

Sandpaper 2.0

The BITSAA Edition

Winter 2009

Birla Institute of Technology and Science Alumni Magazine

India's First
Microprocessor:
The BITSian
Connection



Quarterly
BITSian:
Gurinder Singh

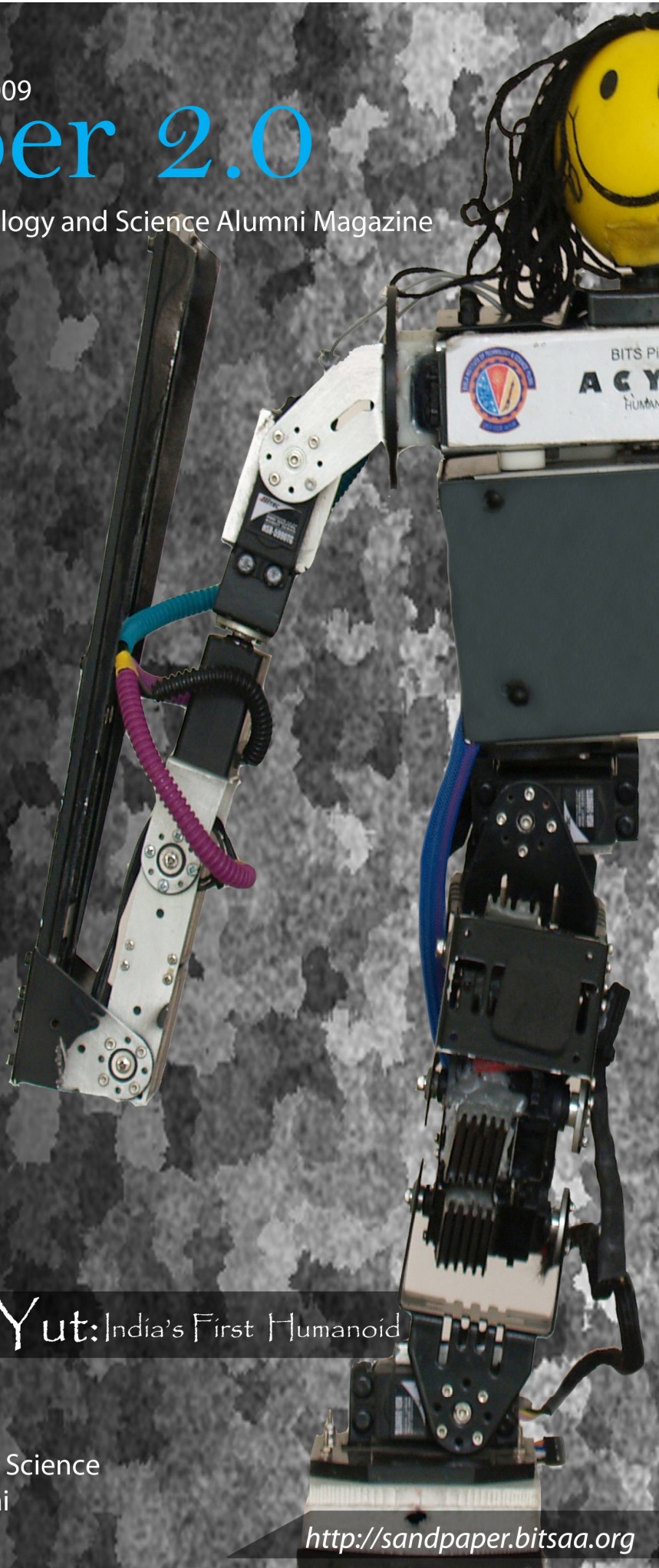
Creative
Media
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AcYut: India's First Humanoid

<http://sandpaper.bitsaa.org>



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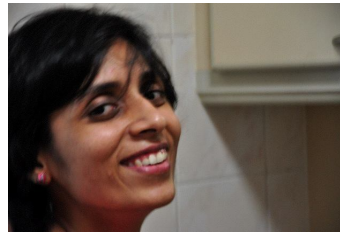
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"My passion for
excellence", I answer**



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The Wind Beneath Your Wings.

From the Editor's Desk

A wonderfully new experience, a gamut of new ideas and a brand new issue filled with fun unfolds. A long way has been travelled and an even longer uncharted path yet to be traversed.



Meenakshi Chatterjee, 2000B5A3721

An editor's job is not an easy one. Needless to say I bow down to the editors of yore – the ones who made Sandpaper a reality. Being an editor is a humbling experience.

I have always liked to write. I remember the first story I wrote. It was about a girl called Maya who perpetually lazed. She found buried treasure and continued her lazy lifestyle! The story kicked off a spark in me. The bug of writing bit me and it has since been incurable.

It seriously happened in my second year, right about the time when I was pretending to pay attention at PS1. Instead of my usual "note-taking", I put my pen and paper to better use. Story telling began. Short stories about ordinary people mired in extraordinary circumstances

Contributing for Sandpaper made me feel important. Just being able to see my name on the fascinating alumni magazine made me a celebrity!

Joining the editorial team was fun. Editing some else's work has its own rewards and pitfalls. While you get enriched by someone else's thoughts, ideas and mesmerizing stories, there is also the fear of judging, of making changes that could possibly ruin the writer's style. The biggest challenge I faced as the Editor of this issue was deciding- every piece was marvelous. Every one deserved to be read. I thank my team who helped me throughout. For every piece you see in this issue, there is one you don't- those are been treasured for next time.

BITSians are rather famous for their tenacity and determination. I look around me in awe and wonder. Youngsters are the new entrepreneurs while on campus – Mantra Awards. Thirty years is all it takes to become distinguished in your field – 30 under 30 Awards. BITSians are designing India's first Humanoid despite all odds and winning at successive Robogames– ACYUT. Charitable foundations and noble work are being done by others – Deepam, BITS.aid and Anuradha Gupta. My batch mate, Kaushik launches his own business venture – Zibika. Intel's new microprocessor is being designed in India led by a BITSian alum. The magnitude of all these achievements humbles me.

This issue has its own share of "firsts". This is the first time we are giving every piece a face to relate to. Every article has the author's picture along with his name. This is also the first time that we have the section Creative Media. Sandpaper isn't only about writers and poets, it is also about artists. It's an attempt to showcase their unique mode of expression.

Finally, this incredible journey of being the Editor would not have been possible without the help of Dileepan. I thank him whole heartedly. Ashish, Anuradha, Sandeep, Dilip were extremely supportive. I feel honored to be able to lead this effort of my very own, my very favorite, the one and only - BITSAA Sandpaper!

AcYut – India's First Humanoid

Students of BITS-Pilani have developed India's first humanoid, AcYut, which has earned international fame after winning the bronze medal at the RoboGames 2009, held in San Francisco, USA. Our Sandpaper team finds out.

Soumya Sen, 2001A8PS263



Students of BITS-Pilani have developed India's first humanoid, AcYut, which has earned international fame after winning the bronze medal at the RoboGames 2009, held in San Francisco, USA. With this achievement, India is now poised to become

a key player in the field of robotics. Our Sandpaper team finds out what motivated these bright students and how their contribution will impact the future of robotics technology in India.

Team Acyut in Tricolor at Robogames 2009



Nothing can stop an idea whose time has come*

*Victor Hugo (Histoire d'un Crime; written 1852, published 1877)

The last decade has witnessed an extraordinary progress in India's nuclear and space programs, the success of which have established her as a major player in scientific and technological research. This

Sandpaper: Did you have the required lab infrastructure at BITS-Pilani?

Team AcYut: BITS actually was very forward thinking in this aspect for having set up a Robotics Lab such a long time back before many other colleges & universities in India. We were also very lucky to have excellent facilities like CNC Mill at the Flexible Manufacturing Systems Lab (FMS).

might have led many to assume that it was only a matter of time that India ventured into the field of Robotics as well. However, research in Robotics never gathered much momentum in India and it remained as an esoteric subject of purely theoretical interest. But a group of students at BITS-Pilani were determined to change that notion for ever. They realized that the time had come to develop India's first humanoid robot that would capture the world's imagination. The fruit of their tireless efforts was the humanoid named 'AcYut-II' (*The Imperishable*). It was presented at the RoboGames 2009, the World's Largest Robot Competition, held in San Francisco, USA by a team of four BITSians- Samay Kohli (team leader), Sushma Vallabhaneni, Mohammad Ariz and Akash Gupta- who had worked under the guidance of Professor R.K.Mittal

at the Center for Robotics Intelligent Systems (CRIS) in Pilani. This indigenously developed humanoid marks the beginning of a new chapter in India's technological

development and is poised to make her a key player in the field of robotics alongside other Asian countries like China and Japan.

Sandpaper: What motivated you to start this project?

Team AcYut: Our initial motivation was to build something that everyone in India thought was "too tough".

An Unusual Visitor on Campus

In February 2007, the "International Conference of Emerging Mechanical Technology-Macro to Nano" held at BITS Pilani campus was attended by Professor Prahlad Vadakkepat of National University of Singapore. He brought with him an unusual guest -a humanoid robot named GINUS. Samay and his friends, who later became his team members, were surprised to learn that the humanoid was developed by an undergraduate student in less than eight months time. Till then, like most of us, they too had believed "that making humanoids was only possible if you invest millions of dollars in the research, and that

the only humanoid out there was ASIMO by Honda." Inspired by GINUS, the team decided to create India's first humanoid.



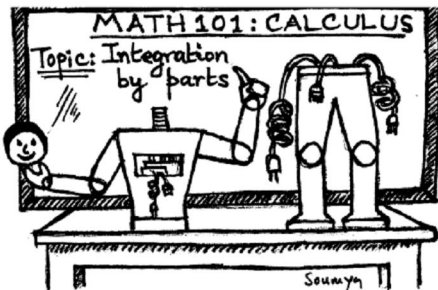
Team AcYut originally consisted of Samay Kohli, Arpit Mohan, Harsh Sinha, Prayag Mukherjee and Sushma Vallabhaneni. They started by creating a biped to test their technical capability. The biped, made mostly out of aluminum and motors, was a success;

it could walk and kick. It served as an initial exercise that taught them valuable lessons before undertaking the bigger task of creating the full-fledged humanoid that they intended to develop for RoboGames, 2008. With the help of Prof. Raj Singh (BITSian batch of '76) of CEERI, Pilani and BITS alumni from '76 batch, the team secured the funding for their project. The team worked at the CRIS (Centre for Robotics and Intelligent Systems) lab which provided them



with an excellent infrastructure for this project.

