

Facebook boy Interviewed Catch up with latest placement news as we

interview Ekanshpreet Singh – The first NSITian to crack facebook...

THE



**In a Galaxy far far away** Take a look at the NSIT in a parallel galaxy far far away...



**BRINGING NSIT TOGETHER** 

**CAT results declared** MBA mania in NSIT is on a high as CAT results are out. Check out how many NSITians...

Issue 5.0

### 26 FEBRUARY 2012

### **REFORM NSIT**

The spark has suddenly caught onto the imagination of a crowd, which till now had been lumbering in an indolent and disgruntled environment. Reform NSIT, a movement which sought to voice the majority opinion and be the next harbinger of change in an institute riddled with rising resentment, has been able to get some leeway with its egregious Facebook publicity and a parallel RTI Dalo Movement. A platform to bring about long awaited changes in the college, Reform NSIT, an initiative taken by an ICE third year undergraduate student Dipankar, comes after a host of other such movements like NSIT Student's Union (NSU); which though started with similar motive, wasn't able to make much of an impact in its brief history. Two meetings were held with the Dean of Student's Welfare Association and other distinguished authorities inside the campus and up for discussion, were a host of affairs - the minutes of some of which are posted below.

#### MEETING DATED – 18/01/2012

Verbal Meeting with Director, DSW, Undergrad DSW, Registrar, Proctor and other elite members.

Issues regarding Library & Computer Center were discussed and the following points were agreed upon:

1. Number of books, magazines and journals in the library to be increased.

2. Proposal to copy whole JNU library catalogue.

3. 30 computers – internet enabled - to be installed (in the library) out of which 15 would be Macs and rest normal PCs.

4. Setting up a small kiosk inside the library for roviding small time refreshments.

5. Library and computer center to remain open till 10pm.

6. Two Photostat machines to be kept in library which would provide photocopy at the rate 40p.7. A section of costly reference books would be made for read only purposes.

 8. A suggestion box would be kept to entertain all book requests and subsequent books would be purchased by the library.

#### MEETING DATED: 23/01/12

Meeting with Dr. M.P.S. Bhatia, Sh. R.C. Thakur, Prof. Shampa Chakraverty and Sh. A.P. Mittal. The following points were stressed upon-

1. Setting up of Wifi - Proposal for which was sent 1 month back, approval still awaited.

# SPECIES OF NSIT

NSIT is like a non-deterministic function oscillating in sheer randomness. The electic mix of different NSITians resembles the desultory of the animal kingdom. So, we at Alliance take upon the tedious task of classifying species (even if they share the most eccentric details).

Stare at the columns below, contemplate, give a look of 'this is me', swish your hair back and savour 'the species of NSIT'......



#### **"THE CONVERSION TRIANGLE"**



2. Process Control Lab in ICE department and CAD lab in COE department would be operational till 10 pm everyday so that students could use internet facilities.

An order to replace faulty switches worth Rs. 90 lakhs was placed with a vendor. All parts have been received, installed and are now operational but the vendor has not been paid who consequently is threatening to take legal action against the college.
 Every classroom is equipped with LAN ports which can be made live if required by giving an application to the INS office given an official dignitary takes up the responsibility to oversee the whole procedure.

5. Our Institute has options for 2 internet connections:

a. We are currently using a leased Reliance 8 Mbps line – the validity of which is about to expire.
Application for up gradation to 16 Mbps and extension of lease period is stuck somewhere in the system.
b. Direct line from NIC - 1 Gbps network – but



## **STUDENT VOICE**

Result related discripancies in our college

## Professor speak

### **Prof.O.P.** Thakur

#### Dean, U.G.

The students don't fill up the course code number properly and its very difficult to identify a course with course name. Hence the discrepancies in result. And as far as the delay in result

is concerned, Many of the tabulators are from DTU so they don't really care about our result and show carelessness. We are trying to put some NSIT staff as tabulators so that the result process can be accelerated."



#### Dr. S.P. Singh Associate professor

ECE

"The main problem that we face is that we are provided with wrong award lists.. This list contains the names of the students who have left the college. The possible solution for such discrepancies is that the Tabulators in DU should

check the history of the student before they generate the marksheets. And also the copies of students who have re-appeared in the examination should be bundled separately so that they are not mixed with the copies of present batch students."

## Student's speak



Rajul Jain ICE 2<sup>nd</sup> year "Discrepancies in result can be painful to some students like me. In my case,

my name was printed wrong in the mark sheet and thus adminstration was not giving it to me.I had to give my college I-card as well as my hostel I-card to prove it. They asked me to

collect a form from U.G. Office and fill the same.When I asked U.G. Office for the form, sir scolded me saying that it is not their problem and I have to go to FOT(DTU) to complain for the same. He then gave me the form saying whenever he will get time he will forward it only then.

Such discrepancies may sometime cause trouble to some of us.Administration must try to avoid such mistakes."



Deepanshu Bansal MPAE 3<sup>rd</sup> year

Inspite of appearing for all end semester exams, I was marked absent in 2 subjects.I spoke to the Director as well as Bhatia sir and did a lot of running around. It was only after about 4 months that i received my result.Getting corrections done in the marksheets

## DISCREPANCIES IN RESULT

#### Toshit Agarwal

NSIT, known for its stupendous placement records has some of the leading companies visiting its campus. While the companies judge a student's academic record on the basis of the result shown in the mark sheets, they can hardly imagine the efforts put in by the students to obtain their correct mark sheets.

Have you ever been marked absent for an exam you gave? Did you have to make endless visits to the admin to get your name correctly spelt in the mark sheet? Or have you been given marks which you feel have been generated using a random function? If your answer is no to all then thank God, He saved you a lot of miseries.

The day after the results are announced, NSIT admin room number 15 aka U.G. section (referred as admin henceforth) is flocked with students complaining about the discrepancies in their result. After many trips to the admin you should be thankful if your grievances are addressed. But actually even our admin is not the one to be blamed. A long procedure is to be followed and our admin is forced to work even when the fault is not theirs. Many students believe that the only reason for such mistakes is the carelessness of the teachers but that is not the case. The teachers are provided with a roll no list that has not been updated and so it contains the names of the students who have left the college, hence while copying the marks onto the list, by mistake, even they are awarded with marks. The teachers also never receive the list of the students who are reappearing in the practical exams. It's after the person shows up for the practical that his credentials are cross checked with admin.

