



CSA OPEN DAY 2010



EXPERIENCE.

Rupesh Nasre.

Department of Computer Science and Automation.
Indian Institute of Science.

This document lists the experience of Open Day celebrated on Feb 26, 2010 at the Department of Computer Science and Automation, Indian Institute of Science.

BACKGROUND

India observes February 28 as the National Science Day to commemorate *Raman Effect* of the Nobel Laureate Sir C.V. Raman. In 2010, Indian Institute of Science (IISc) organized an *Open Day* on February 26, 2010 to celebrate the National Science Day. This event was open to everyone. It was hoped to be a great opportunity for professors, lecturers, teachers and students of various academic institutions including schools and colleges around Bangalore and the general public to participate in this event.

IISc showcased the cutting edge research being conducted in various laboratories. The visitors had access to various research laboratories in over 40 departments to get a feel of the world-class research in IISc. Each department had arranged various programmes for the visitors to highlight its work.



Sir C. V. Raman

TWO WEEKS BEFORE...

The Open Day was announced two weeks before by the institute. The chairman of the Department of Computer Science and Automation, Prof. Y. Narahari, called for an initial organizational meeting of enthusiastic students of CSA department on the evening of Feb 11, 2010 in Intel conference room. The enthusiasm was paramount as the late-comers had to pull in chairs from the adjoining rooms. This was an artifact of personal persuasion of students by Prof. Narahari prior to the organizational meeting.

The meeting highlighted several points, the most important one being students' enthusiasm. Within the ninety minute meeting, a rough skeleton of the CSA Open Day was built and students volunteered to take care of the individual responsibilities.

- Posters outside every laboratory describing the work done in the laboratory and achievements.
- Project and tool demonstrations, audio-visual presentations in every laboratory.
- Technical lectures by eminent personalities in the field of Computer Science.
- An audio-visual presentation of departmental history, people and research work.
- A stall on open source software.
- Stall by ACM Bangalore Chapter.
- A programming contest, a puzzle solving competition and a technical quiz for the enthusiastic visitors.
- Information brochures and posters detailing research work and degree courses in the department.

Event	In-charge
CSA brochures and posters	Suresh V.
Posters on pinup boards	Ramasuri Narayanam
Technical lectures	Arnab De
Departmental videos	Arun R., Prasad H. L.
Open source stall	Paul Victor
Programming contest	Paul Victor
Puzzle solving (Gedanken)	Subramanya Bharadwaj
Technical quiz	Mayuresh Kunjir
ACM Bangalore Chapter	Arnab De
T-shirts, certificates	Mayur Mohite
Photographs and video coverage	Sujit Gujar
Website	Rupesh Nasre.

Since individual laboratories were supposed to showcase their research work with posters and demonstrations, an in-charge for each lab was identified.

Research lab	In-charge
Algorithms and Verification Lab	Subramanya Bharadwaj
Compiler Lab	Arun R.
Computer Architecture And Systems Lab	Siva Chander
Database Systems Lab	Mayuresh Kunjir
Distributed Computing Lab	Amulyaratna Swain
Electronic Commerce Lab	Ramasuri Narayanam
High Performance Computing Lab	Manikantan R.
Informatics Lab	Suresh V.
Machine Learning Lab	Adway Mitra
Programming Languages Lab	Arnab De
Stochastic Systems Lab	Prasad H. L.
Visualization and Graphics Lab	Dilip Thomas

With the organization in place, most of the work was partitioned and assigned to a small team. The in-charge defined was mainly for the communication purpose; each of the tasks was to be carried out by a group of volunteers.