AcYut-I @ APOGEE'08



By March 2008, the team had prepared the first prototype of the humanoid, AcYut-I, and unveiled it in front of the curious eyes of fellow students at the annual tech-fest, APOGEE'08. This humanoid could walk, climb stairs, dance and play soccer. AcYut-I was then presented at the RoboGames 2008 in San Francisco where it won the sixth place among the 28 participating countries. Buoyed by this success, Team Acyut went on to develop even a better version of their humanoid. In doing so, the team first analyzed the drawbacks of AcYut-I's design; for example, they found that the location of the batteries in the front part of the chest was making it difficult for the robot to maintain its balance while walking. Hence the batteries of AcYut-II were placed in the chest in a way that ensured that the center of gravity was near the centre of the robot.

Furthermore, the chest and the shoulder parts were separated to ensure that the motor rotated only the necessary parts so as to not topple it whenever its arms were rotated. The team then focused on adding Artificial Intelligence to the robot in order to make it autonomous rather than automated. The students developed a bodysuit which allows AcYut-II to mimic their own movements and actions, thus enabling them to control the robot from a distance. Therefore the robot can perform several complex moves as opposed to being restricted to a limited set of pre-programmed movements that hand-held remote controls typically allow. As a result, AcYut-II resembles humans more closely than its predecessors. AcYut-II is also taller and has a higher torque motor that gives it the strength to punch harder. Moreover, its ability to move quickly around corners reduces its chances of falling out of the ring during a Kung Fu match. These features have ensured that AcYut-II will remain true to its name.

FUN FACTS!

AcYut learnt some of his Bollywood dance moves from Shakti Kapoor!



Dance Lessons from Shakti Kapoor

The Chronicle of a Victory Foretold

Like its predecessor, AcYut-II was also presented in June at the RoboGames 2009 held in San Francisco, California. This humanoid was far superior to many other robots, and hence its success was inevitable. The team members informed, "Even the people who were winning medals for the last seven-eight years got scared looking at AcYut II in the rehearsals. They

tried to analyze AcYut-II's prepared counter moves for them during the night. Those people are generally prepared much before hand and never change their moves/strategies at the last moment. But AcYut II frightened the previous world champions also."

AcYut-II's performance won it the bronze at the RoboGames 2009 and earned it praise among the researchers, including the founder of RoboGames, Mr. David Calkins. In fact, the team felt that AcYut-II could have performed even better at the competition. "Although we were capable enough to get gold in RoboGames 2009, unfortunately, we had to forfeit the final match because of a technical glitch. Even if we had fought the match, we would have got the Silver [medal]", the team told us.

Over the years, the project 'AcYut' has also received continuous encourage

ment and generous funding from the BITS Alumni Association (BITSAA), especially from '76-'81 alumni and BITSAA-SVC. Subodh Karnik, a BITSian from '76 batch and CEO of ATA at the time, arranged for Continental Airlines to provide Team AcYut with four tickets for the price of just one. AcYut also received sponsorship from companies like Force10Networks, Sierra Atlantic, Oriental Insurance and Continental Airlines.

The Three Musketeers

Besides the humanoid, AcYut-II, BITSians have also created three other robots which have won international praise. At the RoboGames 2009, another BITSian team, 'Automized Minds', consisting of Ravi Sankar Ippili, Uttam Grandhi and V.K.

moves and

Pannala, who worked with Professor B.K.Rout, presented the three robots- *Michelangelo*, *Cyborg* and *Wall-E*.

Sandpaper: Did you meet your expectation with AcYut-II?

Team AcYut: As far as the design of AcYut-II is concerned, it is one of the best humanoid designs in the world, but there is always scope for improvement. With AcYut-II we have definitely reached near our expectations but there is still so much to achieve.

FUN FACTS!

AcYut has quite a bit of temper! Once he smashed an expensive Dell XPS Laptop in the Lab, but luckily the laptop had an Insurance coverage and there was no clause in it against Robot damage!

Michelangelo, a robot that can sketch portraits of people when provided with the drawings of the image in Portable Grey Map Format, won the Silver Medal, while *Cyborg*, won the Bronze. *Cyborg* is a sculpture that depicts a half human and a half robot. The robot presents itself in a pensive mood, as if musing about the possible impact of the human to robot transformation on the various spheres of life. The entire

structure is made out of sheet metal and thermocol. The Third robot is one that resembles the animated character, *Wall-E*, and it can dance to the tune of the Academy Award winning composition, "Jai Ho!" It clinched the first prize at IIT Bombay's TechFest held during January of 2009.

The Way Ahead and Beyond...

Team AcYut has already started their work on improving AcYut-II for RoboGames 2010. Besides using more sophisticated algorithms to ensure that AcYut will never lose its balance, the team is also focusing on the additional feature of a 'Slave Suit' which a human operator can wear to control the humanoid. They have completed the first build and intend to test it on visitors at the



Ideen Expo at Germany in September. If this is successfully completed, such capabilities will allow the humanoid to be used in assisting police and military operations in hazardous environments.

Sandpaper: What lessons does the success story of AcYut-II teach regarding the future of Robotics in India?

Team AcYut: Indians can also compete with the Japanese and Americans in the field of Robotics which is considered to be their area of expertise as of now.

e students. When asked about their future plans, the enthusiastic response from Team AcYut was: "We plan to start up a company that offers Robotics education in a completely different and fun way."

The BITSian Alumni are also equally excited about the prospects of Robotics in India. Raju Reddy, CEO of Sierra Atlantic, told us "While we have plenty to cheer about the success of our ACYUT team, what excites me most is the opportunity now for BITS Pilani to become the hub of Robotics studies and research in India and one of the leading centers for Robotics in Asia over time. Accomplishing this goal in the long term will be the greatest reward my class of '76-'81 can have for volunteering their time, money and ideas to this initiative. Robotics by nature is also multi-disciplinary – Electrical Engineering, Mechanical Engineering and Computer Science (not counting Art) making it particularly attractive for a premier University like BITS to focus on for building leadership".

Viggy Mokkarala, another alumni from '76 batch who played an important role in raising funds and publicity for the team told us, "ACYUT-II's success in RoboGames

What is the selection process for Team AcYut?

It starts with a demonstration and open interaction along with a written resume. Those who are short-listed are taken on probation to assess their commitment and only then are they taken in.

The team members are very hopeful about the future of Robotics research in India. During their travels to IIT campuses and schools across India, they have witnessed a huge interest in Robotics among undergraduat

2009 and the ensuing worldwide publicity has put BITS on the map as THE center for Robotics in India. The team's travels around the country and the interest generated are proof of this".

Prof. R.K. Mittal told the Sandpaper Team that he needed only two words to describe the future of Robotics at

BITS- "Very Bright!" He added that the team is now working towards developments in the field of Micro-robotics. "We will soon be setting up a MEMS design centre. 70 lakh rupees have already been sanctioned for this lab. The fabrication of all component designs

will be done at CEERI." he informed us. The creation of AcYut-II at BITS has brought hope for a new technological revolution in India. As BITSians we all share the joy and wish Team AcYut even greater success in all their future efforts.

Sandpaper: Has the Government of India shown any interest in this development so far?

Prof. R. K. Mittal: The Atomic Energy Agencies were very interested in AcYut as they see a future in using robots to replace humans in hazardous environments. Commercial agencies are also interested in it as a programmable platform for humanoid robotics development.



Quarterly BITSian – Guri Sohi

Dr. Guri Sohi, BITS-Pilani Alumni, ID 76F06954, elected member of the US National Academy of Engineering in 2009, recipient of several prestigious awards and established professor of Computer Architecture at University of Wisconsin Madison, takes time out to chat with Sandpaper regarding his life, his work, his BITS (the one he remembers fondly) and himself. For his tremendous achievement in his field as BITS alum, he is our Quarterly BITSian. Interviewed by



Bhavesh Mehta, 1999A7PS049

It takes effort and creativity to tread the unbeaten path. To follow your dreams when none else believes in them requires tremendous self confidence. In Dr. Sohi's own words, "Do things differently. While joining the mainstream has a reassuring feel to it, to really stand out you need to create new approaches to problems. This is difficult if you are constantly surrounded by and work with existing approaches since this naturally results in incremental improvements rather than new directions."

Dr. Guri Sohi, BITS-Pilani Alumni, ID 76F06954, elected member of the US National Academy of Engineering in 2009, recipient of several prestigious awards and established professor of Computer Architecture at University of Wisconsin Madison, takes time out to chat with Sandpaper regarding his life, his work, his BITS (the one he



remembers fondly) and himself. For his tremendous achievement in his field as BITS alum, he is our Quarterly BITSian.

Professional Life

- First of all, we take this opportunity to offer our heartiest congratulations on behalf of the entire BITSian community on being elected a member of the US National Academy of Engineering earlier this year. How are you feeling at the moment?

Thank you very much. I am mostly elated. However I do go through a variety of sentiments when I reflect upon the various opportunities that I have been fortunate to have had and without which it is unlikely I would have received this recognition.

- For the benefit of our readers, can you tell us more about the US National Academy of Engineering? How is this award special to you?

The National Academy of Engineering (NAE) is an autonomous body of

outstanding engineers with the responsibility of advising the US federal government. Membership is by invitation only with new members selected by current members of the academy. It is very special since this is one of the highest professional recognitions that an engineer can receive.

- We understand that you are one of the leading researchers in the field of Computer Architecture. Can you please share with us some of your latest research in a few words? What problems are you trying to solve now?

Currently I am working with a very small group of students on trying to propose new directions for making use of multicore processors and understanding the implications the new directions on computer architecture. We are challenging the decade's old premise that parallel execution requires a parallel program representation and have proposed a new model where we can achieve parallel execution with a sequential program representation, without additional hardware or compiler support. If we succeed at this, we believe we can have a dramatic impact on the design of not only hardware but also on software.

- How would you characterize the current state of computer architecture? Could you talk about the pace of innovation, compared with what it was in the past?

We are now at a point that innovations in computer architecture are even more important. The rate of improvement in processor clock speeds has slowed down, and thus we have to put an even greater burden on improving parallelism (via computer architectural and micro-architectural innovations) to continue to get increased performance. We will also require a plethora of computer architecture innovations to address new constraints on design, namely power and unreliable hardware components.