The students face a lot of problems because of the errors. The fourth year students have difficulties in their placement session because their updated mark sheets are delayed and they have less no of courses which they can drop and improve their percentage. Students also face hard times while applying for internships because students with no backs are obviously preferred and some hard working and deserving candidates lose their opportunity even when they are not at fault.

The errors are not all. The cumbersome procedure that follows adds to ones woes. For errors like a person being marked absent for an exam one gave, a discrepancy form is to be filled in admin and then that form is sent to the Faculty of Technology (FOT). One has to support the application with the Fee receipt and the Hall ticket used for that

examination. (Keep your Hall tickets safely from now on if you have not already started doing that).

In one of the rare cases, the paper was misplaced by the teacher. In this case, the student submitted the application about 6-7 times, after which the admin woke up and took some actions. Luckily his paper was found but he's still awaiting his result.

The students who face the problem of their name being misspelled in the result have to fill a correction form available in the admin. This is a generic correction form for correction of any factual information. This form has to be filled and submitted in admin with a photocopy of an earlier mark sheet in which the name is spelled correctly. Even this form is sent to FOT and the admin asks them to visit back after a month. But generally their mark sheet comes when the next lot is dispatched after next semester's result.

The students who receive marks below their expectations or are not satisfied with the result have to go on a long and tiring journey for remedial of their problem. They start by taking a form from the admin. Fill it up and get it attested from the admin itself. Then they have to go to D.U. Office, North campus and pay the re-evaluation fee. From there, the next step is to submit the fee receipt in the FOT office which is in DTU. This complete procedure takes around 6-7 hours. All the people who have not yet applied for re-evaluation, be prepared if you ever decide to go for re-evaluation.

The re-evaluation result is declared with the next semester's result only and in case the marks have been modified they'll be put up on the list otherwise no result is given. Another problem which students face is that since the re-evaluation results are declared so late, it's a gamble between re-evaluation and reexamination.

The admin is also helpless because examination and results are controlled by FOT. Though the question still unanswered is "Why is the FOT office located in DTU, even when DTU is not governed by it?" The obvious answer is the laziness of government officials but that is no justification when our future is at stake. The need of the hour is to bring FOT to NSIT so that speedy actions can be taken and students don't have to roam around the whole Delhi.

If the recent rumours are to be believed, Dr. Raj Senani, our director, now also the head of FOT, has fast tracked the procedure of result and we can expect result within two months of examinations. Also our sources tell us that our admin is trying their best to get the results of last semester before 29th February, 2012.

## **PLACEMENTS : THE OTHER SIDE OF THE COIN**

#### Ishan Nigam

The placements in the current academic session for the batch of 2012 have brought in some new and rather baffling trends for some particular branches. MPAE, a branch which has consistently been one of the fastest to be placed in the last few years has seen an unfortunate turn of events this placement season. ICE, a branch which is open to Electronics and Manufacturing companies along with a few software companies has also faced The problems with ICE department are different,

interviews. The exact reason as to why this anomaly occurred is not known.

High paying non-tech companies like Nomura and Dunhumby and core technical companies like Halliburton and Schlumberger haven't yet come to our college. A parallel extended TnP was set up when the MPAE students requested that they be involved in the process and the TnP extended their support to this initiative.

problems. The Computers department (COE and but their effect has been clearly visible. A number

is really a painstaking procedure. The officials are uncooperative and we are directed to the FOT and then back to NSIT. It's high time the procedure is simplified.





"Discrepancies in results can take any form. In my case, I gave re-examination of Data Structures along with 6th semester End-Sem examination. However, when results were declared, my name and marks, both were not

mentioned in it. To resolve this issue, I filled required form for discrepancies in result. College authorities also asked to submit all documents supporting the fact that I was present in the examination hall that day. According to college authorities, final decision will be taken in a meeting where all the such discrepancies are discussed. Discrepancies of such kind can really be troublesome plus Data Structures is also a core subject of COE Department. I got my marks corrected after a few months, 4-5 trips to FOT in DTU and a lot of haggling.

IT) has had record placements with one of the current 4th years making it to Facebook. Some new Electronics profile firms have also visited our campus this time.

There are many reasons behind the problems being faced by the MPAE and ICE departments; some avoidable, others not so easy to tackle. The industrial production witnessed 5.1% de-growth in October 2011. Some MPAE core companies thus made a complete no show this season at our college. The highly prized PSU jobs have also been a disappointment. The criterion for selection has been revised with GATE exam scores being given substantial weightage in the overall recruitment assessment. NTPC which was set to start its first recruitment drive at NSIT this season will also be using GATE scores as a criterion. Maruti, which was a mass recruiter in the MPAE department till last year has selected much lesser candidates this time around. This was a huge blow to the entire MPAE department as many students had had excellent of core companies have not shown up due to the slow-down of the market. A parallel TnP was also set up for this branch but the initiative has not taken up momentum as it has in the MPAE department. A major problem which has been a nagging concern for quite some time is the clear refusal of companies to allow students from non-COE/IT branches to appear for software profiles.

If the students had been aware that the situation would be such, they would have sat for and cleared interviews for companies which were not their priority at the beginning of the placement season. Everything said and done, it is obvious that the problem was created by the slowdown of the market but that is something that was beyond the control of the college authorities and the students. The question is, whether enough efforts are being made by the people concerned to minimize the damage caused by this slow down in the market and whether this situation could have been tackled in a more effective manner.



# **INNOVISION 2012**

#### Krishan Kumar Singh

Festivals are the result of impassioned efforts and manifold ambitions of all forms of youthful activity, of every generation, springing from the threshold of life." - Pierre De Coubertin

To disseminate the aura of technological innovation and with the vision to embark on the pathway to wisdom, Innovision 2012 - the techno managerial fest of NSIT was held on 18-19 February 2012.

Having an average of 10,000 footfalls and participation from hundreds of colleges across India, Innovision corroborated its reputation as one of the biggest fest of its kind in North India. Learning from the diverse experiences over the years, this year, Innovision not only added to the technical valor, but has also worked to blend in the flavor of management and culture to it.

