



A Half-yearly e-newsletter of the Department of Computer Science and Engineering
Manipal Institute of Technology, Manipal University, Manipal

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Message from Department Chair



On behalf of the faculty and staff of Department of Computer Science and Engineering, I extend my warmest welcome to the students for the new academic year 2017. A big thank you for your active participation in the workshops, guest lectures and Hackathons organized last semester by the Department. I cordially invite you to be a part of International Conferences and Workshops that are planned ahead for the coming Semester. Our faculty members are constantly striving to impart quality education and contribute equally towards quality publications. The Department acknowledges the well-planned activities to its dedicated faculty members and students. Let us all continue to learn and grow.

Department Events:

Smart India Hackathon 2017

“Smart India Hackathon 2017” is a 36 hour non-stop event which is considered one of the biggest digital product development hackathons held till date. The problem statements put forth are by the various Union government ministries and departments Such as the ISRO, Ministry of Defense. The Department together with Department Of Information and Communication Technology hosted this mega event on April 1-2, 2017 where students racked their brains to provide solutions to the problems posed by UGC. 252 students participated in the event.

Angel Hack 2017

The department organized Angel Hack 2017, a 24-hour round-the-clock event on 8-9 April 2017, jointly with the Department of Information and Communication Technology. Around 90-100 students from MIT and neighboring colleges participated in the event. AngelHack Manipal has been created to provide a platform for developers to showcase their ideas/products.

HPE Workshop Series - Intelligence at Brink

The Department organized a one day workshop on January 30th, 2017, conducted by HPE (Hewlett Packard Enterprise) with two separate sessions entitled “Automation through REST API’s and “Security and Hacking”. The HPE team Mr. Harish, Mr. Simha, Mr. Gautam, Mr. Sudhir and Mr. Neelesh channeled the sessions. Around 150 students, research scholars and faculty members were involved in the talk. The talk was primarily on the concept of Composable Infrastructure.

Oracle Interaction

The event “Oracle Interaction” was conducted for the pre-final year students on Feb 20, 2017. The itineraries of the event were a talk by Mr. Amar Rao on "Oracle in Industries" and a tech talk by our alumni Mr. Pranav Tandon and Ms. Aditi Lath. The event witnessed 200 students from various branches.

Let's talk about Graphs

The Department organized a talk on “Let's talk about Graphs” by Dr Juan Sequeda, the co-founder of Capsenta, Austin. on 18th February 2017 . Dr. Juan was accompanied by Dr. Nar-simha Bhat, Founder, Manipal Dot Net. The talk focused on Graphs - a new data model. More than 150 students participated in the event.

Winning the Startup Challenge

The Department organized a guest talk on “Winning the Startup Challenge” on February 7, 2017 at MIT, Manipal. Dr. Ashok Prabhu , an innovation coach from New Jersey presided the session and spoke on the concepts of Innovation through Entrepreneurship. The talk was attended by students from different constituent institutes of Manipal University.

Industry-Academia Interaction

MIT among Top 10 in Infosys Campus Connect Program

MIT Manipal continued its strong cohesive industry collaboration by being in top 10 in various categories in the Infosys Campus Connect Program. The categories include Inspire Faculty Partnership model, Campus Connect events, Elective Batch Rollout and Elective BOS.

Making Industry-Academia Interface Work: RTWO Healthcare

Computer Vision Group of the Department has achieved initial level of Industry-Academia Association with Bengaluru based RTWO Healthcare IT Startup Company. The work involves research and development of prototype model in medical image processing for the diagnosis of diseases using different imaging modalities like CT and MRI.

Department Club Activities

Linux User Group Events:

1. “Google Summer of Code” mentoring program was organized on 15th January 2017.
2. A workshop on “Facebook and RealmDB integration” was held on 22nd January 2017.
3. Avikant Saini and Yash Kumar Lal finished in top 10 teams in India for their project "hello_friend" at Microsoft code.fun.do SHOWCASE held at Microsoft India Campus, Hyderabad on May 11th, 2017.

ACM Chapter of Manipal

1. Cryptography Workshop was held on 28th and 29th January 2017
2. Functional Programming Workshop was held on 27th and 28th February 2017
3. ACM's Code Jam (Online Country-wide coding challenge) was held on 3rd and 4th March 2017
4. TechWeekend '17 took place on 30th March-2nd April 2017

IECSE

1. Women Tech Makers Meet covers various topics and organizes talks by students who have achieved an internship in companies like Sandisk. It was held in the month of January 2017.
2. An annual competitive coding contest "Kaiser" was held on 24th January 2017.
3. Intersection Coding contest was conducted for second and third years which pits each section against each other to determine the best amongst them all and was held on 27th and 28th February 2017.
4. The annual technical fest "Prometheus" of IECSE took place from 24th March 2017 to 26th March 2017.

Faculty Mentor: Dr.Renuka A

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Student Achievement:

Team "One Call" takes first place in Angelhack -2017

Team "One Call" comprising Akshay Khanna, Ankush Anshuman, Ronald Das and Udaya Kumar from our department and Abhishek Mitra from Department Of Computer and Communication Engineering won the "Angel Hack 2017" competition. They built an app that allowed people without Smartphones or Internet connectivity, gain access to services like weather reports, Health tips, Job search, make payments.