Life @ BITS, Pilani

- We would like to know certain details of your life at BITS. For starters, what did you do/study at BITS and which batch did you belong to? And here's something to tickle your memory cells! Do you remember your ID Number?

I was in the batch of 1976. I was a very late second semester admit. I did not get admitted in the first semester, or even in the early rounds of the second semester. That year we had an unusually large number of second semester admissions (over 125 I believe). I was told that this was because the semester-long Practice School had just started and there were several rooms in the bhavans available to accommodate students. I was admitted in the 3rd or 4th round of second semester admissions, and I actually got my admission letter, and joined BITS, a week or two after the semester had started. So technically I was admitted at the bottom of the 1976 batch. I used the opportunity given to me to study hard and ended up graduating as the Gold Medalist in 1981.

I started out in Ram Bhavan, in the wing facing the Ram/Budh mess. I ended up studying Electrical and Electronics Engineering (EEE) and ended up in Rana Pratap Bhavan along with the other EEE majors. At that time rooms were assigned according to CGPA. I was in the wing that many others referred to as the "high tension" wing. I had a wonderful group of wing mates. I met a couple of my wing mates in Chandigarh and several of my batch mates in Delhi in July. I hadn't seen most of them since we left Pilani and it was wonderful reliving the memories.

I do remember my ID number. It started out at 76XXX954 and ended up being 76F06954.

- What are your three best memories of your time at Pilani?

Well, there are too many: relaxing in the museum lawns on a sunny winter afternoon, strolls along Shiv Ganga,

aloo tikkis at the rehri, samosas at the Post Office canteen, paneer pakoras at Connaught, "espresso" at Nutan, gliding with Mr. Sukumaran, and a host of others.

- Do you remember any particular event that you would like to share with us?

That is a hard one. But listening to Ravi Shankar play into the dawn at the Audi was certainly memorable. Then there is the forgettable: the infamous strike that our Student Union called. After a while, most of the student leaders had skipped town as had the "guards" who would go to the train station at Loharu to make sure that other students weren't leaving. Only a few of us were left at Pilani at the end before sanity returned.

- We'd love to hear about your activities and some [any?] courses you liked at BITS?

It has been a very long time so I can't remember all the courses I took. I did enjoy most of them. I drew a lot of inspiration from linear algebra, control systems, and electromagnetic and a variety of other courses.

- Tell us a little about the transition you made from India to the US? What surprised you? What did you like the most and intensely dislike?

It was a real culture shock when I first left India. The journey itself was very interesting: I was travelling with another BITSian who was also attending the University of Illinois and ours was the first flight from Frankfurt to Chicago after the strike by the air traffic controllers in the US. I was afraid that we might get stuck in Germany and run out of money (we both had only about \$600 each, which was close to the maximum amount of foreign exchange that we could get at that time). And then there were complications with not knowing how to use a phone, how to order food in a cafeteria or at McDonalds, or not knowing that the shower curtain should be inside the tub and not outside when taking a shower, but

those stories are for some other time.

I was pleasantly surprised by the very warm welcome that I received from the students and faculty at Illinois. They went to great lengths to make me feel comfortable. There was a good sized community of Indian students at Illinois and we would have a great time when we were not studying.

Initially I greatly disliked the bitter cold in the winter at Illinois. But now the winters in Illinois are warm in comparison to Madison, Wisconsin, where I currently live. I liked almost everything else, especially that one could buy ice cream by the gallon, and it was quite cheap.

Advice & Feedback for BITS students & alumni

- What do you think are the biggest challenges facing BITS today?

Maintaining its position as a premier institution of technical education in the global environment. As India continues to advance, it will need premier research universities where the fundamental knowledge that will power future knowledge-based economies will be created. Does BITS want to become a premier research institution? Doing so is quite difficult, and very expensive.

- What can BITSians do better/start doing to compete with the world's best?

I think they are doing a wonderful job already.

- What role do you see the alumnus playing in making BITS a world-class institution?

Alumni are critical to the success of world-class institutions. They can contribute in a variety of ways including mentoring faculty and students, creating a network of resources which can be used by faculty, alumni and students, as well as contribute financial resources. As an example, my batch mates in Silicon

Valley helped the AcYut Robot team in its initial stages and look how that initial engagement has helped.

The leading private US universities owe a lot of their success to the benevolence of their alumni. In fact, BITS owes its existence to the benevolence of the Birla's. Going forward, the engagement and benevolence of alumni is going to be very important.

- You received the 1999 ACM SIGARCH Maurice Wilkes award, won the WARF Kellett Mid-Career Faculty Researcher award in 2000. You were selected as a Vilas Associate in 1997, and a WARF Named Professor. To put it as a cliché, "What was the secret behind your success?"

Frankly I don't know. Maybe it was being at the right place at the right time. But I always pursued a path that was different from the mainstream and was fortunate to have mentors who encouraged me to pursue such paths. I try not to join the crowd and this has helped me look at problems in different ways.

I was like this at BITS too. Frequently I took classes from professors who weren't the popular professors, i.e., those whose classes everybody wanted to attend. I remember many lectures where there were only 2-3 students in the class and even a few where I was the only one. But I learned a way of looking at problems from instructors such as Sampuran Cheema, Mohi Mukherjee, H. Subramanian and others that I doubt I would have learned had I been in the crowded classes of the popular professors.

- Would you like to give some advice to BITSians aspiring to lead and reach top positions one day?

Do things differently. While joining the mainstream has a reassuring feel to it, to really stand out you need to create new approaches to problems. This is difficult if you are constantly surrounded by and work with existing approaches since this naturally results in incremental improvements

rather than new directions.

- Have you ever worked with business professionals from Pilani or even India? What are your impressions of them in terms of leadership skills or technical abilities?

Not really since my job a professor rarely leads to such situations. My classmates and other friends from BITS are doing a fantastic job, both technically as well as in leadership roles, all over the world. Clearly BITS did something right!

- How do you think we (BITSians/Indians) are distinguishing ourselves? What do we need to be doing better?

Absolutely! It is hard to think of any general suggestion for improvement. In my opinion, two skills will be critical going forward in a global technology environment: cultural sensitivity and understanding and communication skills. So if anything, I would suggest improving these skills.

Personal

- Have you been back to Pilani since you graduated? If so, how was the visit personally and professionally? If not, do you ever intend to go back?

Unfortunately, I have not. And I regret this. I hope to go back before too long.

- What do you read to stay in touch with technology, business other fields that interest you?

Being in a university one is constantly exposed to lectures and seminars on advances in technology well before they enter the market. So that is how I keep in touch with technology. For other matters, I try to spend some time every day reading on-line newspapers such as the New York Times and the Chandigarh Tribune.

- What are your hobbies, interests etc.?

I like to travel. When I can't travel physically, I try to travel "virtually", i.e., read about travel possibilities.

- Tell us something about your family and Madison - where you live.

I have been married for 24 years to my wife, Marilyn, who I met when we were students at the University of Illinois. We have one daughter, Jacinth, who is a junior at Claremont McKenna College in Southern California and we have a West Highland Terrier dog named Annie.

Madison is a wonderful and cosmopolitan city. It is the capital of the State of Wisconsin and is also home to the University of Wisconsin. One of the lesser known facts is that one of the heroes of India, Jayaprakash Narayan, attended the University of Wisconsin, and his tenure here had a formative impact on his political philosophy.

Opinion

- A lot of people are skeptical about the use of multicore chips with increasing number of cores per chip. A lot of focus in research has shifted to programmability of these chips. Is research in Computer Architecture becoming less interesting?

Clearly the number one issue going forward is the programmability of multicore chips. Without this, it is hard to make full use of the chip. However, I believe that we will come up with novel ways of achieving parallel execution on multicore chips, without dramatic changes in the ubiquitous sequential programming paradigm. I believe this will result in a significant change in the architecture of the multicore processors. Let us also not forget that

the new design constraints of power and reliability will continue to call for innovations in computer architecture to tackle them. In fact, as we run out of other technology scaling approaches to address problems (such as faster clock speeds to get performance); the burden will be on computer architecture to provide additional approaches. When new technologies replace current semiconductor technologies, the job of building computing machines with new technologies will fall on computer architects.

- What do you think is next big thing in computers?

My guess is that it will be in opening up entirely new application areas as a result of transforming traditional ways of doing things. But what areas? There will likely be significant new applications that come about as computers transform traditional biology, medicine, health care and the like. For example, a century ago physics and chemistry experiments were done in the laboratory. Today many of them are simulated on computers. Today most biology experiments are done in labs. I suspect many of them will be done via computer simulations once we develop the necessary models for biological processes. Another big area is gathering knowledge from information. Today's search engines have completely transformed traditional avenues for information but they are still rudimentary when it comes to extracting useful knowledge. I envision significant opportunities for advances in this area. There are many others. We are just scratching the surface.

- Anything else you'd like to share with us?

One does not realize how special a place BITS is until long after one has left. I am fortunate to have been able to get the opportunity to study at BITS.



Guri Sohi with his wife Marilyn and daughter Jacinth



Guri Sohi at an Alumni Reunion

A Life in Social Work

Anu talks about how she found her calling and her strength of mind, both at once through non-profit work.

Anuradha Gupta, 86A6PS403



We used to joke that there are corporate husbands with wives that do 'social work.' But it was always my calling to reach out and make a difference. Sometimes seeing people benefit was a reward in itself and sometimes because it lifted me from my mundane, existentialist dilemma. It gave my life a sense of purpose in the backdrop of the Myth of Sisyphus, rolling a boulder up a hill, moving from one day to another day where existence precedes essence.

I always noticed somebody that was in a worse situation than me. It was like the universe conspired to have me notice that. At a time when I had no job and had suffered a miscarriage (that led me to years of sadness) I noticed a lady whose child was dead, living in the slums who had to go to work the next day. It gave me strength to get my act together, get back to working and plough through so many years. I had my own little girl soon and much later adopted my son, the fourth adopted child in our family.

And yet there were 54 million children abandoned in India. And there were children who were malnourished but pushing a cycle wheel gleefully along the road. There were women who were breast feeding because there was no food in the house.