Leaving apart the mind boggling participation, Innovision this time around had much more to offer. This two day fest comprised of prodigious technical events on campus, organized by student teams and societies, along with managerial competitions in collaboration with Entrepreneurship Development Cell(EDC), NSIT. Innovision 2012 had also initiated an unprecedented trend to organize a series of online events and workshops related to Ethical Hacking, Microsoft Student Partnership, Android Apps Development; all a month before the actual fest, keeping the adrenaline levels of students high.

"Innovision 2012 was not only a college fest; it was a multi-dimensional pervasion of knowledge. There were countless workshops and pre-fest events throughout the nation to spread the zing of Innovision countrywide and in the end, the harmonization between the juniors and core team made the fest legendary" said Ravi Mittal, a third year undergraduate student and Chief Convener of Innovision 2012. The fest also created a buzz amongst NSITians, with many of the 1st and 2nd years actively participating in the fest management activities. Thus in



#### **Bofors-Defence** Expo

the shadow of lustrous events, the fest also acted as a catalyst helping to establish a fruitful bond between students. In spite of great efforts and ceaseless exuberance, the fest got lackluster at several point of time on Day 2, with few events getting delayed or cancelled due to logistic issues and time constraints.

"A thunderbolt is just a fierce name, if it has the lighted ground, A thunderbolt becomes a deadly game, if it has the creaking sound"

Innovision brought the crescendo of techno rock culture and the zeal of adventurism under one roof. From Felicity to the incredible Laser Show, Zorbing to Black Pearl, Innovision interlaced the peculiarities of college life in a single thread. Moreover, adding icing to the cake were Technothon, Electro Mechins, Defense Expo and over fifty other unparalleled events.

With countless ebbs and flows, the fest was finally successful in portraying an ever lasting experience in our life.

Accolades - Innovision 2012

#### **EVENT LIST:**

#### **KRITI PAPER PRESENTATION ELECTRO-MECHINS**

Black pearl Carnage Robowars Junkyard Wars Breadboard Challenge Complicato Electronics Quiz blood hound(Line follower) BIOVISIONS

Bio- Bickering Bio-Quest Modelling Mania Trademark

#### LITERARY

Breaking News Cryptomania English Debate English GD English Extempore Graphic Novel Hindi Debate Hindi GD Just a minute Poetry Movie Quiz Turn Coat Youth Parliament

#### MANAGERIALS

Bplan Competition freakonomics startup showcase Case-Study Corpova- Corporate Quiz

#### ONLINE

Bodmas Digital Fortress Enigmata Tagline bulls n bears Ad-mad

#### SCHOOL BAG

C++ Quiz Display Working Model School Quiz Spell Bee

#### **TECHNOTHON**

Bug The Bug IT Quiz Linux Challenge Java@ Coffee Android App Development Sci-tech quiz

#### **MISCELLANOUS**

SudokuTambola Musical Chair Treasure hunt

#### MAJOR ATTRACTIONS

Defence Expo Road Rage Fahrenite Lazer Show

#### ADRENALINZ

Go-Karting Rappling Rivercrossing Paint Ball Parasailing Zorbing

## **MCLEODGANJ : A TRUE BEAUTY**

#### Arjun Singh

If you are looking for a relaxed holiday, an overnight away from Delhi, away from hordes of blabbering tourists and also for cheap but excellent Italian and continental food then Mcleodganj is the perfect place to be. Be it the international crowd, the less travelled trails or lazy breakfasts, at 2082 meters "little Lhasa" sure has a magic of its own. So what exactly is McLeod? 20 km from Dharamshala, this quaint but bustling town is the official headquarters of the Tibetan exiles in India. And trust me the word that describes the place would be "feel".



wintery months. You'd find the rates of all menus and hotels half, clearer streets and meaningful people around (read: no shouts of garmiyan hai hill station chalen?)

•Weekday: Again clearer streets, no monstrous SUV's vying for spaces, packed with people looking for a quick getaway form the cities of Punjab and Delhi.

•Checkoutifsomeconferenceishappening: Why? Well, you could see the Dalai Lama; I did and it was an amazing experience. The atmosphere was so magical; one could see so many hopeful, eager people waiting; just to have a glimpse of him, to touch him. He felt

almost prophet like. So, how to get there? For us students, a flight may not be to Pathankot, and further to Dharamshala via bus or taxi. Both the modes take approximately the same time to reach the destination.

#### And, where to stay?

There are plenty of cheap and expensive hotels, dorm rooms to fit all budgets. Good rooms are available at 500-700 rupees per night with hot water and quilts along with triple sharing or more. Also these are lean season rates; expect them to escalate in the summers.

Eat!

This place is a foodie's paradise and believe me on this, if vou are into Italian

there is excellent connectivity from Delhi for one doesn't exceed a hundred and fifty bucks tops, no matter where you eat or what you eat (off season rates).

#### What to see?

Mcleod has something to offer to all kinds, be it the adventurous, the spiritualist or the capitalist (nice shops around). I'd recommend a trek to the Triund hill, 15 kms on one side which can be completed in a day, to and fro. You can also plan to stay on the hill-top for a night in sleeping bags, for which you can contact a trekking operator in Mcleodganj itself. One can visit the Dalai Lama temple and the Tibet museum adjacent to it. Also Bhagsu nag



Hot Chocolate Pancake

viable option. а Though there is air connectivity Delhi from to Dharamshala. recommend I'd travelling by train or bus which is cheap and comfortable.



Monks down the lane

food, God bless this place. There are a number of Tibetan restaurants as well, if you wish to try. The author recommends (so does lonely planet) - Jimmy Italian Kitchen for its pizzas and beer.

En-route : Trek to Triund Hill

#### When to visit?

It's a cold place and it snows in January there. So you can form your own opinions on when to visit depending on your love for cold. But if you ask me for the right time, follow the three points.

•Offseason: Yes, and these would be the •TRAIN: I haven't travelled via a train but

•BUS: you get a bus directly to McleodMganj or Dharamshala from Kashmere Gate ISBT, both run by Himachal roadways and by private operators. The fares range from Rs 500 to Rs 1200, for one side depending upon AC/non-AC or Volvo/non-Volvo buses. The buses start at 8:30 - 9 pm and reach the destination around 7 am in the morning.