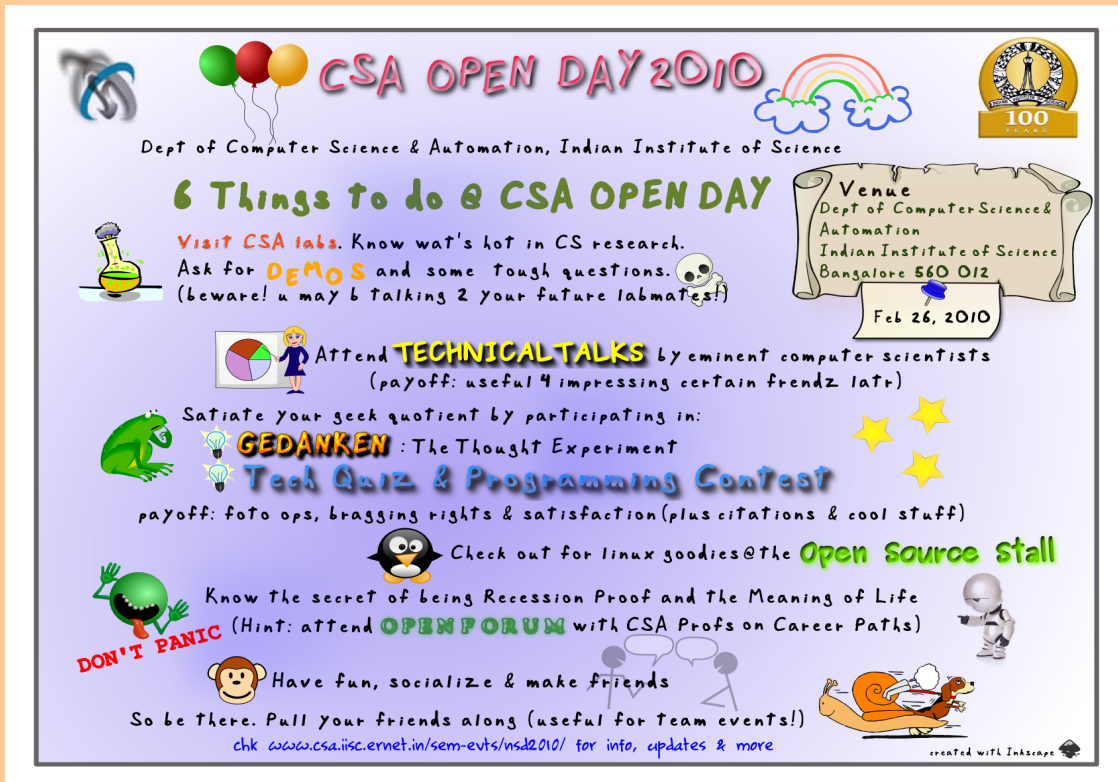
We had two weeks to organize the event. It seemed doable, but required a good planning. If we wanted to pull the crowd, a good publicity was required. In any big event, surprises *must* be expected. And we did face a few.

The next meeting was planned on Feb 16, 2010, ten days before the event. It was mostly to trigger everyone to start working. The faculty in-charge, Prof. Narahari, asked everyone to come prepared for the meeting with a status update of the work. The lab in-charge were asked to have a clear idea of what was planned inside each lab and a draft version of the lab poster.

TEN DAYS BEFORE...

The status update meeting revealed that each lab had a fair idea of what would be showcased. Most of the labs had started working on creating a poster talking about the research work conducted. CSA already had a pin-up board and a white board outside every lab and faculty room. Thus, our job was to simply create posters and attach over the boards.

A CSA poster for publicity of the Open Day covering various departmental events was necessary. Suresh took the lead and came up with a brilliant poster on Feb 18, 2010.



Varun Reddy was quick to get fifty A3 size copies of the poster from Printo, Malleshwaram. The first poster was put up on CSA notice board at the entrance on Feb 19, 2010, one week before the event.

On the same night, we put up the posters in the common eateries in campus: three messes, tea-board, faculty club and kabini. CSA became the first department in campus to advertise about the Open Day.

Some of us, like Subramanya Bharadwaj and Suresh V., had a prior experience with CSA SHOWCASE, an annual event where CSA used to conduct programming and puzzle competitions, and in general, highlight the department. The event, last held in 2005, was open to all the outside students. The experience came in handy for the Open Day. IISc Open Day was planned on Friday, a week day. Therefore, several of us were skeptical about the number of visitors coming to the department. A rough estimate was 300, and that too was looked upon on the more optimistic side. The experienced students suggested that for a good publicity, we should visit individual colleges in Bangalore and invite students and faculty. The suggestion was immediately considered for implementation. Prof. Narahari agreed to sponsor two cabs for the travel. Subramanya listed down the colleges according to their locations in Bangalore and divided them in three groups: East Bangalore, West Bangalore and colleges nearby IISc.