What brought joy in their hearts? Where does the peace come from in such a tough world? Growing up in India I was surrounded by such examples. There were of course the success stories, the little boy in

the train who was selling *bindis* while singing off key and collecting money. The slums in Dharawi spawned the greatest enterprise. When child labor was banned in Varanasi carpet industry, the export factories had to furnish certification that they were child labor free. What happened to those children who would make some money working in this industry? Some would study; they had options. Rather than move in and find them options, these factories destroyed a means of livelihood. Many took to stealing and prostitution. US on the other hand that imposed this restriction and has many children working in extensive agriculture.

A kind solution for anything has to be a grassroots solution and a balanced solution. I had to connect with a corporate with a strong sense of social responsibility or non profit to make that possible.

I always thought I would be the corporate, ambitious lady and manage social work in parallel. It was wonderful being in Levers and working with villagers in Etah. It really moved me when I organized an eye camp and when I was transferred into my division. I worked with the Factory Manager of my department to improve the village around our factory, we framed our response to village development against a backdrop – that improving quality of life of villagers where we had factories and places in general would be good for the economy, kind and good for our sales most of which came from penetration into villages, small packs and mass brands like Lifebuoy. The corporate responsibility that Levers undertook with

projects like Project Shakti (back in 1990's) actually added a sense of pride and belonging to employees that cared.

But moving to the US, there were different <http://www.managingtheartofliving.org/images/T>



[ree.jpg](#)

challenges. Loneliness, lack of community, I worked briefly with substance abuse and teen pregnancies and it was so disheartening, I opted to safer issues like education. I worked for a while and while the recession and prioritizing spending time with my kid made me stay at home, I started looking for non profit volunteering. The skills I brought to the table were publicity basically, project writing and grant writing I added with time.

I went through many non profits, Asha, Pratham, Anuradha Foundation, Food Allergy and Anaphylaxis Network, Lend a Hand India, BITSunami, Life for Manish which I tried to bring to BITSAA, BITS.Aid and eventually Art of Living Foundation.

There were two issues in non profits, one is that a lot of small non profits address the same issues and do not get together for critical mass because of limited budgets and the other is that in the absence of remuneration, one works because one believes in issues to turnover is very high. The needs for affirmation, achievement and power (through money, position) are all more difficult to strive for, people work from home and rarely connect and most work is pro bono. Personalities tend to govern decisions in the absence of policy sometimes. Coming from a huge corporate, this was a challenge for me always since I loved structured work. India on the other hand is gorgeously diverse and beautifully chaotic. When India got liberalized so to say in 1991, suddenly, there was less red tape, less rules and more of international business that we were

studying and since IIFT, Delhi was affiliated to the Ministry of Commerce, we were bang in the middle of a metamorphosis. A nation so large, yet democratic, secular, such dichotomies exist in every area that the mind boggles

So how does one connect with a cause? For some it is a calling, they set up or work for non profits as employees. For others they chose from many non profits in areas like health, poverty alleviation, education, environmental issues etc. The problem is that working with causes often got one depleted. Many experience fatigue while working through a particular cause that they believe in passionately but they get hurt. Seeing children struggle to get vocational education can be tough for anybody. People get burnt out.

In that context, two non profits come to mind that are rather complete in their practice.

One is the Art of Living foundation that seeks to strengthen individuals who then contribute to social causes. The other is close to home for us BITSians, BITS.Aid which was formed three years back and then reorganized.

I must say that BITS.Aid has a very noble objective. Imagine 30,000 BITS, Alumni who are already in some way or the most connected to social causes. They have the skills, the resources, the motivation to make a difference. Improving that nexus by listing projects and getting volunteers who are anyway looking for a cause based on a particular skill (or even a job) is a formidable task.

Sudip has organized a team to relaunch BITS.Aid. I had three years back listed a project (Lend a Hand India) and been part of the initial team that included the late Laxman Mohanty, a great friend and colleague who worked for setting up schools in Orissa and many such causes.

But I have constraints and my family priorities often take over. That is where a spiritual non profit helped me; spirituality in India is often connected with going off on one's own path, one's own journey inwards and can be an isolating one, with people going off to Ashrams or many living in seclusion to ponder life's mysteries. Is the purpose of self-development merely for the self? Or is it to take the knowledge to the community and serve the community with valor?

Art of Living attempts to answer these questions by instituting for its volunteers a practice that involves Sadhana, or their own strengthening practices (involving Sudarshan Kriya, yoga, breathing techniques, an ayurvedic approach to diet and health), Seva, or service and Satsang, or a community that is supportive in one's personal growth and in helping one with service projects. And the community is organized into volunteers, coordinators (of projects and courses) as well as teachers who go through rigorous training but are mostly volunteers. Volunteers are free to undertake whatever role (they do go through a basic course which teaches them techniques) in seva and there are opportunities to connect to knowledge series which are scriptures, interpretations of Bhagavad Gita, Ashtawakra, Bhakti Sutras, Patanjali Yoga Sutras etc.

The attempt is social service in the context of personal growth and community support. Since AOL's programs have reached 30 million people in 140 countries and there are centers all over the world, wherever one goes for a visit, to live, for a project or a course, one immediately connects with the community. We call it 'One World Family'. Quite like the Buddhist community where there is Dharma (which is one's own path in the journey of truth), Sangha (or the community) and Buddha (the Master) in a modern day world where nobody leaves home, like teachers often joke, the is the 'Art of Living' not leaving. To think it was founded by a loving, little man we call Guruji who decided to take 'knowledge' and service to the masses, one is

amazed as one sees how much goodwill AOL has generated in the world, with United Nations, with different countries through working in war zones, terrorist infested areas and responding with trauma care in different places.

In the US, AOL conducted free courses after 9/11 with highly trained teachers who worked with PTSD, depression and other issues using ancient Indian techniques of breathing and meditation. They went to help out at New Orleans, at Virginia Tech and local chapters being completely organic organize services the community needs.

This is fun! Art of Living is one of the world's largest non profits and they operate so quietly and gently that most people don't know that. They are to the non profit world what a company like say GE is to the corporate world or what a company like Unilever India is to the corporate world in India.

And to think this is all based on ancient Indian spirituality, it is a matter of great pride for Indians that we have responded to a stressful, violent world by finding an alternative. Like Sri Sri Ravi Shankar says,

"Violence Free Society
Disease Free Body
Quiver Free Breath
Confusion Free Mind
Inhibition Free Intellect
Trauma Free Memory
Sorrow Free Soul
And an Ego that Encompasses ALL
Is the Birthright of Every Citizen
On this Planet. "

So I have found yet another way of living a life in service, where I need not just write poetry about issues that overwhelm me. I can actually 'BE THE CHANGE I WANT TO SEE IN THE WORLD.'

http://americanobserver.net/photos/20071023/20071023_artofliving1.jpg



Place for Ethics

Have we forgotten what the word 'ethics' means? Does it have its due in today's world? Dilip D'Souza wonders...



Dilip D'Souza, 76F06346

Confession: I have a minor connection to the film "Swades". Its director, Ashutosh Gowariker, got some of the ideas for the film from an article I once wrote, about two young engineers who built a dam. If you watch the film, you'll see a "Thank you Dilip D'Souza" flash across the screen at the start.

That's all I'll say here about this.

But there's a reason I mention this Swades connection. One March day a few years ago, I found myself in front of a class of eager MBA students at a management institute in Rajasthan. (Not BITS, be it noted). I spoke to them about the young engineers, and my link to "Swades". Later that evening, one of the professors introduced me to another set of students. "This is the man," he said, "who wrote the script for Swades".

I quickly corrected him -- I didn't write the script, I said, I just wrote an article that the director read and thought about.

The professor waved away my objections. "You should just say it," he told me firmly. "Just say you are the scriptwriter."

That I was stunned is an understatement. Here was a professor telling a few dozen students a complete fabrication about me, and then telling me in front of them that I should propagate it as well. A professor of business, no less. What lessons were his students taking home from this incident? What idea of ethics would they take into their careers?

Am I reading too much into this small incident? Well, then another small incident happened.

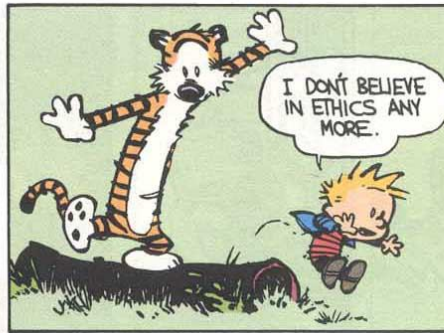
This was during an online competition I entered in not long ago. I didn't make the shortlist, so I swallowed my disappointment by following the three finalists. They were being judged by the blog posts they put up over a ten day period, the winner to walk away with a handsome sum of money. The competition between the three was intense, though genial.

One of the three was a recent graduate; I'll call him K, from one of the country's best known B-schools. Bright, keen and articulate, K wrote some vivid and easy-to-read posts, even if one of his competitors was clearly superior. Still, K was working hard, and you could tell that the contest would go down to the wire.

Then, one morning about halfway through the ten days, I clicked through to the site to read K's latest missive. Something seemed both odd and vaguely familiar about it, but I paid no attention then. Later in the day, it came to me. Someone had once drawn my attention to a two-year-old article in a publication I sometimes look at, and somehow, K's post reminded me of that essay. I brought it up again on my screen. To my amazement, K had lifted entire paragraphs from this article and reproduced them in his post, even retaining the few spelling and grammar errors, with no mention of the original or its author. In fact, it was the language and the errors that had

calvin and Hobbes

by WATTERSON



GET WHAT YOU CAN WHILE THE GETTING'S GOOD—THAT'S WHAT I SAY! MIGHT MAKES RIGHT! THE WINNERS WRITE THE HISTORY BOOKS!



[All rights for the image reserved with Bill Watterson, the creator of Calvin and Hobbes]

seemed odd to me, because they made this post so unlike K's other smoother writing.

I remember sitting there baffled. Is this what intense competition had done to K? Why would this young man risk his chance at the prize, possibly even his reputation this early in his career, by plagiarizing so blatantly? Why would he do it, in this Web era when plagiarism is so easily uncovered?

I wrestled with myself for a while, then finally sent a note to the organizers of the competition, telling them all this. They took note of it and mentioned it on the site that hosted the blogs. That drove K to add the name of the author of the article to his post, though without any acknowledgement of or apology for the plagiarism.