Nick's Italian Café for quiches, apple pies, chocolate brownies and farmer's breakfast, Oogo's Café Italiano for the English breakfast (Eggs and bacon), pasta cooked in vodka and waffles topped with butter and maple syrup. Try Momo café, a pretty little shop with fantastic ambience which has fillings in any vegetable or meat imaginable. Oh I forget to add, each meal

temple and the waterfall are worth visiting. In short it's a quiet and charming place with polite multi-national crowd all around. If you looking to take some time off and relax outside the throes of Delhi, then I'd recommend you this place. If you need to further clarify any doubts and need further information, feel free to contact me at nsit.newspaper@nsitonline.in

Do you have something to say? Send in a letter to the editor Mail us at 'nsit.newspaper@nsitonline.in'

## THE HEIRS OF FLEMING AND FARADAY

#### Akanksha Dewaker

Electronic engineering basically involves the design and testing of electronic circuits that use components such as resistors, capacitors, inductors, diodes and transistors to achieve a particular functionality. Communication branch on the other hand deals with broadcasting or point to point transfer of information. It includes designing of telecommunications equipment and facilities, such as complex electronic switching systems, copper telephone facilities, and fiber optics.

Specialisations

•Microelectronics engineering deals with the designing and fabrication of very small electronic circuit components for use in ICs or sometimes for use on their own as a general component. Nanoelectronics is further scaling of devices down to nanometer levels.

•Signal processing deals with the analysis and manipulation of signals, both analog and digital. For analog signals, it may involve signal amplification and there modulation or demodulation for telecommunications. Digital signal processing on the other hand is a quite a different field with applications in all kinds of image, video, audio and speech processing systems.

•**Telecommunications engineering** focuses on information transmission across a medium by optical fiber or simply through free space.

•Control engineering focuses on designing of controllers to cause systems to behave in the desired manner. It uses electrical circuits, digital signal processors, microcontrollers and many other electronic packages to do so. Autopilot technology and industrial automation have been possible though this engineering.



• C o m p u t e r engineering deals with the design of computer systems. It involves designing new hardware, PDAs and supercomputers or

the use of computers to control an industrial plant. Computer-like architectures are now found in a range of devices other than computers themselves such as video game consoles and DVD players.

•Instrumentation engineering deals with the design of devices to measure physical quantities such as pressure, flow and temperature. It requires a good understanding of physics especially electromagnetic theory. For example, flight instruments measure variables such as wind speed and altitude to enable pilots the control of aircraft.

•Microwave engineering is basically the study and design of systems which work on signals with short wavelengths. This field has a role in antennae, radar, transmission lines, space based systems (remote sensing), measurements, microwave radiation hazards and safety measures. For example, it has significance in design of shipboard radar as it makes possible the detection of smaller targets. While, conventional circuit theory is based on voltages and currents microwave theory is based on electromagnetic fields. Syllabus and System: The old story

It's high time that our archaic syllabus is revised. We are studying about magnetic tapes and cassettes in the consumer electronics course which can fairly be called the forefathers of present technology. Nimish Girdhar, 4th year complains of being forced to study outdated 8085 microprocessors, rather than focusing on present industry demands. One of our alumni working in Texas Communications, Harshit Jain feels that we should be studying about VLSI Circuits, Fabrication and layout of circuits on Silicon, and Advanced Sequential circuits in keeping with the industry demands. According to Gaurav Sharma, 4th year, currently working under Dr. Raj Senani, there are many loopholes in the syllabus needing urgent attention. Having 5 electromagnetic courses without even the slightest clue on how to build an actual antenna, 2 useless communication courses and Digital signal processing 1 and 2 without a digital signal processor in the course limits our practical knowledge. The academicians also need to take into account a 6 month contiguous intern period in the final year, a shorter winter break and a longer summer break, with practical exam dates not spilling over into the vacation period. Talks to change this syllabus have been going on since eternity, but little seems to be done. Serious reforms in courses like VLSI (Very Large Integrated Circuits) Circuits, Fabrication and layout of circuits on Silicon and depth into Advanced Sequential circuits is important. The saddest part is that most electronics engineers have never known the smell of the caustic fumes of molten solder.

But, another side does exist to this aspect. We do examine discrete components using breadboard, and Oscilloscopes. It's an excellent way of observing theories of equations. We also use PSPICE and Matlab softwares to observe simulations of complicated circuits. This is the perfect way to start with. However, sometimes it is our wrong attitude towards studies which further affects us and it all forms the unfitting system we all are stuck in. So, a little inward assessment regarding this will not be a bad start.





this subject and pass-out without getting to play with micro-controllers or magnificent circuits, there are a few shining stars still adorning this field in NSIT. For genuinely interested students, hurdles are just passing stones. Albeit with little facilities - but with guidance of highly capable professors; students are learning and excelling. We have some brilliant professors and one can always find a great mentor for one's interest. Dr.

always find a great mentor for one's interest. Dr. Harish Parthasarathy is a known personality in the areas of Artificial intelligence, wave propagation and study of stochastic processes. Professor D.V. Gadre is very popular for his exciting projects and students have made

projects like LED birthday candles, LED markers for photographs and twilight switches under him. His field of research also includes embedded systems. The basic areas of research for Dr. Tarun Rawat are digital signal processing, circuits and systems and stochastic processes. Dr. Maneesha Gupta is working on Low Power and high performance flip-flops, their applications and design of fractional order differentiators and integrators. Mr. S.P.Singh is working in the area of communication and digital signal processing. Mrs. Sujata Sengar is also working in Digital Signal Processing(DSP) among other fields. With Indraprastha Institute of Information Technology(IIIT),Delhi functioning from our own campus, some students are also working under their professors. Varun S. Shridhar, 3rd year is working on wireless communication under Professor Sanjit Krishnan Kaul of IIIT. Dr. Vinayak Naik also guides students in the same field. Professor Saket Srivastava helps students in a variety of miscellaneous fields of electronics.

#### Will you land in here?

The companies coming for on-campus placements in technical field are indeed few. But nonetheless, they are big players in the electronics world. Some of these include Texas Instrument, nVidia,, Cosmic Circuits, Freescale Semiconductor, Cypresss Semiconductor,

#### **Related Fields**

•Mechatronics deals with the convergence of electrical and mechanical systems and includes automated manufacturing systems, heating, ventilation and air-conditioning systems and various subsystems of aircraft and automobiles.

