure & Communication** category as on 30 Nov 2016 with total downloads of **1,595** during 1997-2016. The Top 10 can be viewed at: <https://papers.ssrn.com/sol3/topTen/topTenResults.cfm?groupingId=2424166&netorjml=jml>

Shivam Agarwal (MT2013143) and Jyaa Sreevalsan Nair presented their paper titled, **"NodeTrix-Multiplex: Visual Analytics of Multiplex Small World Networks,"** co-authored by Amit Tomar (MT2013008), at the 5th International Workshop on Complex Networks and their Applications, in Milan, Italy. Shivam is currently a research staff member in the Graphics-Visualization-Computing Lab.

S. Agarwal, A. Tomar, and J. Sreevalsan-Nair, "NodeTrix-Multiplex: Visual Analytics of Multiplex Small World Networks," in Complex Networks & Their Applications V, Studies in Computational Intelligence, vol. 693, pp 579-591, Springer International Publishing, 2017. http://link.springer.com/chapter/10.1007/978-3-319-50901-3_46

Policy Papers

Consultation Note on **"Model for Nation-wide Interoperable and Scalable Public Wi-Fi Networks"** for Telecom Regulatory Authority of India (TRAI) by Prof. V. Sridhar was published on TRAI website in November 2016.

Faculty and Staff

IIITB will be partnering in research with Caribou Digital, UK to conduct a study on Digital Identity starting this November. The 8-month research project will explore how people create, experience and manage various forms of digital identities in their everyday lives. Fieldwork for this research will be conducted in urban and rural sites in Karnataka and other states in the course of the next few months. Prof. Janaki Srinivasan will be the PI for this project and visiting faculty Dr. Sarita Seshagiri will be co-PI on the IIITB side. The IIITB and Caribou teams spent two productive weeks this month in Bangalore, with meetings to fine-tune the research and kicking off the pilot phase of the field research with interviews conducted at various sites across Bengaluru.

Prof. S. Sadagopan, the Director, interacted with British Prime Minister Theresa May during her visit to Bengaluru on November 8.

Examinership of Doctoral Dissertations (Prof. V. Sridhar)

Michail Katsigianlis. (2016). Techno-economics of radio access networks: case of Finland. Department of Communications and Engineering, Aalto University, Espoo, Finland. Prof. Sridhar was the "opponent" of the Ph.D candidate at the Public Examination held at Aalto University on November 11.

Earlier This Year

Prof. Janaki Srinivasan was on a **jury panel to review 12 social innovation projects involving 60 innovators at TCS Foundation's Digital Impact Square initiative** in Nashik during August 26-27. The jury panel helped select projects that could move from a 5-month long "probe" phase to a "grow" phase of the innovation cycle. The innovations included tools for affordable and quick soil testing, matching blood donors to blood requirements, monitoring water leakage and bus tracking.

Prof. Janaki Srinivasan attended **an international research seminar on family empowerment** held on October 1 at the Asian University for Women in Chittagong, Bangladesh. She was invited to participate as a distinguished country expert at the seminar where findings were presented from a three-year comparative study on the impact of women's education and employment opportunities on gender relations in the family in Bangladesh, Pakistan, India and Afghanistan.

IIITB and Samsung Research India-Bangalore (SRIB) renewed the MoU for next three years for Sponsored M.Tech, MSR and Ph.D programs on October 6. It was attended by Prof. Rajagopalan, Coordinator Sponsored M.Tech Programme, Prof. Debabrata Das, Dean-Academic and R&D from IIITB and Dr. Alok De, Global VP, SRIB, Dr. Ruchi Tandon along with other officials of SRIB.

Prof. V. Sridhar gave an invited session on **"Spectrum Management: The Regulatory and Policy challenges"** at the Workshop on Telecom Policy and Regulation for the officials of the Telecom Regulatory Authority of India (TRAI) at Indian Institute of Technology Delhi on October 20.

Dr. Mandar Vijay Kulkarni presented his paper titled **"From margins to the mainstream: New hybrid spaces and the role of technology"** in the conference, Young Scholars Initiative (YSI) Plenary: Piecing Together a Paradigm organized by the Institute for New Economic Thinking at Central European University, Budapest, Hungary during October 19-22.

Students

Abhinav Shrivastava (MT2015003), Ashhadul Islam (MT2015030), Aniket Kumar (MT2015012) and Janaki Vinesh Joshi (MT2015051) presented their app 'Echo' at [Procon.in](http://procon.in) 2016 conference held during November 10-11.

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

November 1: Dr. Sarita Seshagiri, Visiting Faculty

Academic Milestones

November 2: State of the Art Seminar by Anushka Chandrababu (PH2012001) on **"Convex Model Databases"**

November 3: Open Seminar by Prashant Walli (PH2012005) on **"Energy Efficient Medium Access Control Algorithms for LTE-Advanced"**

November 21: State of the Art Seminar by D. Kumar (PH2013004) on **"Ensemble Methods and Practical Guidance with Emphasis on System Engineering"**

Guest Talk

November 16: Dr. P. S. Sai Krishna, from BITS Pilani (Hyderabad Campus), on **"Identification and Control of Cloud Computing Systems"**

November 23: Dr. Arnab Kumar Biswas, from the Department of Electronic Systems Engineering of the Indian Institute of Science, on **"Securing Multiprocessor Systems-on-Chip"**

November 30: Dr. Srinivas Venkatesh, from the Cryptography and Information Security group at the University of Bristol, UK, on **"Securing Cryptographic Implementations against Side-Channel Attacks"**

Campus Visitors

November 3: Prof. Simon Gay (Professor, School of Computing Science) and team, University of Glasgow

November 11: Mr. Raghu Radhakrishnan, CEO & President, TmaxSoft Technologies Pvt Limited

November 17: Mr. Bhavesh Trivedi, Director (DPA), MEA

November 22: Dr. C. V. Madhukar, Omdia

November 25: Mr. Vivek Kulkarni, IAS(R) Chairman, Brick Works & Ms. Rajee

Campus Calendar for December 2016

December 5-10: End-Term Exam

December 11-31: End-Term break

December 12-14 - "Decoding the Digital" - A 3 day Winter School on digital society (Themes: Smart Cities and Social Media) organized by CITAPP

December 14: 54th Senate Meeting

December 19: (Tentative) WSL one-day workshop