Varun Reddy, Paul Victor, Tilak Raj and Kaushik B. V. had a hectic schedule covering around fifteen colleges on Feb 22, 2010. The colleges covered were AIT Jnana Bharathi Campus, RVCE, JSS, PESIT, RNSIT, DSC, UVCE, BIT, BMS, BNMIT, Jyoti Nivas, Christ College, St. Joseph, MSRIT and Mount Carmel. In each college, they met the head/principal of the Computer Science department for the permission to put up a poster on the notice board. They received a welcoming response. The enthusiastic CSA volunteers also went to the classrooms and announced about the IISc event urging students to come over. The students were very happy to meet the IIScians and to know of the opportunity. After the college visits, we were sure that we would easily encounter over 300 visitors.

ONE WEEK BEFORE...

As the Open Day started approaching, the work also increased. Prof. Narahari and the volunteers selected Rupesh Nasre as the lead volunteer and Sujit Gujar as the sub-lead volunteer for coordinating volunteer activities.

The lab posters started pouring in. As a display, we put up the posters on the Open Day website. The plan was to later merge the research-heavy posters into CSA website. Several labs had their pin-up boards occupied with the cutting edge research being conducted at the labs. Most of them pitched the language in the poster at a level that could be easily understood by the undergraduate students – main visitors of the Open Day. A few labs (Database Systems Lab and Visualization Lab) had more than one posters showcasing their research, while many had a higher level description in a poster pinned outside and a more detailed version inside the lab. The posters continued occupying their places until two days before the event.

While individual research laboratories were busy preparing posters for their specific research areas, Prof. Narahari enthused Sujit Gujar and Prasad H. L. to create department specific posters. The students designed 3 brilliant posters:

- CSA Profile detailing the current statistics of the department including the number of faculty, students, staff; various prestigious awards won by the faculty and students; statistics on the number of publications in terms of books, book chapters, conference papers and journals; the number of citations received by top papers authored by the faculty and students; statistics on the number of ongoing projects in the department; etc.
- Sponsors listing various government and private companies that have tied hands with CSA for developing some cutting edge technologies. The sponsors have provided valuable support to the department over years by contributing useful case studies, research methodologies, research problems and grants enabling a strong bond between the two parties.
- Opportunities mentioning various ways in which bright interested students can be part of the vibrant community of CSA department. The poster mentioned about various course programs, research programs, and summer internships. It also detailed various research areas and laboratories available in the department.

These posters were also meant to be sent to various colleges all over India for advertising about CSA.



Another department level showcasing option was to create an audio-visual presentation of CSA's history, its achievements and its current profile. Incidentally, we had such a presentation done for the Centenary Conference. Arun R. and Prasad H. L. modified it to include the latest information and with the background voices of Abhishek Udupa, Meghana Nasre, Nithin Shivashankar and Arun R., an impressive presentation of CSA was made ready. The presentation, run in a loop on two plasma screens, was quite a big hit on the Open Day.

Simultaneously, volunteers were busy in arranging for various events on the Open Day. Arnab De contacted ACM Bangalore Chapter for having a stall and received a positive response. He also organized two technical talks. One by Prof. Ravi Kannan from Microsoft Research on *Research in Theoretical Computer Science*, and another by Dr. Ramesh Hariharan from Strand Life Sciences on *Algorithms for Life*. This was widely advertised on CSA Open Day webpage.

Three contests were planned for the Open Day.

- Programming contest called Bits N Bytes.
- Puzzle solving contest called Gedanken.
- Technical quiz called Random Access.



Prof. Ravi Kannan

Each contest had two rounds. The preliminary round was to shortlist a few teams for the final round. The first rounds of all the contests were paper based. The final round of the programming contest was to be held online on computers, that of the puzzle solving contest was written and that of the technical quiz was verbal. The online open source platform used for the programming contest was developed by one of the CSA students, Aditya Manthramurthy, along with others. The programming contest organizers, mostly from the Database Systems Lab, discussed several problems and came up with a set of questions for both the rounds. The puzzle solving contest organizers were mostly the Algorithms Lab members. They brainstormed on many novel puzzles and finally came up with two sets of questions. The technical quiz organizers were distributed in Computer



Dr. Ramesh Hariharan

Architecture and Systems Laboratory and High Performance Computing Lab. They were also part of the IISc Quiz Club and had an ongoing experience with it. An attraction point of the technical quiz was audience questions which, on correct answer, were going to result in getting chocolates. The information about each contest including the description, time, venue, team compositions and prizes was made available a priori on CSA Open Day website.

Several visiting students were expected to be interested in knowing about various opportunities available at the CSA department. Therefore, we planned a special session on *Opportunities at CSA*. Dr. Sathish Govindarajan agreed to deliver the information and several other faculty members agreed to be present to answer queries.