But several reactions to this episode, from others following the competition, baffled and bothered me even more. They were all

variations on "what's the big deal, anyway?" Here are some of these reactions, quoted verbatim:

- * "I don't find any harm in plagiarism until it's a great post." [Whatever that means; I suspect that "until" should have been "if"].
- * "Plagiarism can't be avoided nowadays in [an] era of information and technology because of sheer [sic] number of articles."
- * "If it's unintentional and slightly modified, it will not cause harm."
- * "It was research, not plagiarism!"

Now none of us would react to a theft by saying "He was borrowing, not robbing!" Why do we treat plagiarism differently? Why do we take it less seriously?

Turned out there was no penalty for K. He carried on blogging, and finished the

competition as runner-up. Maybe it was indeed research, not plagiarism.

Again, am I reading too much into small incidents? I don't know, but if they do happen to reflect wider trends, these free and easy attitudes towards ethics trouble me. Does the urge to get ahead mean anything goes?

More learned folks than me have found evidence of sometimes "muddy" ethics among students in business schools. In particular, there's Don McCabe, a professor of management at Rutgers University. In a much discussed article on the Harvard B-school blog, "MBAs Cheat. But Why?" (<http://u.nu/54c23>), McCabe blames the "get-it-done, damn-the-torpedoes, succeed-at-all costs mentality" among today's business students in the USA. In other words, the intense competition also lasts through their careers. McCabe thinks this means students today are "more prone to ethical problems" than in the past, and that therefore, B-schools must teach ethics as part of their curricula.

This is not the place for an analysis of McCabe's arguments – for that, reading his original would be a far more useful exercise.

But he ends with some musing on how "business schools and their progeny ... lack a sense of disgrace." They think they can do anything in pursuit of a strong bottom-line – grades or stock prices. But can they really get away with it?

McCabe has a disturbing take on that: "As long as society accepts such behavior when it's associated with strong stock performance, I'm afraid they may."

In an India that sees itself as a country rising rapidly, management institutes are certainly proliferating rapidly. Only a few days before writing this, I counted dozens along a 10-km stretch of road on the outskirts of a large UP city I visited. Besides, we admire entrepreneurship and competition, and the rewards those bring. Rightly so! Some BITS alumni make impressive efforts to mentor current BITS students who want to go to B-schools.

Yet in all that, I hope there remains a place for ethics. I hope the two small incidents I mention are only aberrations.

I hope. But somewhere inside, I can't quite shake the same pessimism McCabe feels.



Are you aware of “Let’s Promote BITS-Pilani”

Few BITSians are creating the first-of-its-kind grassroots movement to promote the BITS Pilani brand among Class 11 and Class 12 students. Join the BITSAA International movement !!!



Deepak Malani 2003A8PS175

The lack of awareness amongst the young student community about BITS-Pilani was a growing concern & was something which had to be dealt at its earliest. It was alarming when we realized that students were unaware of all the flexibilities & features that BITS offer during the time of their admission. All these lead to the start of the initiative - Let's Promote BITS-Pilani. LPBP aims to create awareness amongst the student community about BITS-Pilani. It focuses on building the brand "BITS-Pilani" and promoting all its campuses - Pilani, Goa, Dubai & Hyderabad. The medium suggested for this brand building exercise was to conduct information sessions in schools, colleges and coaching centers wherein the speaker would enlighten the young aspirants, clear their doubts and in a way act as the Ambassador of BITS-Pilani.

The first experimental information session held at Hyderabad received a huge response with more than 200 students participating in the session.



It was after the success of this attempt that motivated the team to kick-start the work simultaneously in two campuses - Pilani & Goa. In its early phase, the initiative received a lot of appreciation & cooperation

from both students & the administration. Documents were prepared which would assist in conducting "Info Sessions". Volunteers were identified & trained for delivering these information sessions at respective campuses.

Phase I: The Journey Begins

The team members of the initiative were into action all across the country during the winter break of 2008 (15th Dec - 5th Jan'09). During this phase students from both the campuses participated actively and delivered info sessions in their schools & colleges. Due to this untiring effort, within 20 days the initiative was successful in reaching as many as 7500 students with the help of nearly 50 volunteers from Pilani & Goa campus.

Harish & Cherukuri Aditya (both from Goa Campus) conducted 3 sessions each & played a major role in this phase. "The Hindu" approached Harish and appreciated the initiative. They also showed their desire to write about this unique initiative in their daily.

Phase II: The power of BITSAA

Phase II was an entirely new chapter for LPBP because this time around, it was the seniors who conducted the info sessions. Alumni across the globe liked the idea & expressed interest to be part of this initiative. The willingness from the alumni boosted the morale of the initiative and helped it to gain more momentum.



The first session of Phase II was conducted by Sagar Dughrekar ('95). Based in London, Sagar currently works as a Business Analyst with Barclays Capital. He has been an active member of BITSAA & was instrumental in setting up the BITSAA Mumbai Chapter. It was conducted in association with Institute of Engineers in Aurangabad, Sagar's session was attended by over 450 students and parents from different schools of Aurangabad.



Phase III: And it goes on...

The planning of Phase III started almost parallel to Phase II's. Like Phase I, this phase will consist of students as volunteers but not only from Goa & Pilani but also from our new campus at Hyderabad! After the success of Phase I & alum's support to Phase II, Phase III required even more enthusiastic ambassadors who could play the dual role of giving out info and also guide their juniors in making correct discipline and career decisions



Phase III witnessed an enthusiastic first year student from Hyderabad campus who conducted 10 information sessions across his city all alone!



Neil C. Jog apart from clearing the doubts of the aspirants also brought some useful feedback to the LPBP team about the misconceptions & doubts that still exist in the minds of the aspirants.

What next ???

- Do you feel that there is a scent of ignorance about BITS-Pilani & its unique features?
- Do you believe that you can take the role of building the brand of BITS-Pilani?

Join hands in this unique initiative !!!

If you have any queries, please write to the Let's Promote BITS-Pilani team at <mailto:lpbp-team@bitsaa.org>. You can also visit <http://www.bitsaa.org/?page=lpbp> for more details on how you can contribute.

MANTRA AWARD Winners

The recently concluded Mantra Awards brought five great BITS-Pilani Dubai and four amazing BITS-Pilani students to limelight. In true BITSIAN style, Sandpaper gives you their "Intro". Read on...



Saurabh Ladha, 2008AAPS289U
Apurva Misra, 2007A3PS217P

BITS-Pilani, DUBAI Winners

Shrey Sanger – Extraordinary Leadership Potential, Male

Shrey Sanger is a Computer Science



Graduate from BITS, Pilani - Dubai. He graduated in 2009 as the President of the Student Council at BITS, Pilani - Dubai. An excellent student, he was actively involved in all cultural activities and

was also the Senior Editor of the college newsletter "@bitsdubai". A permanent member of the college debating team, he has participated and won several inter-college public speaking competitions throughout. As an avid public speaker - he often compeered college events like Sparks, BITS Sports Festival, Annual Cultural and Sports Day. But perhaps his most memorable contribution has been as the resident Quiz Master for BITS, Pilani - Dubai - hosting all four editions of B'Quizzed (the annual quiz competition organized by BITS, Pilani - Dubai). He was also the Event Coordinator for B'Quizzed 2009 and oversaw the expansion of a previously inter-collegiate event to high school students. He is currently looking for job opportunities in

IT/Marketing/Event Management. His hobbies include Debating, Quizzing and Bathroom Singing!

Neha Nair - Extraordinary Leadership Potential – Female

Neha Nair is currently pursuing Semester VII of B.E. (Hons.)

Mechanical Engineering at BITS - Pilani Dubai [BPD]. Having been an avid reader since childhood, she counts English among her favorite courses at BPD along with Management,

Operations Research and CAD. Besides being a Senior Reporter for the College newsletter, she holds the post of the General Secretary in the Student Council and is also an active member of the Cultural Committee. She has represented BPD at GETEX '09 [an educational exhibition] and even on TV [a very 'interesting' experience she says!]. A self proclaimed motor-mouth and extrovert, her interests include reading, dabbling in art & craft, debating, meeting new people and then some more reading. After her graduation, in 2010, she looks forward to pursuing further studies in Management.



Mohamed Amar - Social Leader of the Year
Mohamed Amar was born on in late Aug, 1987 in the town of Tiruvarur, Tamil Nadu in India. He moved to UAE within 3 months of birth and has been living there ever since.

He joined BITS Pilani, Dubai in 2005 and completed B.E (Electrical and Electronics Engineering). During college, he had the opportunity to work and help in organizing a number of



college events. Eventually during his third year he was elected as the President of the Social Awareness Club and organized events such as blood donation drives, plantation drives and visits to Special needs centers. He currently plans to work in the Technical Marketing Field. His hobbies include cooking, watching TV series and sports such as tennis and cricket.

Sivagurunathan - Entrepreneur of the Year



Sivaguru is the Co-owner of website www.milledrive.com and Mille Media Limited (Established as a Limited

Company in Hong Kong). Previously he has designed several websites and sold one of them (along with 2 more partners). Siva handles troubleshooting and handling of network configurations, utilization and monitoring of resources across data centres, security setup, kernel level optimizations, database customizations and virtualization setup to enhance server performance as a part of his job. He is also involved in carrying out all financial transactions. Siva has received certifications of CCNP, CCNA, CEH, VCP, MCITP and MCTS which has helped him in identifying similar problems affecting enterprises in case scenarios.

Arshad Ahmed - Technical Innovator of the Year

Arshad is a final year student at BITS-Pilani, Dubai. His passion is to develop innovative,

extremely affordable health care solutions for people living on very low income. His low cost ventilator won the first prize at Techfest, IIT Bombay and he was invited to present it at the World Health Care Congress. He will be doing his postgraduate



studies in the University of Manchester where he hopes to develop his ventilator further. He has participated in and won other competitions such as the BITS Pilani - Dubai Technofest and the IEEE Design challenge. His interests include trekking, exploring and diving.