•**Robotics** is the branch of technology that deals with the design, construction, operation, manufacture and application of robots. It is related to the sciences of electronics, engineering, mechanics, mechatronics, and software.

•Biomedical engineering is another related discipline, concerned with the design of medical equipment. This includes fixed equipment such as ventilators and MRI scanners as well as mobile equipment such as artificial pacemakers and artificial hearts.

•Oceanographic engineering, also called marine electronics engineering concerns with the design of electronic devices for use in the marine environment, such as the remote sensing systems used by oceanographers.

•Electromagnetic compatibility (EMC) is the branch of electrical sciences which studies the unintentional generation, propagation and



reception of electromagnetic energy.

•Cybernetics is the interdisciplinary study of the structure of regulatory systems. It is closely related to information theory, control theory and systems theory and has influenced game theory, sociology, psychology, philosophy, and architecture and organizational theory.

•Remote sensing technology is designed to enable people to look beyond the range of human vision in range or in spectral perception. It is used for a variety of measuring and mapping applications in order to study and analyse atomic structures and various other objects that even the most high-powered microscope cannot see.

•Cryptography is the practice and study of techniques for secure communication in the presence of third parties. More generally, it is about constructing and analyzing protocols that overcome the influence of third parties. It is related to various aspects in information security such as data confidentiality, data integrity, and authentication. Modern cryptography includes the disciplines of mathematics, computer science, and electrical engineering. Its applications include ATM cards, computer

ST Microelectronics, ST Ericson, BHEL, C-DOT, TRAI and AGC Networks.

passwords, and electronic commerce.

## THE ATTIC

#### Archit Chandra

This is the reason why a group of NSITians started a book rental facility called 'The Attic' in the college. The main objective of the venture is to encourage the cultivation of a healthy reading habit in the campus that will gradually lead to a greater intellectual atmosphere therein. With this aim in mind, this group of students started work on what was to become their greatest obsession till date, their dream, and a way to give back to the place they had come to call their second home. Funnily enough, the idea for this venture had come from a joke on a Facebook message thread. "We were all laughing behind our respective screens when somebody typed "Why not?" and within moments everyone was brainstorming for what ultimately became

#### 'The Attic.", they said.

The Attic is not a bookshop. Nor are they acting as middlemen for some library/ shop. The books that they have to offer have all been selected after a thorough study of the kind of literature that would

be most helpful to readers as well as the reading habits of NSIT students. According to them,

what they wanted was not a "thousandstrong-random-book-library" but a good collection of meaningful books. Their collection boasts of literary classics (Charles Dickens, Shakespeare, Jane Austen), thrillers (Sidney Sheldon, Jeffrey Archer, John Grisham), biographies (Lee Iacocca, Mahatma Gandhi) and management oriented books (Freakonomics, Rashmi Bansal) amongst others. The Attic was the result of months of hard work and preparation by its founders. Planning for 'The Attic' had started six months before any word was spread. All of this time was used



to chalk out the model the venture is currently running on, select books for

the inventory and to give finishing touches to the system being put into place. They work in a completely democratic manner with the complete involvement of each and every member. "We even decided on the name 'The Attic' through a vote." said a member. That said, all the duties and responsibilities are divided amongst all the members for the smooth functioning of the enterprise.

They give out books for rent on a weekly basis, taking a security amount when the book is given out and return the security amount minus the rent when the borrower gives the book back. The transactions are made during what they call "exchanges" that take place on every Wednesday and Friday. Users are notified about the details of the transactions and the exchanges through e-mail and SMS.

The books cost as much a packet of chips to read but leave you with much more. Here's something new, something different and something worth an experience. Link to their Facebook page:http://www.facebook.com/the.attic.books Link to their website:http://attic-books.blogspot.in/

## EKANSHPREET SINGH : THE **facebook** BOY

#### Ishan Nigam

#### 1. How was your recruitment at Facebook different from the one with Amazon in terms of the skills tested?

A.The Facebook recruitment was a 2 month long process. There were 5 rounds. The 1st round was a written (coding) round which was unique to Facebook. We were given 90 minutes for 1 question. 1 written exam and 2 interview rounds were held in DTU. The last round was a 'character-filter' telephone-interview round. They wanted to make sure they were hiring the right guy.

Facebook was more rigorous in its selection procedure as compared with Amazon. Technically, apart from the first round at Facebook, both interviews were quite similar.

2.What is your position at Facebook? Will you be working in India or abroad? A.I will start work at Facebook as a Software Development Engineer, working in the Menlo Park office in California, USA.

3.Do you have any alternate career options in mind? Any intentions to change tracks 3-4 years down the line? A.Switching jobs soon is not good for one's CV. I plan to continue at Facebook, rising up the ranks. I'll probably move towards technical management 3-4 years from now. I see myself as a managing engineer and not an engineering manager!

4. How would you describe the role of your peers and seniors in gaining technical knowledge in NSIT?

A.I started working at Software for 6.What technical skills have you developed Activities (SEETA) - a start-up by and the societies in college? Manusheel Sir, at the end of my first year. I A.I started learning flash animation in had exposure to new technologies and was school. Then I moved from 2D animation encouraged to implement them. I came to 3D animation. My work at Software for into contact with other seniors through Education, Entertainment and Training CSI and NSITonline.

The atmosphere in my class was over-

competitive. There were no mass bunks; a tradition I'm happy to hear that has been broken by my juniors!

5.What all activities were you involved in in college? What has been your role in CSI and NSITonline and how has it helped you? A.I joined CSI

and NSITonline in my first year. My first project NSITonline at was to create an

automated system for emails. Gradually your CV? Also, could you throw some I moved from working under seniors to light on the work you did? advising younger members. NSITonline A.I did a project with Dhurendar Sir on was technical work while CSI was networking. Projects and internships are management work. It has been a great important. Never go for an intern just learning experience, being a part of both because it's a big name in the industry. of them.

Education, Entertainment and Training participating in technical competitions

Activities (SEETA) and NSITonline was primarily web-development. I learned its

> associated languages like PHP and Java. The community and my mentors in the Google Summer Of Code (GSOC) project helped immensely in building my confidence. 7.What is the role of papers, projects and internships in enhancing

comfortably in placement interviews. 1 or 2 projects by the end of the 3rd year are enough. A project need not be with a professor, and may be independent work. I learned a lot in my work with the ThinkUp open source community and in my android app development.