Since it was expected that all the volunteers would be busy with various activities throughout the day, Prof. Narahari arranged for lunch boxes for all the faculty, staff and student volunteers of the department. A high-tea was also planned after the closing ceremony for all of them along with the speakers, the guests and the winners. By the time we finalized the menu for high-tea, it became almost a full meal and we were forced to name it as a mini-dinner. The menu included Vegetable Sandwich, Medur Vada, Kara Bath, Kesari Bath, Pineapple Pastry, Potato Wafers and Orange Juice.

The complete schedule of the event was now frozen.

Time	Event
10:00 -- 10:45	Prelims - Puzzle Solving
10:45 -- 11:45	Prelims - Programming Contest
12:00 -- 12:45	Tech Talk by Prof. Ravi Kannan
12:45 -- 13:00	Finals - Puzzle Solving - Question paper distribution
14:00 -- 14:45	Tech talk by Dr. Ramesh Hariharan
15:00 -- 15:45	Interactive Session on Opportunities at CSA
16:00 -- 16:15	Finals - Puzzle Solving - Answer paper submission
16:00 -- 17:30	Finals - Programming Contest
16:00 -- 17:30	Prelims + Finals - Technical Quiz
18:00 -- 18:30	Prize Distribution and Closing Ceremony
18:30 -- 19:00	Mini-dinner at CSA Garden

TWO DAYS BEFORE...

As the D-Day approached, the environment in the department continued becoming more and more vibrant. All lab posters were put up, the labs were cleaned and demonstrations were prepared. The Open Day banner to be put up at the department entrance was ordered. We decided that each contest would honor three prizes and all the contest finalists should receive appreciation certificates. Surya Prakash Singh prepared a professional looking message for the certificate and we ordered 50 certificates with a printing agency.

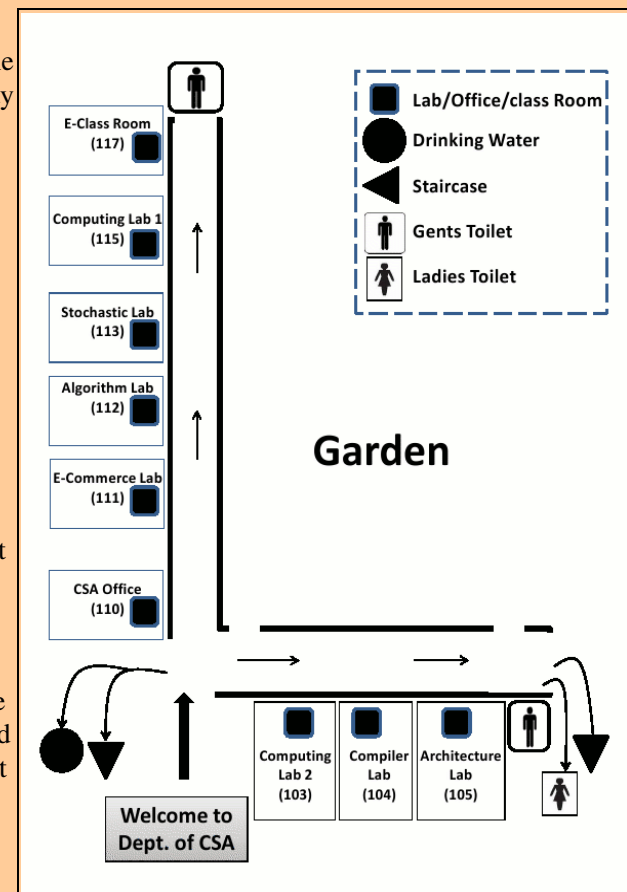
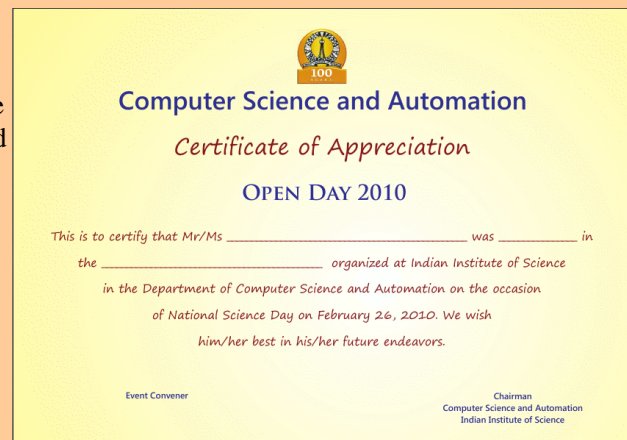
We also ordered t-shirts for the faculty, volunteers, staff and the guests. Mayur Mohite did a good job of communicating with the t-shirt agency and got those ready very much in advance. We distributed the t-shirts amongst volunteers and decided that all the volunteers must wear the t-shirts on the Open Day for easy identification. The faculty members and the staff received the t-shirts on the Open Day.