BITS-Pilani Winners

Rajat Tibrewal, currently pursuing his dual degree in Msc (Hons.) Physics with BE (Hons.) Computer science at BITS Pilani, believes in affecting lives by his work. He aspires to become a specialist in Artificially Intelligent Network Systems, Human-Computer interaction and Information & Communication Technology. Backed by an excellent academic record and an exceptional

skill-set, Rajat aims to use his knowledge in designing new products or solutions that would directly address many prevalent social problems. As part of several associations and clubs at BITS Pilani, he has



displayed his passion to work, his philosophy to keep things simple and his grit to lead. He has been involved with the Robotics club where he designed friendlier user interfaces. He has spent a lot of effort in the study of Swarm intelligence, developing simulations and applying the concept to several seemingly unrelated fields, such as organizational dynamics. His Swarm intelligence projects include

Simulation of Ant Colonies and an algorithm that could be attached to cars which would suggest alternate routes to desired destinations without the use of GPS. Apart from earning the laurel of being a Goldman Sach Global Leaders Program Nominee, he also holds several posts of responsibility like the Coordinator of Computer Science Association at BITS Pilani. He has been responsible for introducing several innovative initiatives that has revolutionized the way the association works and the output it delivers.

Thouta Shailesh, pursuing his BE Hons



Electronics and Instrumentation Engineering, at BITS Pilani has a passion for social entrepreneurship. He wants to bring a change in the Indian economy by improving the Medium Scale

Entrepreneurs (MSEs) by providing training in managerial and marketing skills. He has been actively involved in organizations like NCC and NSS from an early age. His experiences as an NCC volunteer made him aware of the harsh realities of life and made him a socially responsible person. While working with NSS as a volunteer, project lead and later on as president, he got a chance to serve the community. He was instrumental in starting new projects and improving the way NSS functioned as an organization in BITS Pilani. He believes in inspiring people to bring about a change and has aptly proven his statement while working for NSS. While pursuing his interests in the social sector, he has continued his passion for electronics by being an active member of the Instrumentation Forum in BITS Pilani.

Mayank Mathur, pursuing his BE Hons Electronics & Instrumentation, believes in leading from the front. He has been an active contributing member of Instrumentation Forum as well as BITS Pilani. Propelled by a passion for electronics, he has introduced the concept of workshops by industry professionals to help students learn from their first hand experience. He

was actively involved in setting up PSoC lab in BITS Pilani. As a Coordinator of Instrumentation Forum he coordinated many events during his tenure. He always encouraged his colleagues to pursue activities in the Forum with utmost dedication, constantly being a supportive, guiding light even after the completion of his stint as the Coordinator.



M Santosh Laxman, currently pursuing B.E. Hons Electrical and Electronics Engineering --- has a keen interest in entrepreneurship and web 2.0 technologies. He has developed and managed many websites over the past two years. He is also the founder of a personalized merchandise company "Colon K" and "BITSexam", a website catering to the needs of aspiring BITSians. He is also a reporter for YourStory.in, an online media platform for entrepreneurs. With his keen observational and analytical abilities, he wants to achieve his dream of being a serial entrepreneur in life.



THE SECOND GLOBAL BITSAA 30 UNDER 30 AWARDS (2009)

These awards are the highest recognition by the BITS Pilani community to thirty students or alums for their extraordinary achievements before the age of 30. Here is the list for this year's winners.



Ashwin Gowda, 2002A6A1756

The Global 30 under 30 Awards are presented once every three years. These awards are the highest recognition by the BITS Pilani community to thirty students or alums for their extraordinary achievements before the age of 30. All students from Dubai, Goa, Pilani and Distance Learning Programs are eligible to participate. Winners are nominated by anyone within the BITS community including students, alumni and faculty. 2009 is the 2nd time that the awards are being presented.

BITSAA received over 100 applications this year across the campuses. The applications were then evaluated by an elite panel of six highly accomplished members of the BITSAA

community.

The award is dedicated to all those young BITSians who thought and acted differently, who challenged the status quo, rewrote the rules, and created their own paths. To the leaders, innovators, researchers, academics, students, entertainers, winners, engineers, scientists and concerned Samaritans who studied within the BITS academic environment around the world. These are the people who set the best examples of what it means to be a BITSian!

Below are the candidates who made it to the highest level. For more information on the winners visit www.bitsaa.org.



HOW DO WE BENEFIT FROM THE STOCK MARKET?

The current financial crisis has impacted all parts of the world and left the investors worried about the future of the global economy. The question that a commoner is asking is whether such a crisis will occur again and what can be done to prevent it. But the author opines that such crisis is quite inevitable, but there are ways to keep one's head above the water. He provides three key tips that investors should keep in mind.



VP Rajesh, 87A3PS107

The turbulence in the financial markets has impacted all of our lives either directly or indirectly. People planning their retirement had to reassess their plans for the golden years and folks in their golden years could only think of hoarding more gold. Anyone who has dared to open his or her broker's monthly financial statements has only seen red for the last several quarters. Stories abound from the latest graduating class that saw their offers being rescinded or delayed for a variety of purported reasons, that is, if they were lucky to land with their dream job in the first place. BITSians aspiring for higher education have faced financial aid cuts due to drop in the universities' endowment funds. The picture has been gloomy, to say the least, for the last several months.

I will not dwell on the cause(s) that led the world to the precipice of financial disaster in this cycle as it has been covered eloquently in several publications. Suffice to say that the history is replete with similar kind of manias from 1937 Dutch tulip bubble to 1930 depression in the US, 1998 Asian crisis and 2000 Internet bubble. Each time the reason, context and geography is different but the result is the same – fatal blow to the investors. The clear take-away is that such financial tragedies are going to be part and parcel of life and unfortunately each generation will either experience it

first-hand or, if lucky, will only hear about it from the preceding generations. What's not so clear is whether one can anticipate such disasters and avoid them to the extent that it does not lead to a complete ruin. However, there are some timeless principles that can help an investor benefit from such situations and take advantage of the opportunities created. In my opinion there are three such principles – (1) invest when psychologically it is hard, (2) invest at the low valuation entry points, and (3) smart money is buying (or selling). Let me elaborate on each point.

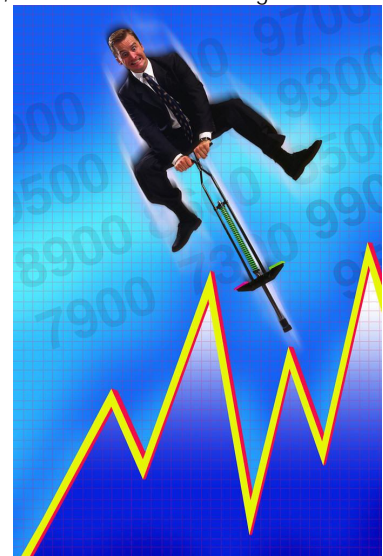
Research has proven that most people feel disproportionately worse about a financial loss (by a factor of 2 to 3 times) in comparison to a thrill of a gain. The asymmetry strongly suggests, as an investor, to think counter intuitively about the financial markets. When everyone is feeling happy (or giddy) and stock market analysts/managers are toast of the cocktail parties, it is time to pull-back. On the flip-side, when every time you pick up a newspaper/magazine, it is full of gloom-and-doom stories; it is time to add to your exposure to the stock market. Warren Buffett has eloquently put it: "buy when everyone else is selling and sell when everyone else is buying." It is hard to exercise self-control but the financial gains or benefits of preservation of capital are quite enormous.

On a quantitative basis, focus on what you are paying for the stocks. Although intrinsic value is the best measure of a business, price to earnings (P/E) ratio are readily available to assess the overall attractiveness of the stocks. Today, S&P 500 is at the same level that it first achieved back in early 1998. Aside from the paltry dividends, there is nothing to show for the last 11 years. And yet the earnings, the primary determinant of market's valuation, have increased substantially over the same period. Back then, investors were in a good mood and were willing to assign high P/E ratio to the stocks. Today, people are extrapolating the current situation into the future and heavily discounting the potential earnings. Looking at 10-year trailing P/E multiple, it has come down significantly from a high of over 45x P/E multiple back in 2000 to approximately 20x at current S&P 500 level, much closer to the long-term average of the US stock market. At the bottom of 1982 and 1931 valuation cycles the same ratio was 12x and 7x, respectively.

Smart investors have proven themselves over a long period of time with careful analysis and intuitive feel of the market sentiment. Warren Buffett is one such legendary investor of our times. As much as he dislikes making stock market predictions, Buffett has been uncannily correct in calling the major peaks and troughs in valuation cycles over the last 50 years. In his famous New York Times op-ed piece in October 2008, he noted: "Equities will almost certainly outperform cash over the next decade, probably by a substantial degree." Another lesser-known name is Jeremy

Grantham at GMO in Boston. He has been commenting on the stock market for several decades now and has a strong track record of analyzing the valuation cycles. He is one of the few commentators who had called for a decade of subpar stock market return back in 2000. His missives are eagerly awaited and read broadly by fund managers and investors in general. Earlier this year, he wrote: "Plan A: you must force yourself to invest in a cheap market even when you are terrified by rapidly falling prices, as I admit I was to some extent. I also suggested Plan B: if you missed the earlier lows, you must grit your teeth and phase slowly into a cheap market. You can't gamble that it will oblige you by another low, and historical analogies with earlier, much lower market lows are fraught with genuine differences."

There are no guarantees in financial markets but if an investor follows these three principles religiously, he or she will improve their chances of significantly outperforming the stock market over a long-term.

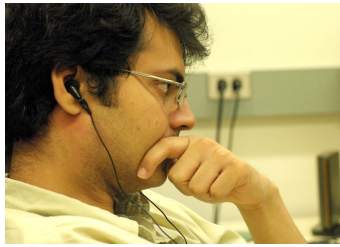


<http://kenoath.files.wordpress.com/2009/02/stock-market-chart.jpg>

Pressure and Colorful Women

The first drawing depicts pressure of life...

Bodhisatwa Sadhu, 2003A3PS071



The second drawing is an acrylic painting of colorful women.