I was part of the team that developed SEETA's website. I also worked on developing the website for Scalable-C (which is a professional version of Youtube).

I published 4 papers, including 1 at MIT. All the papers were co-authored by fellow NSITians.

8. You have been declared a role model by 3 batches of COE/IT students. How does it feel?

A.It feels nice that the hard work has paid off. But I think I must remain down to earth and keep my feet firmly on the ground. These are the first steps, it's just the start!

9. There was an initiative by the 4th years to teach the juniors some programming skills, but it seems to have become dormant. Any thoughts of restarting that?

A.It was a commendable initiative. I think CSI programming sessions can be organized for helping develop programming skills. There might be something in the pipeline soon.

10.What would be your advice for students in the software industry, interested in taking up a technical job?

A.I would suggest that everyone stays in the safe bracket of percentage aggregate. Practical knowledge is very important. One must remain updated with the latest developments in technology. It's also essential that you keep in touch with coding.

## **PROFESSOR PROFILE : DR. PRERNA GAUR**



Dr. Prerna Gaur comes across as a tender and amicable professor. She is a modest person who has gained expertise in the art of multitasking by playing the role of a professor, project mentor, Treasurer-IEEE Delhi Section, Chair Standing Committee - Students and Educational activities,

and secretary ISTE (NSIT chapter) all at once and doing them well. She believes

#### Shrey Bansiwal

from the mundane theories and emphasizes on practical knowledge in a way that students start loving her subject.

Q. How long have you been teaching?

A. I started my teaching career in 1994 in industries working in Indo Asean Fusegear and Marketing. I joined NSIT after 4 years in 1998.

#### Q What are your key research areas?

A. My fields of research are microprocessors, solar power, electrical drives, power electronics, face and voice recognition and line followers.

Q. During the course of your teaching career, have you seen any change in the curriculum or would you like to see a change in the curriculum?

A. The concepts always remain the same. It is only the way in which they are applied that changes. So, it is the professors' duty to remain updated with the changes in technology and teach the students accordingly. With the changing times, the way of teaching should change and there is no need for changes in the curriculum. Q. ...and in the students' outlook or behaviour?

A. There has been just a slight change in the students' outlook and their inclination towards technology, and that too for good. The newer generations, contradictory to the general perception, are more eager to learn, especially in the field of practical sciences. Apart from the third and fourth year students, there are many first and second years who are enthusiastic about doing projects as an extra curricular activity.

You should do stuff you can talk about

#### Q. Speaking of projects, how many projects are you currently guiding?

A. Currently, I'm handling 4 Undergraduate projects and this is the upper limit for the same. Apart from those, I'm guiding 3 Post Graduate and 5 PhD projects.

#### Q. Please tell us more about Undergraduate projects. What all topics have been researched into?

A. The topics are Artificial Intelligence based Control of Power Electronics that covers Fuzzy Logic Neural Network etc, Wind Energy Systems and Hybrid Energy Systems. The outcome of many of them has been excellent. We have been successful in publishing journals and Conference papers.



Q Certainly, many students come to you to seek your assistance. What is the criteria by which you shortlist the students?

A. Dedication and motivation are the attributes I look for in the students. Their intensity of enthusiasm reflects when they repeatedly come to me to ask for my supervision. I would, without a doubt, love to help such students.

Q. Your name is well associated with IEEE. Please elaborate on your role in the society? A. I have been a part of IEEE ever since it started at this institution in 2000. As a member, I sought permission to start a technical fest in NSIT under the name of IEEE and Innovision was born in 2002. Today, I am the Branch Coordinator for IEEE-NSIT.

#### Q. What advice would you like to give the **NSITians?**

A. I would suggest that all students should keep on exploring new aspects of science. Unlike what is generally presumed, the college provides various well-equipped labs. All it takes is the motivation to learn that ignites the aura.



in perseverance and ardour and is always there for the students seeking her help in various areas. She takes the students away

## **CO-FOUNDER OF NSITONLINE RETURNS TO TEACH WEB-D**

#### Toshit Agarwal

 $\mathbf{S}_{2009}$  decided not to sit for his placements because he believed "Let no one but workshop (45 hours) in NSIT in CAD me dictate what I do". Hence Dulcet Solutions, a one stop solution of all web related lab, COE block. The needs, was formed. After two and a half idea of the workshop came during our end years of work he felt that good new web designers were lacking in the market, so he semester exams. So came up with an idea to setup an Institute to the two organizers had to face many teach people "How to Learn Web Technologies". He started with WebInstitute and to difficulties reach out to more students, an idea to conduct workshops in college premises struck off. The workshop was a huge success with his mind.

With the help of two second year students, of

Instrumentation and Control Engineering, Gulati Sahil and Yogesh Arora, he conducted a 13 day



publicising the workshop but finally it paid 33 registrations, out of which some of the students were from IIT Bombay, BITS and

in

#### St. Stephens.

of HTML 5, JQuery and CSS 3. A web designing competition was organized at the end of the workshop in which Aman Gupta, Third Year, NSIT won an 8 GB pen drive. Also, all the students were given certificates of completion

and were provided with tutorials of Web Designing.

The workshop helped students utilize their time in winter holidays.

In a short span of 13 days, Tusshar Singh, 1st year student of NSIT says the students got to learn "The workshop was completely training MySQL, HTML, PHP, oriented, helpful to learn and explore new Wordpress, CSS and basics methods in web-development. Methods of Web-Development beyond the course structure were also taught that helped me to make my own website more attractive and user friendly."

> Sandeep Sharma, 3rd year, BITS said "The workshop was really very helpful. Before joining this workshop, I had no idea about web designing. This workshop encouraged me to take further interest in wed designing and development. This workshop was completely practical based. It helped me in understanding the basics of web designing."