Amulyaratna Swain and Adway Mitra created a clean intuitive map of CSA department (one for each floor) highlighting various labs, seminar halls, water coolers and toilets. They also placed the maps at strategic locations in the department with a 'You are here' feature. The maps proved very valuable for the visitors for easy navigation through the department. The departments of Computer Science and Automation and Electrical Engineering are physically connected. Therefore, at two connecting points, Amulya and Adway also pasted printouts mentioning the boundaries of CSA and EE departments. This avoided a lot of confusion.

Amulya appended the CSA map with the schedule and we initially printed around 400 copies back-to-back to be kept at the CSA entrance for each visitor. The easy access to the map and the schedule avoided a lot of queries, and the need for a separate helpdesk. Paul Victor also marked each toilet door mentioning the gender. Rama Suri printed the schedule on A3 size posters and placed those at the notice boards on each floor.

We purchased the prizes for winners from Tata Book House. The prizes for each event were an 8 GB pen-drive for the winner, a Rs. 400 book coupon for the first runner up and a Rs. 200 book coupon for the second runner up. We also purchased chocolates for the technical quiz and a feedback book for the visitors.

While all the pin-up boards outside the research laboratories were filled with lab posters, the boards outside the faculty rooms were empty. Therefore, we printed one more copy of each poster from SERC and pinned it outside the room of the related faculty member. This filled up all the pin-up boards in the department. Unfortunately, the empty white-boards outside each lab and the faculty members' rooms were not posing a good picture. We came up with an innovative idea: we wrote inspiring and funny quotes related to Computer Science from great computer scientists on the white-boards. All these efforts created a good departmental showcase while a visitor passed through the corridors.



For any emergency activities or for dropping the guests to their company places, Prof. Narahari arranged for a car to be available at all times on the Open Day.

In all the logistics, Mr. Akram proved to be an invaluable help. Prof. Narahari had interacted with him during the Centenary Conference and Mr. Akram did not disappoint during the CSA Open Day. Ordering the banners, food, certificates, plasma screens, almost everything happened due to his coordination.

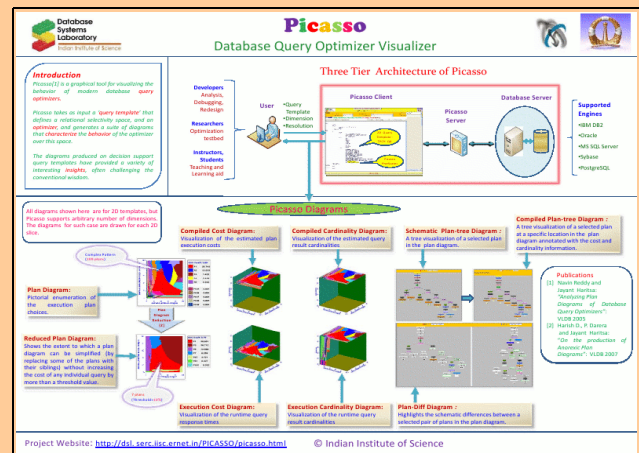
While Mr. Akram was coordinating, the CSA staff was executing it. All the office personnel, Mrs. Lalitha Mohan, Mrs. Suguna, Ms. Meenakshi, Mr. Gopi, Mr. Manjunath, Mrs. Lakshmi, Mrs. Balamma, Mrs. Shyamala and others were taking efforts as if it was a family function at home. They cleaned the CSA garden, shifted the furniture from the corridors and drew a colorful rangoli at the CSA entrance welcoming the guests one day before the event. While the helping staff was busy, the technical staff was arranging for the plasma screens and making sure that all the machines, the mikes and the projectors were in a working condition. Mr. Pushparaj, Mr. Jagadish, Mr. Shankar and Mr. Megavannan managed the technical aspects of the CSA Open Day arrangement.