Team VisionX launches beta version of Drishya in Provenance 2017

Drishya, being a PDA (Personal Digital Assistant) to the visually impaired, helps them in recognizing objects and navigation. A prototype was exhibited in Provenance 2017 and has gained wide acceptance. Team VisionX comprises four members from MIT, Manipal. Saksham Pandey student from our department was one among them.

Get Set Go - Online Quiz Contest

Final year students of our department, Mr. Rohan Jain and Mr. Vedang Gutgutia were among the 18 students selected as Graduate Engineer Trainees by Reliance Industries for Reliance Corporate IT park, during the campus placement process on Nov 16, 2016. All of them had to mandatorily participate in the online quiz contest "Get Set Go" conducted during April 2017, Rohan and Vedang have emerged as winners of the contest.

Fin Assistant app wins Unisys Cloud 20/20 Y8 Technical Project Contest

A team of four -Arpan Mishra, Datla Manish Varma, Nabil DSilva and Sailesh Sriram took home the top 2,00,000 INR prize in the Unisys Cloud 20/20 Y8 Technical Project Contest 2017. *Fin Assistant* is an easy to use AI powered chatbot which offers a host of solutions to the individual investors for financial statement analysis of different companies.

MIT Team finishes as state runners-up in TCS TechBytes '17

A crew of 2 members, Kunal Joshi (CSE) and Anurag Roy (ICE) were victorious in regional finals, TCS TechBytes held at Sahyadri College of Engineering, Mangaluru. The crew represented MIT in the state finals, Bengaluru and attained the runners-up position.

Second Runners-up at TAPMI Quiz

The team of Sailesh Sriram and Nabil DSilva were declared the second runners-up in the grand finale of the 14th edition of Quiz on the Beach hosted by T.A. Pai Management Institute which took place on 8th January 2017. They were awarded a cash prize of Rs. 1 Lakh. .

Manipal students won the Second Runner-up in the South Zone Inter-University Badminton Tournament

Madurai Kamaraj University had organized the South Zone Inter-University Badminton Tournaments for the year 2016-2017. A team of seven from different constituent colleges of Manipal University won the second runner up. Mr. Govardhan Shenoy, student of fourth semester was one of the team members.

Ganga Singhal bags Kadambi Award

The Kadambi family have instituted an endowment fund from which scholarships of ₹30,000 each are given to students who have demonstrated excellence in sports (with the exception of cricket) at the State or national level. Ganga Singhal, final year student of the department, received this award on the Founder's day celebration, April 30, 2017.

Manipal Research Colloquium 2017

Manipal Research Colloquium 2017 is an annual scientific paper presentation event organized under the aegis of Directorate of Research, Manipal University. K.V Bharghav Sidhartha, Vidya Vivaswanth won the first prize for the poster titled "Study of Differences in Key sizes of RSA and Elliptic Curve Cryptography" and Nadiya Naaz, Sonali Mittal, Sony Acharya acquired second prize for the poster titled "Standard KLE Line Payment Server".

Faculty Achievement:

Two MIT employees bag prestigious IMC Ramakrishna Bajaj National Quality Award

Mr. Dasharathraj K Shetty and Mr. H.S.Bhat have received the coveted Certificate of Excellence Award-2016, instituted by IMC Ramakrishna Bajaj National Quality Awards Trust for the year 2016. Mr. Anil Sardana, CEO of TATA Power handed over the awards.

CSE Faculty wins first place at Smart City Challenge 2017

Mrs. Anjana .S secured first place at the National level competition 'Smart City Challenge 2017' conducted as part of the Workshop "Internet of Things (IoT) for Emerging Engineering Applications in Smart City Implementations", held on 9th - 11th Feb 2017 at PSG College of Technology, Coimbatore.

Doctorate Degree conferred to Mrs. Hemalatha S

Mrs. Hemalatha S has been awarded Ph.D. degree from Manipal University, on 17th February, 2017, for her thesis entitled "Techniques for Optimizing Capacity and Security in Steganography".

Alumni into Premium Universities/Institutions:

1. Mehul Smriti Rajee : Graduate School of Harvard University
2. Suraj Raghavan : University of Minnesota
3. Nishith Sinha : Georgia Institute of Technology
4. Harsimar Bagga : John Hopkins University
5. Samarth Kulshreshtha : University of Illinois Urbana Champaign
6. Neeraja Velayudhan : University Of Manchester
7. Dharini Krishna : Carnegie Mellon University

Faculty Journal Publications:

1. Rao, Shreyas Suresh, and Ashalatha Nayak "Enterprise Ontology Model for Tacit Knowledge Externalization in Socio-technical Enterprises", April 2017.
2. Shanthi, P. B., and K. S. Hareesha. "Analysis of Malignancy in Pap Smear Images Using Gray Level Co-Occurrence Matrix and Gradient Magnitude." *Advanced Science Letters* 23.3 (2017): 1846-1852.
3. Manjunath, K. N., P. C. Siddalingaswamy, and G. K. Prabhu. "Measurement of smaller colon polyp in CT colonography images using morphological image processing." *International Journal of Computer Assisted Radiology and Surgery* (2017): 1-11.

Software Procurement

1. Sparx Systems Enterprise Architect software is installed and configured in three different labs in the Department. It is a visual modeling and design tool based on the Object Management Group-UML.
2. NetSim Software Version 9.1 installed and configured in Network Lab. This simulation software is used for Protocol Modeling & Simulation, Network R&D and Defense applications.