## **FLYING COLOURS IN NSIT**



#### SUFIS E A

#### Nitin Garg, Nilayan Das Gupta

Yes, you correctly read the headline at first sight. Breaking away from the always-rock-article tradition, this column will discuss the mystic genre of "sufi music". However, before one listens to the songs, it is very important to dwell upon the ideas imbibed in this revolutionary music movement. It began at a time when the world was torn into different religions, each proclaiming its superiority over the other, and sought a way to answer the eternal question of oneness with God. The followers of "Sufism" believed that self-abnegation from all that is material, and devotion to God by singing in his glory leads to salvation. Although its origins lie in Islam, Sufi music can be enjoyed by anyone irrespective of color, creed or religion. The credit of bringing Sufi music to our generation perhaps lies with Pakistani qawalli singers Wadali Brothers ( Damadam Mast kalandar) and Nusrat Fateh Ali Khan ( Afreen and Kaisa yeh pyar hai), for their success paved way for Indian artists such as Kailash Kher, A.R. Rehman and Rabbi Shergill to perform this genre. This expression of ecstasy symbolizing the alignment of God with the World needs no "cool" tag, as goes the saying,

#### "To each, his own".

The very first song on the list is "Afreen Afreen" sung by the great maestro Nusrat Fateh Ali Khan. It is a sincere depicture of the love one professes to a lover in the beautiful background of Sufi mysticism. The words Afreen Afreen which are chanted through the entire course of the song mean "Behold! O the most beautiful one". As the song unfolds one gets to know the creative side of the love portrayed in an unabridged confession which draws comparisons to various sights of beauty present in nature



and long discussed fables.



The beauty of the heart is the lasting beauty: its lips give to drink of the water of life. Truly it is the water, that which pours, and the one who drinks. All three become one when your talisman is shattered. That oneness you can't know by reasoning.

Dhaani - a soulful number coming from the Pakistani band "Strings" - combines in itself the rhythmic frivolity of musical harmony and never tends to give up the joyful tempo throughout the whole song. Dhaani signifies the light green color associated with the outer covering of a grain of raw rice. The song is groovier as compared to other previous compositions (of the same band) and carries the quaint touch of Sufi in the otherwise perfect blend of classical fusion.

Tere Bin Sanu Soniya - a song by the contemporary great Rabbi Shergill - is a song for the die-hard romantics and music lovers. The beautiful syllables of the song spelt out in lyrical symphony combined with the energetic profusion of love stymies the brooding and longing heart and furnishes glimpses of youthful exuberance - when the mere prophecy of loves stimulates the phlegmatic into a never ending frenzy. The same words of the song when spelt out in English can even put Shakespearian romance to shame. For the English translation of the song - http://rabbism. blogspot.in/2005/07/tere-bin-rabbi-shergill-lyrics.html

For a Sufi music aficionado the song by the very great AR Rehman- Piya Haji Ali, from a bygone movie, Fiza, is a rare treasure. The music by Rehman embodies everything that Sufism is known for - mysticism, devotion, preaching and eternal love for the omnipresent almighty. As if his ingenuity with the music was not enough, Rehman shares the stage with Ghulam Mustafa in crooning out the lines with extra ordinary panache.

So we save the best for the last! It's the maestro again - the late Nusrat Fateh Ali Khan - who this time does his magic through "Allaa Hoo", the traditional Sufi chant relating god to the eternal truth. Words can't impress the magic strung by its lyrics and thus create the vibes generated through a live audition. So there's no equivocation on its greatness but we would best leave the ball rolling in your court to perpetuate an enthralling listening experience!

WINTER SPORTS TOURNAMENT List of events

Krishan Kumar Singh

Expecting an amalgamation of culture, technology and literature, the even semester began with the recreational extravaganza of Annual Sports Meet 2012, in the second week of January. This meet facilitated not only the revival of NSIT's wrecked sport's infrastructure, but also paved the way for competitive excellence among the examination ridden youth.

Like every top engineering college, NSIT can be classified in the league of third world sporting communities, by default. In the wake of providing a balanced environment, a group of 3rd years, along with the NSIT physical training faculty, particularly Mr. Praveen Saroha, materialized the idea of sports meet in January. Inter-branch sporting events were held for a versatile range, including field sports, indoor sports and power lifting.

Leaving aside several discrepancies, regarding clash of events with classes and incoherent schedule changes, the sports meet was an overall success. To ensure ample participation for all, league matches were held in place of traditional knockouts for girls, seeing there lesser proportion. Adding to the frenzy, were free food Coupons,



which were distributed to all the participants, irrespective of the match result. The organizers roped in all there efforts to meet the desired infrastructure and standards, by having official referees and umpires, and by providing proper sports kit and accessories for all the events.

Ailing from the gloomy and monotonous study curriculum, the students eventually had a breather in the form of Sports meet. It also laid down the foundation stone towards the Annual Sports Fest, Utkarsh, which will be held in March 2012. Seeing the sponsors and support pouring in, one can expect an everlasting sporting avocation this semester.

1. Cricket 2. Football (Men & Women) 3. Basketball (Men & Women) 4. Volleyball (Men & Women) 5. Lawn Tennis (Men & Women) 6. Badminton (Men & Women) 7. Chess 8. Carom 9. Table Tennis 10. Athletics



# IN A GALAXY FAR FAR AWAY...

#### Shivangi Saxena

NSIT- Where reputation precedes the name. The pious name echoed in my mind. A name that would induce frenzy to a person whose auditory organs are working only remotely well. Enough of extensive introductions (well merited though), here I present the world NSIT- the prestigious engineering college that religiously tops both the survey of top engineering colleges (conducted by TIME magazine) and the most popular college (conducted by MTv).

The above lines aptly justify my over-hyped and itching agitation that assembled in my emaciated body on that day. The day when my rosy dreams culminated to an astounding miracle- visiting NSIT's sprawling campus. A worthy and neurologically superior friend of mine went to this hub of immense knowledge after cracking NSIT-EEE. She had decided to gift me a share of this mammoth college by taking me to her technical-fest.

The moment we set foot on the rambling grounds, the air seemed different. We boarded the upgraded solar rickshaw designed by a 3rd year student of EC branch. It was unmanned and the destination was fed by default. Such a machine served the task of orbiting in the campus without the risk of getting arthritis. The campus was wifi enabled but with a difference. A movie could be downloaded in 2.563 seconds. Afterall CERN had itself presided the installation. The unmanned rickshaw turned. Aand my breath stopped. I had a glimpse of the administration section. It seemed like a breeding ground of robots running helter skelter to complete the chores. The famed admin area boasted of 45 robots (human sized), 5 supercomputers and innumerable miniature robots. The task of delivering perfection was mastered by the admin people and admin robots. The sincerity and honesty was in complete contrast to the bureaucracy that plagued other government bodies. The college was festooned in gigantic banners that had voluntarily offered sponsorship. About 99.67% were turned down as they didn't figure in the list of Forbes 100. With great reputation, comes great responsibility.