Ch N V Kiran, 2004B4A7541

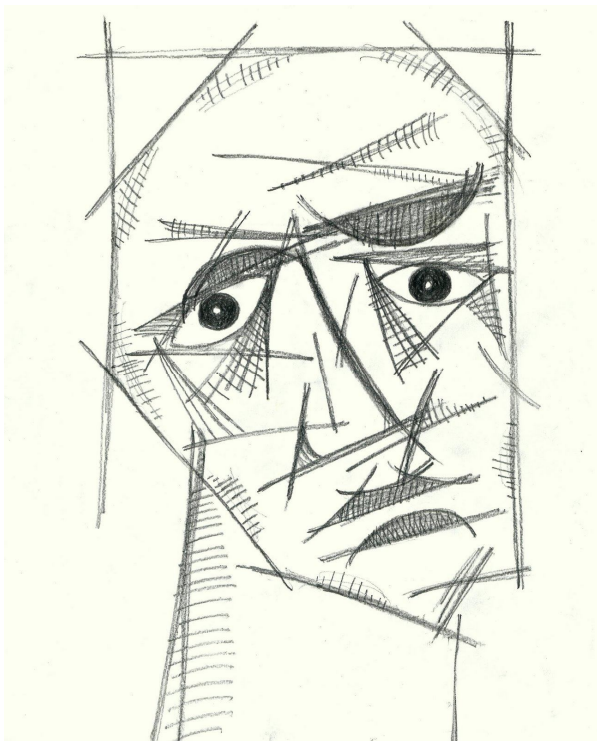


Figure 2: Pressure

<http://sandpaper.bitsaa.org>



Figure 1: Colorful Women

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The Players

"The significance of the chessboard design on which the four gamblers sit is that the gamblers are themselves pawns in a larger game being played out in the world they inhabit."

Soumya Sen, 2001A8PS263



Photographs and Captions

An excellent photographer, Debarati captures different essence of life in these pictures.

Debarati Mukherjee, 2002B1PS368



*I'm nothing special; just a
common man with
common thoughts, and
I've led a common life.*

*Where ever you
go, there you are.*





*The fragility of
existence.*



I'll be back!

*Made it Ma! Top
of the world!*



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Incapable of Love

Addy explores what it is to love someone beyond physical and social boundaries. As they say, key to happiness is something to do, someone to love and something to hope for!



Aditya Satija, 2001A8PS405

It was a cold night in August – not unusual in these parts. I had returned from the funeral of my grandfather with a box full of family memorabilia he had wanted me to have in his will. They told me that the box was just some old photographs and newspaper reports. My grandmother, an imperious lady with a famous temper and executor of the said testament had insisted that I take the box and worry about the contents later.

That night, under the influence of a cocktail of multivitamins and caffeine chewing gum, I was having trouble sleeping. I decided to open the box. I examined the lock, taking care not to damage the exquisite little carvings in an ancient alphabet. They told me that the box had been in the family for four generations before my grandfather and that it would be priceless if I ever hit the auction-house circuit. The seventh generation of fingers rolled those little wheels like a modern combination lock, trying to spell out an ancient family name in an ancient alphabet. It came from my grandfather's grandmother's family. That generation had had only daughters and the family name had been lost forever till it reappeared as my middle name.

I wondered about what I would say to my ancestors when I meet them on the other side if I did not have any children. I was inching closer to fifty and was no longer sure of my ability to carry a child to term. In a little facility on another continent, were four little containers that contained my only chances – eggs that I had preserved in my early twenties thanks to the wisdom of my mother.

<http://sandpaper.bitsaa.org>



"Sometimes, I wonder if I will ever have grandchildren."

"Ma! Please! For heaven's sake, don't even begin that one! Right now, all I need is to make the next promotion. There is no way you are getting any grandchildren. I am not sure if K and I want any children at all. We haven't even started talking about it."

"You might not want them now. But, you will later. It is instinct. It is nature. We are born to beget. You are not ready now. I know that. I don't want you to give me grandchildren when you are not ready to be a mother."

"Thanks for understanding. Then, why did you even bring this up?"

"Listen carefully. I am a fertility specialist. So, this is more professional advice than parental advice..."

The box snapped open. I was scared I had broken it. The cause of the fear probably was a combination of the wrath of six generations of forefathers and the loss of the millions I would have made auctioning the contraption off. Tout suite, I shook the contents out on to the carpet and slammed the lid shut to check if I had damaged my precious box. After all, I was good at damaging things I treasured.

After twelve years of marriage, K had decided to move to South Africa for work and I realized I just did not love him enough to bother. It had taken me twelve years to realize that I did not love the man I had been married to. I did not feel any sense of belonging towards him. When he was gone, I did not miss him at all. Whatever we had was over. When he came back and hugged me, I realized I wasn't even attracted to him any more. I was indifferent. We just did not have the magic anymore. It had taken me exactly three hours to ask him for a divorce. We had a loveless marriage and we both knew it. It had taken him three minutes to



agree to it. After all, there were no children, no shared assets to squabble over – we hadn't even a joint bank account. Years of singlehood later, I wished that I never desired love. If I had not asked for divorce, we would still be carrying on like we had been – appearing together at family functions and going on vacations together. We were always in a good mood around each other and we glittered in photographs. If you believed the photographs, we had the most perfect marriage ever. So much for picture-perfect.

"Pa! I wish I still had a marriage."

<http://sandpaper.bitsaa.org>

"Are you saying you wish that you still had K?"

"Yes! I wish I had K. Actually, no! Anyone... just anyone would do. I just wish I had someone."

"Then you did the right thing. Your marriage would have kept you both out of love. Today, you have hope and K has children with someone he loves."

"You have been watching too many movies Pa! Oh! It is his daughter's birthday next week. I must go buy a present..."

There were pictures of my extended family scattered all over my floor. There were little newspaper clippings of pictures of my great-grandfather shaking hands with the Governor-General, that of his father with a foot over the carcass of a freshly hunted tiger and that of his mother – an old frail woman peeking out of the curtains of a palanquin for a last look at her husband's remains. That lady had owned this box at some point.

It was a strange kaleidoscope of my ancestors. It traced their lives from the black-and-white to the colored photograph era. My grandfather had neatly written a little date on a spot of Scotch Tape and affixed it to the back of the colored photographs. I wonder if they ever diagnosed OCD in those days. He had taken extra care of the pictures of my grandmother. However, not all of the pictures were happy. There were pictures of the time when she had fallen off a horse and slipped a disc in her spine and then those of the time when her liver had given way from all that drinking. There were also pictures of them in the early years of their marriage. Awww! Look at them on that camel-ride on the dunes and them on the little boat in the lagoon. Strangely, my grandfather hadn't changed at all between his youth and middle age whereas my grandmother looked like a completely different woman in her photographs with Pa as a child. In those pictures, she looked like a younger version of the matriarch who had run the household while we were growing up.

And then, I turned a picture over. It was the oldest colored picture in the lot. It was from my grandparents' wedding. Wait a minute! Grandmother looks a lot like the woman

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with Pa in shorts. Then, who is the woman with Grandfather on the camel and in the



boat?

I arranged the pictures in chronological order. Grandfather was riding camels and boats with this strange woman when Pa was fifteen years old and grandmother was recovering from her cirrhosis. Oh My Gosh! Grandfather was philandering! He was cheating on grandmother. She is in mourning for a man who was cheating on her. Oh My Gosh! She has to know about this. She has to come out of mourning. This is so degrading to her as a woman.

I couldn't sleep all night. As soon as the day broke, I knew I had to call grandmother. I knew she had to know. I just know these things. I just know what I must do like I knew I had to end my marriage. But, there was no way I was prepared for her response.

"And do you think I did not know?"

"I don't understand!"

"I know if an insect crawls on the skin of any of you. There is nothing that I can't find out when it comes to the people I love. And I did love your grandfather. She wore awful perfume. I knew he had been with her right then."

"Do you know who she was?"

"No. I never bothered to find out."

"You never bothered? You make it your business to know everything. You used to know the names and telephone numbers of the boys who called me mobile telephone

when I was in high school. I don't understand. The last time I did not bother what my husband did, you said that I needed to end my marriage."

"Do you know why I did not have children after your father?"

"You became an alcoholic! You had to send Pa off to boarding school so that he could be kept away from you."

"Yes. When your father was away, I slipped my disc and almost drank myself to death. Do you know who lived with me in this house during those five awful years of sickness? Your grandfather did! With my back, I was incapable of going to the bathroom on my own. He carried me – each time! When my liver gave way, I used to vomit like the most vicious of demons was stirring my guts. He held my hair out of my face as I retched. He was ready with aniseed, cardamom and a smile for me. Do you remember your marriage vows? In sickness and in health? For better or for worse? I don't know any man who would have done it for me. By the time I recovered, he had already passed every test of fidelity there is as far as I was concerned. He was still with me after the monster I had been to him and our child. He still held me and cared for me when I was in that condition. If there was another woman, I knew that he was devoted to me far more than he would be ever devoted to her. There is no way I was ever going to believe he was cheating on me."

"But he was!"

"If he was, I realized I loved him so much that I did not care. He had already proven he loved me so much that I did not care. The bottom line here is that when I found out, I realized I did not care. And you will watch your mouth when you speak of a dead person. Your parents have worked a lot on your upbringing."

That ended it. Love makes us do strange things. I can't imagine grandmother pardoning anything. She always knew how to punish us when we did something wrong so that we would repent it as much as we possibly could have. And here I was, incapable of loving K. Incapable of loving anyone!

Quasimodo

A love story unfolds, between the flowing river and the pebbled path. Capricious as the river is, she soon finds her new love, the Sun. Does love consume all?



Tania Roy, 2002A3PS126

Pebbled path found it difficult for footsteps to tread on him. As he twirled into himself at the thoughtless touch of bold elements, he squirmed and panicked. He liked to sing when water jived on him. He liked to waltz in the rhythm of water's music. He loved to feel the curves of the elegant lady as she caressed him along her way. He liked to gift her with a diamond ring when the silver rays dazzled on him as water gurgled along.

He was alone, solitary. He defined peace for himself. Water made him feel happy. He was one with her. As nights passed with the two lovers entwined in the gossamer fragrance under the blue moonlight, pebbled path realized that he could no longer find peace in his solitude. He would be lonely when she was gone.

Then one day, while pebbled path was still dazed by the beauty of his new-found calm, the volatility of the happiness stared at him. He was bare. He was dry. He missed the soft kisses. He missed the laughter of his lady as she danced through him to he knew not where. He detested the footsteps even more now. Then he started reveling in the pain as the rubbers brushed against him, as the pebbles dashed into each other when those giant creatures stepped on his bruises, insensate.

Then one day he discovered the colors – a pristine green. That was water's gift to him in return of the diamond ring. He felt beautiful all over again. Clad in moss, he cherished the memories of the nights when water brought the stars to him.



But, the brook - she played with her lovers. She could enter the hearts of all those she passed by. She was a good lover, nevertheless. She could devote her present to the one she loved. Alas, her love was fleeting!