An important concern was security. Since several unknown faces would be roaming around the department, we wanted a security personnel who knows all CSA family members and would be able to make out the visitors. Prof. Narahari asked Mr. Javare Gowda, the regular security guard of CSA department, to be present continuously for two shifts on the Open Day. He and his agency agreed and we were relieved.

While the colorful rangoli welcome guests, the flowers showed them the way. Prof. Narahari ordered several beautiful plants from the IISc Nursery for the Open Day. The pots containing little plants were placed at CSA entrance and the corridors, which gave altogether a homely look to the department.

One day before the event, we sent a broadcast inviting all the IISc community to visit CSA for the Open Day. We all went to sleep dreaming about the next day.



CSA OPEN DAY.



The day dawned. As the sunrays pierced themselves through the windows and the corridors, the volunteers in black t-shirts, named by Prof. Narahari as black-cat-commandos, were busy setting up tables, erecting plasma screens, and opening labs. Even while we were not fully ready, visitors started literally pouring in. Everyone was asked to enter the name and the college in the visitor book. The visitors, most of whom were BE/BTech students from local colleges, had a bright excitement in their eyes as they entered CSA looking at the rangoli. The average age of the department came down fast within a few minutes.

The first event was the puzzle solving contest, for which we anticipated 20 participating teams and prepared 30 question/answer sheets. The number of teams exceeded 100 and all the research students witnessed the problem of scalability in reality. There was not enough room in the Seminar Hall to accommodate all the enthusiastic participants and we had to make use of other classrooms for conducting the contest. The organizers took some quick decisions which reduced the overall confusion. The response was simply overwhelming and the organizers of the next event got some time to prepare themselves better. Our visits to the local colleges and the news about the Open Day in the newspapers paid off to attract several students and faculty members from local schools and colleges despite it being a working day.



The scale of events resulted in another logistical issue. Correction of hundreds of answer papers within a couple of hours was a stupendous task. The organizers did a marvelous job there by calling all possible volunteers for correction. Many participants could not solve most of the problems, which also added to the speed of correction. The results of the prelims for the programming contest and the puzzle solving contest were declared by lunch time.

An important decision we took was to ask each participant to note down his/her mobile number on the answer sheet. This was very helpful because the selected participants may be anywhere in campus, and we did not want them to miss the finals. We sent SMS to all the teams selected and all of them appeared for the finals.



Visitors who were not keen about participating in the contests started reading the posters, chuckling at the quotes and visiting research labs. To say the least, they were impressed. The individual lab volunteers did a marvelous job throughout the day explaining all the projects tirelessly to the inquisitive students. Each lab received hundreds of visitors in a few hours.

The audio-visual presentation at the plasma screens and the CSA profile posters received the maximum attention. Both described the department in a nutshell.

We were surprised to see a few visitors in uniform; they were students in standards VIII and IX from a few local schools. On interacting with them, it was nice to receive a response, "I learned what spam is.". More I personally admired was the accompanying teacher who took efforts to convince the school administration for taking students to IISc, brought them here and allowed them to swim in the ocean of knowledge that IISc is. I am sure, the teacher succeeded in inspiring his students towards science.

At noon, the e-classroom did not have place to even stand. Prof. Kannan gave an inspiring lecture on *Research in Theoretical Computer Science*. Several visitors stood near the door and peeped through windows to get a glimpse of the talk.



A similar phenomenon was observed in the second technical talk post lunch. Dr. Hariharan grabbed the nerve of his audience for almost an hour while talking about *Algorithms for Life*. A few eminent personalities also attended the talk and the event, notably Prof. N. Vishwanadham, Dr. Vijay Chandru and Dr. Swami Manohar.

We arranged for tea prior to the first and after the second techtalk in lush green CSA garden. Visitors who were tired or who could not find a place in e-classroom to listen to the talks settled on the green grass enjoying the mystic environment.

The black-cat-commandos, busy with paper correction, took turns to finish lunch in the Intel conference room. The faculty and the staff also accompanied them.



Post lunch, the crowd continued, although the morning onslaught was over. After the second techtalk, more people gathered for the interactive session on *Opportunities at CSA*. This was one of the main crowd-pullers. Dr. Sathish Govindarajan described several ways in which students/faculty can be associated with the department. Dr. Ambedkar Dukkupati, Dr. Aditya Kanade, Dr. Vijay Natarajan, Prof. Narasimha Murty and the chairman, Prof. Narahari, took part in the question answer session.

