K.S. Institute of Technology Bangalore

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

INDUSTRIAL VISIT REPORT
By
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Industrial Visit Venue: IISc, Bangalore
Event at Venue: Open Day
Date: 4th March 2017
Day: Saturday

Objective

The main objective of the Industrial Visit is to give an exposure to the pre-final year (6th Semester) CSE students and pre-final year (2nd Semester) M.Tech students towards new technologies. This visit will give the students to carry out projects either in CSE domain or in interdisciplinary domains. The students participating in the event or in coding event at IISc will boost their technical skills which will help them during placements.

Schedule

Time	Activities	Remarks
8:30 AM	Students Assembling at KSIT	
9:00 AM	Departure from KSIT to IISc through college transportation	
10:15 AM	Reached IISc	Students and concerned faculties had Breakfast in the IISc Campus
10:45 AM	Reported to volunteer for IISc Event	Mr. Suraj Nigave (student coordinator)
10:50 AM – 2:00 PM	Volunteer guiding us to departmental visit to CSA, SERC, Department of Electronics & Engineering, Aeronautical Engineering	Along with Exhibition the students also participated in Seminars and Coding Competition.
2:10 PM	Departure from IISC to KSIT	
3:45 PM	Reached KSIT	

Details about the visit:

On March 4th, 2017 the 2nd and 3rd year students of CSE branch visited IISc on 04/03/2016, open day. The visit was also accompanied by batches of 13 CSE faculties. Each faculties coordinated 15-20 students each. During the visit both the faculties and students both were involved in participating the competition, quiz and tech talks. The Research activities of all the departments were displayed. The students and the faculties had a good interaction with the researchers. They were able to know the recent research works being conducted in all departments. The students found greater interest in the field of nano science and its applications especially the mechanism of dust free particles in the room. The other interesting application was the unmanned aero vehicle. They were very interesting aspect in the visit compared to last day visit especially in the DESE (Department of Electronic Systems Engineering) where the students were enthusiastic over the project display. They had a project exhibition there, where we really got to see some great projects. They had quadcopters there, which was actually nicely implemented. And the best thing about all of these projects were that rather than controlling their devices with an electronic remote, they had interfaced it to their phones. All of them had developed an app to interact with their devices and control it. This related all the projects to our field of study, giving an insight into networking and various other topics. The people explained how they had worked on making it light and stable, and they could also control the speed of their blades, the orientation, the speed and the angle. The flight of the quadcopter was actually quite impressive.

The next students and staffs visited were Supercomputer Education and Research Centre (SERC), the fastest supercomputer in India. Everyone was excited to see it. All students and staffs went inside and there were the display of arrays of machines, with an unimaginable system configuration. No wonder it is so fast! It contains TBs of RAM, hundreds of 12 core Haswell processors, all running in parallel to give a computing speed of up to 900 Teraflops, which is just astounding. As explained by the representative, it is developed by CRAY and runs their flavor of Linux. 6 arrays do the computation and 3 blocks are used just to hold the intermediate solution. An administration terminal is given, which is accessed remotely. It can queue up to 72 jobs at a time. And researchers run such sophisticated simulation on it that even this supercomputer takes days to finish. The power is just astonishing. In the same place, we were given a tour of computing hardware history. From earlier FORTRAN chips to old hard disks, to new machines. Old keyboards, and printers. Notebooks of 1997, having just 16 MB RAM and 32 MB hard disks. It really makes us think about the pace at which the computer industry has developed, surpassing all expectations. It really gave us a look into how things were developed, and how the technology, that we nowadays take for granted, has developed through the times. Lined up with these were the older supercomputers, which even though many not seem that powerful by the current standards, used to be a big deal in their times. The students also participated in quiz programs in Supercomputer Education and Research Centre (SERC) and also were keenly taking interest to gain research ideas.

The next leg of the visit were Computer Science and Automation (CSA), all the students were very enthusiastic and the visit was motivational for their further study and research. There were many events going on there. It was nice to see the presence of industry there,

all offering new and cutting edge technologies and platform to work upon. We had mobile industry there, offering information and tools to build various types of apps for phones. We had TCS there, offering their solutions. We had Microsoft there, talking about Bing and other online services they offer and how we could incorporate them for our usage. We had them demoing a computer graphics animation. They were rendering an animated forest scene at full HD resolution in real time with a frame rate of 60 FPS. The graphic had lots of detail. This was especially inspiring, since we have the Computer Graphics subject this semester and we are required to do a project and make our own animation. And this was a great opportunity to learn, seeing a great demonstration in front of us. It really lets us know how powerful the technology that we study is, and what wonders can be achieved by that. There also was a guest lecture happening at the lecture hall, being conducted by the officials of IBM.

In the last few leg of the visit, we tried to gather ideas in different departments - Department of Electrical Engineering (DEE), Department of Aerospace Engineering (DAE). By the time it was 2:00 pm we gathered at the common point and left the venue by 2:10 pm. In this way the event was successful, eventful with a lot of learning experience.

Event Pictures

Personal Computer

Inside-Outside

Can you find the CPU, Hard Disk?

Welcome to Open Day

Supercomputer Education and
Research Centre

Home of
India's Fastest Supercomputer

See the Past and Future
at Present

SERC

Conclusion & Acknowledgment

The Students and we the Faculties thoroughly enjoyed and learnt new things at IISc. It was useful both for the students as well as faculties.

I, firstly would like to thank our **Management** for the opportunity given to make this visit successful one. I then thank our principal **Dr. T.V. Govindaraju** whose blessings and support made the visit to IISc a greatest success. I am very thankful to our Head of the Department (Computer Science and Engineering) **Dr. Rekha B. Venkatapur**, without her continuous guidance, motivation and moral support this visit would not have been possible. I am also thankful to our Industrial Visit Chief Coordinator **Dr. Ranjana Jain** who motivated and guided me throughout. The visit to IISc is incomplete without the support of all my colleagues **Mr. Krishna Gudi S, Mr. Raghavendra Char S, Mrs. Swathi K, Mr. Kushal Kumar BN, Mr. Pradeep Kumar GH, Mr. Pradeep KR, Mr. Kumar K, Mrs. Renukadevi, Mrs. Siddutushara, Mrs. Kokila, Mr. Kumar K, Mrs. Deepa and Mrs. Sangeetha V** who helped me in coordinating during the industrial visit. Lastly the students of **4th** and **6th Semester BE** (Computer Science and Engineering) for being cooperative and maintaining discipline during the Industrial Visit.