The technical fest doubled as placement fair as well as an exhibition that proclaimed extreme engineering. The chances of finding a nobel holder strolling in these very grounds wasn't at all surprising. I scanned the battleground adorned by technological advancements and absorbed the surrounding. However I couldn't spot any of the regular non-technical company that shipped hundreds from our 45th ranked college sans an auditorium unlike NSIT. When i voiced my astonishment, a scream of horror mingled with disgust emerged from my friend. She sneered at the thought of FMCG majors hiring from their college. "We are not here to sell soaps, we are engineers not petty salesperson", she grunted as if I had battered her pride. To prevent further outburst, I pointed out to an auction that took place a few steps away. She waved it as a usual auction where the tech bigwigs engaged in a combat to procure the latest invention by NSITians. And the price-"just a couple million dollars with a black jaguar free", she casually said ignoring my conspicuous jaw dropping.

I had a surreal feeling with ubiquitous engineering marvel staring at me. The Vera Wang and Prada clad crowd with their perfect DNA sequence and higher in evolution ladder made little effort to make me feel comfortable and sane.



Suddenly a homo sapien radiating uncanny intelligence passed by. While my friend greeted without a muffle in her speech, I had a verbal paralysis. She had won 5 nobel in different fields. The friend offered an explanation-"My teacher". I suddenly remembered all those fabled tales where there were no theory subjects and a project to be submitted every fortnight.

In order to dismiss my uneasiness and frequent bouts of exclamations, I asked my friend to take me to someplace with fresh air. She took me to the football field as the rest of the 17 fields had been loaned for practice of London Olympics. My entire eyeball could not accommodate such expansiveness. Then she uttered which had me go kaput-"You know what FA cup finals would be held here..... though I doubt Chelsea will make it, Arsenal has lost it while ManCity looks promising.... blah blah

#### DISCLAIMER:

1. All these events occurred while the writer was in semiconscious, drunk, belittled state.

2. The writer has personal grudge against the incompetent Chelsea team though she finds

Michael Ballack visually appealing in spite of his inept shooting skills!

So all those Chelsea fanatics, pray (as if it would work \*winks\*)

## NSIT SPIC MACAY VIRASAT

We have no time to stand and stare" This January, SPIC MACAY, NSIT Chapter, in an attempt to help us take a break from a very technical and mundane world around us, hosted a 10-day cultural extravaganza under the VIRASAT series. The event was organised to demonstrate our country's VIRASAT through an array of magnificent performances, an exquisite Heritage Walk to Humayun's Tomb and a workshop on the art of Spinning and Weaving. The event was kicked off with a Kathak performance by Padma Bhushan recepient, Shovana Narayan; followed by a Qawwali act by the famous trio of the Nizami Brothers the next day. This was followed by a Dhrupad recital concert by Ustad Wasifuddin Dagar, a descendant of the legendary Swami Haridas Dagar, Tansen's teacher . The next day saw a concert from Grammy Award winning artist,



Pandit Vishvmohan Bhatt playing the Mohan Veena, an instrument he has invented himself. It is a modified guitar with twenty strings. A terrific performance in Hindustani vocals was showcased by Shrimati Meeta Pandit in the last segment of this exhibition of our rich and diverse culture. The program gained boundless appreciation from the college students and the faculty members, making a refreshing change to the technical atmosphere in our college.



Photography

Club

Collaboration

Find out where this picture is

*"What is this life if, full of care,* 

### NSIT QUIZ CLUB Collaboration

The NSIT Quiz Fest 2012 was organized by the NSIT Quiz Club from 10th to 12th February, 2012 for the 4th consecutive year. This year's edition saw 11 quizzes (5 Main + 6 Filler) being organized over three days. Apart from this, an online quiz series was also held from February 5th to 9th on the NSIT Quiz Club website (http://nsit-qc.blogspot.com ) to cater to those who

could not attend the quiz fest in person. Landmark Quiz 2012 One of the biggest Open quizzes in the country, the Landmark Quiz was conducted in Delhi for the first time on 18th February 2012 at Kamani Auditorium, witnessing a participation of over 230 teams. The team from



NSIT, comprising of Krittika Adhikary, Archit Chandra and Sudhakar Gupta, bagged the title of the Best College Team and also finished 3rd overall.

### Idea Conference in NSIT : NSEF The national social

entrepreneurship foundation for the first time conducted its prestigious



Idea conference in NSIT on 25th January 2012. Illustrious speakers such as Mr Manjeet Singh from d-lite energy solutions, Sonal Kapoor from Protsahan India and Pallavi Keshri the founder of Esyaar graced the conference with their presence. They enlightened the students about social entrepreneurship and various hurdles they faced along their journey as entrepreneurs. The conference witnessed participation from other colleges like Shaheed Sukhdev College of Business Studies. A business plan competition was also organized after the conference which was immensely competitive. The winners Mannu Matta and Mannan Gupta have qualified to the finals to held in IIT Madras.

\*\*-Special thanks to Aakanksha Saini, member of canvas (Art and Craft society of NSIT), for comics depicted in the cover story.

### THE NEWSPAPER TEAM



taken in NSIT?



Mansi Aggarwal COE 4<sup>th</sup> year

Rajat Goel COE 4<sup>th</sup> year



Arjun Singh ECE 3<sup>rd</sup> year (Design)



Esha Puri MPAE 3<sup>rd</sup> year <sup>(Feature)</sup>



Gazal Gupta COE 3<sup>rd</sup> year Journalists



(Content)



Nitin Garg IT 3<sup>rd</sup> year (Manager)



Akanksha Dewaker ECE 2<sup>nd</sup>year



Ishan Nigam IT 2<sup>nd</sup> year



Shivangi Saxena IT 2<sup>nd</sup> year



Toshit Agarwal COE 2<sup>nd</sup> year



Ayush Maiti ICE 1<sup>st</sup>year







Shrey Bansiwal ECE 1<sup>st</sup> year