The office staff photocopied the schedule-cum-map sheets in 200 numbers, as the copies got over. Ms. Meenakshi manned the stall to sell the remaining t-shirts. Each costing Rs. 200, we sold around 25 t-shirts.

The contest finals started at 16:00. The contest organizers had selected eight teams each. The programming contest took place in Intel Lab, the technical quiz was held in e-classroom, whereas the puzzle solving contest was open: the contestants were distributed the question/answer sheets and were left to go anywhere in CSA to solve the puzzles. Many of them chose CSA garden for answering the questions.

The crowd continued visiting CSA research labs until around 17:00, after which several visitors planned to leave. We collected feedback from the visitors.

The finals came to a finish at 17:30. The organizers of the puzzle solving contest again took their positions for correcting papers. The results of the other two contests were directly available. Meanwhile, we distributed the appreciation certificates to the contest organizers who filled those up with the contest name, participant name and the winning position, duly signed by the contest head. The certificates already bore a CSA stamp.

The closing ceremony commenced at 18:00 in e-classroom. It witnessed a few eminent guests from the IISc Alumni Association and senior CSA faculty. The guests distributed the prizes to the winners. The certificates were distributed at the end of the function. Prof. Narahari, in his closing remarks, thanked the visitors for participating in the Open Day and making it a success. He also thanked all the faculty members, the staff and the student volunteers for executing the event enthusiastically.



Event	Winner	First Runner-up	Second Runner-up
Gedanken -- Puzzle Solving	Bruhathi H.S. & Madhuri Venkatesh	Govindaray M. Naik & Benhur Chetak D'Souza -- and -- Harinarayanan S. & Janakiraman V.	
Bits N Bytes -- Programming Contest	Avinash Krishnan & Adarsh	Anil C.R. & Anish	Manu C. & Bharath S. Kallur
Random Access -- Technical Quiz	Coca Sai Prajeeth & Ameen Mohammed	Ganapathy S.E.K. & Basavaraj Talwar	Amal Antony & Mahima Sivasankar

All the guests, the faculty members, the finalists, the CSA staff and the black-cat-commandos ended the CSA Open Day with a mini-dinner at CSA garden. After the day-long running around, the food tasted really great.



AFTER OPEN DAY...

The visitor book suggested that over one thousand people visited CSA department on the Open Day. That is a huge response considering around fifteen thousand visited IISc campus that day. The aftereffect was a huge response to the CSA summer internship program. Within fifteen days, we received around 1500 applications. For the Open Day, we received some nice feedback. But one common feedback across campus was that IISc should open itself for the public every year.

Dr. M.K. Sridhar, National Degree College, Bangalore.

'Open Day' program of IISc on Feb 26, 2010 has certainly opened up new vistas to young students in various professional courses. The department of CSA has contributed significantly for the R&D of IT in India and globally as well. Hearty congratulations for the staff, research students and office staff for doing a great academic service under the very efficient dynamic chairmanship of Prof. Y. Narahari.

Hiti Saini, Christ University, Bangalore.

Impression about CSA Open Day: Challenging.

Suggestions: There should be more events. Contact numbers should be given on brochures.

Avinash Krishnan R., MSRIT, Bangalore.

Most liked event: Demos (Graphics Lab > Game Theory Lab > ...).

Suggestions: More technical talks.

Taral Shah, Christ University, Bangalore.

Most liked event: Technical Quiz.

Impression about CSA Open Day: Excellent.

Sinny Kumari, DSI, Bangalore.

Most liked event: Puzzle solving.

Impressions about CSA Open Day: It is a very good place and programs and events were very good.

Suggestions: Give certificates to all the participants.

Sudhendu Kumar, BMSCE, Bangalore.

Most liked event: Programming contest.

Impression about CSA Open Day: Impressive, exposure gaining.

Suggestions: Try not to clash events.

Vipin Nair, Christ University, Bangalore.

Most liked event: Technical Quiz.

Impression about CSA Open Day: Very nice. Excellent.

Shantanu Tushar, BMSCE, Bangalore.

Most liked event: Programming contest.

Impression about CSA Open Day: It was fun and exciting.

Suggestions: There wasn't enough space for the attendees for some seminars.

Adarsh J., MSRIT, Bangalore.

Most liked events: All the demos.

Impression about CSA Open Day: A great opportunity to interact with intelligent minds. The event should be happening more number of times.

Suggestions: Goodies were missing :(.

We hope that the next Open Day will be much bigger and better.