She had loved to meander through the huge boulders. She loved enveloping herself around the forbidding sinews of the black rocks, cooling them even more than they were. She shivered at the touch of light; she flirted with the stars, twinkled like the first touch of youth. Pebbled path was her lover, too. The most docile of them all, he was. She played with him, she laughed when she was around him. They were a good company.

Then came the sun. She glimmered in beauty as the sun played with her waves. She started waiting under sleepless nights, for him to come back to her. The stars cried as she twinkled without any emotion.

Pebbled path grew cold under her. Memories were but burdens to her. She just waited for the sun to come, to adorn her with the diamond ring.

The sun paid her visit regularly. He scorched her as the day proceeded. He wanted her only for himself. She was enchanted. She gave her away to him. She liked being taken away, losing her identity. For, what was identity when love was all that mattered? Much to her dismay, she realized her emotions. She could not run away. Her soul was absorbed by her lover, for the first time. Then one day, she lost herself.

<http://www.microsoft.com/nz/windows/bliss/default.aspx>

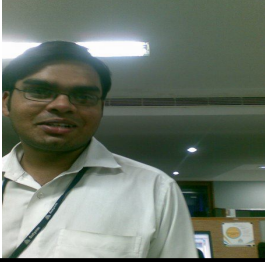


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ALAPANA

Hope fades away...peace eludes us, the moment we start reminiscing about our youth. It's inevitable."



Hemant Kumar C R, 2002A4PS269

A chorus in my backyard forced me to take notice,
Something so soothing...so reminiscent of days of my youth,
I walk now with a stick in my hand,
which never forgets to remind me of the days to come...

The evening sun was going down the sea.
A scarlet image spreads across the waters
Never had it ceased to amuse me as a child,
That Sea could engulf something so powerful...

The little waves touching my feet,
taking the sand away from underneath,
Something like time does to you...
Takes away moments but promising to return with better ones...

Once, I prayed so hard to let me fall back in time,
To a life that I had once lived,
Where all I would care was to forget about time,
That was the time when the next day was more promising...

I was amidst people, who were brimming with life,

Bustling but serene at the same time,
When severing was not in mind,
yet knowing that one day we have to face it.

And then we did face it,
promising each other to never forget,
Etching the memories to our souls,
we moved on to the other side of life...

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That's when probably I began thinking about time,
and from then on it started going faster than I thought of,
Years later, I looked back,
Found nothing apart from the lingering images of my youth...

I smiled that the waves washing my feet,
once kissed the feet of others I knew,
It made me jealous for an instant,
that when I couldn't, they met the ones I love.

The dusk reminded me of the night to come,
Reminding me that the time has come,
To walk back into oblivion of my life,
And seek a rhythm to this dwindling life...

I smile at the days bygone and hope the time keeps its promise,
But life's just that...made up of broken promises and hopes of undoing that,
Pure melody I would say,
this way of life,
Chaotic yet reminding you that serenity exists in some part of the world,
A peace which everybody seeks, but only some find...



The Frozen Verdure

Some people cross our paths for a fleeting moment but leave a mark forever. Ranjit writes in memory of one such person, Shashank, a BITSian who is no longer amongst us...



Ranjit Kumar M, 2002B2A4632

8:00 a.m. in the early hours,
As we knocked on door 265 of Gandhi
Bhavan,
Tears shed out of our eyes for we no sooner
realized,
Death, the cruel monster had taken him
away,
Shadowing a part of happiness from our
lives,
Leaving us with memories all alone till day...

Days and weeks elapsed to get into tune
with,
Death, for we had to then strongly believe,
A vigorous turbulence where the loving
warmth replaced by stale
coldness,
A tidal surge where the
sweetness of grace
replaced by acute
bitterness,
And the dark nightmare
replacing the gentle
refulgent light.

Great were those rare
days,
Where our affiliation
ameliorated as deep as
the ocean,
Cuddled in a salubrious
gaiety
And coalescing in an ecstasy of felicitous
sanity.

There is always an enlivening Spirit
And a placid credence of life wherever he
was,
For he possessed that splendid charm.
Deeming of the infinite frolic we had at the
playtime,
And during our night-study, mesmerize us
till day.

We feel proud to gladly call him a great
friend,
Who was very dear, true, kind, lending a
helping hand
In support, doing that extra something,

Which wins the
hearts of others
And whose
absence yet
intensifies with
warmth
Felt in the heart
even while we are
miles apart.

Though parted
from us, he shall
Always remain in
these hearts
forever
As rich as the

dawn, for he has sown
A share of mirth and memories within!



Seduction

An obese woman, trapped in a lack-luster marriage finds motivation to lose weight from her Seduction class. Insidiously changes creep into her life. "Does she lose only her fat?" wonders the author.



Meenakshi Chatterjee, 2000B5A3721

The first time I thought of losing weight, I was in the 'Seduction' class.

"A few pounds off those thighs and waist," Michael said pointing to my navel, "and you'll be a gorgeous swan!"

I nodded slowly.

I was a slow person. It wasn't just the fat that weighed me down, my mind worked slowly too. Behind my back, my colleagues whispered, "Babel". It was an acronym for 'Baby Elephant'. I ignored it when I could. Other times I had earplugs.

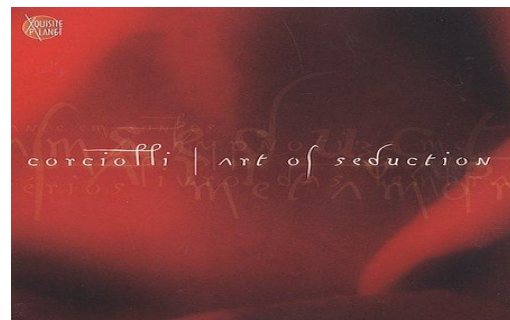
Work was dissatisfying, pay wasn't. Sitting at my desk most of the day, I let the fat accumulate. They gathered in force and in number in the nooks and crannies of my body and made themselves at home. From



pleasantly plump to overweight to obese – the transition took less than a year.

<http://sandpaper.bitsaa.org>

I wasn't bothered. I was married.



My husband never complained about my weight.

'Seduction' happened just after I met Michael. He brought back all the school girlishness in me. I had an instant crush on him.

"Seduction is an art and whoever masters it never lacks admirers." I listened to Michael spellbound. His classes went on for an hour, three times a week.

Sitting among younger, prettier and slimmer women, made me feel unique. I stood out. People noticed me. That's how Michael noticed me.

"The art of seduction starts at the eyes. But what good are the eyes if the other person doesn't notice you?" I was at an advantage here.

Initially when I experimented, men were shocked rather than surprised. Out of curiosity, they responded. It worked. I found ways to better my art.

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I started having fun.

In the evenings, after my class, my husband always had dinner with me. He went back to work sometimes, actually quite often now, but always returned for our two hour dinner. During our first married month, he christened it "Two-Some-time". The name stuck and so did the time. Sometimes when I went out with friends, ate dinner at work, or just couldn't make it, he ate alone at home.

Our dinner conversations bore the same pattern.

"Is that what we are having for dinner today? Looks good to me", boomed Richard happily. Even if we were having instant noodles, Richard made the same mundane comment. I never responded. After a while of silence, he asked his next usual question.

"So how was your day honey? Amazing I hope?"

I grunted. I didn't feel the necessity to discuss my days with him.

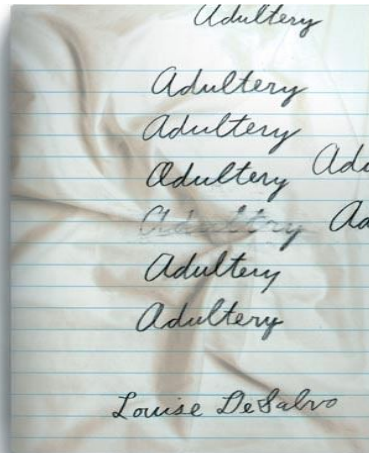
He always gave me a minute or two, expecting something more than just a grunt. It amazed me how patient a man could be. Two years of asking the same question and still he waited for my reply.

"My days don't change any more. I have been passed on by younger blood for promotion. No matter how much I try, my juniors keep outshining me. The way things are, soon I will be holding the same position for the longest time in history," Richard ended with a chuckle.

I couldn't understand how someone could make fun of his failures.

I always ended my meals before him and whenever I finished I got up and left. Sometimes I said, "I am done", and sometimes I just left with just the sound of my chair pushing back. Every time, Richard looked up at me, into my face and smiled. Then he said the three words that always left me disgusted.

"I love you."



I had been married for two years now. We met at a common friend's place. His loneliness, long bachelorhood and his parent's nagging – all contributed to our hasty courtship and rapid marriage. I was slow and by the time I realized where I was headed, I found myself married to a man I had known only for a few weeks.

Richard was rich and ugly. Childhood mumps, measles, playground injuries had all left their indelible unappealing marks on his face and body. Combined

with his fierce green eyes, it was easy to imagine him as a gun toting mafia man. For a man that looked like this, he was surprisingly gentle. He never raised his voice.

"....and so you see the benefits of

"Seduction is an art and whoever masters it never lacks admirers." I listened to Michael spellbound. His classes went on for an hour, three times a week.

weight loss are manifold and the best way in that direction is sustained starvation," Michael's drone broke my reverie. Everyone in class knew why he brought up the weight loss at least once. It was for me.

I decided to slim down. I had found a strong motivation to do it.

A year ago my world had fallen apart. One Monday night, when Richard returned late, I smelt her on his shirt for the first time. It was a powerful feminine smell. The next week he went on a business trip – or so he said, in Hawaii. Whenever I called him at the hotel, a husky female replied. She said she was the attendant. Obviously, I knew what needs she attended to!

When he returned, he came back with a gift for me! That was so unlike him. Richard wasn't a romantic, he didn't even come close. During our courtship, any planning was done by me. He just paid the bills. A candle light dinner was 'severe straining on his myopic eyes', a cruise was 'never-ending sea sicknesses, a gift was 'simply a waste compared to food' and love was 'overrated', 'compatibility was better'...his list was endless.

A diamond pendant hanging from a white gold chain- it was a beautiful necklace. None of the jewelry I owned measured up to it. At another time, a more naïve myself would have loved it.

"Don't you like it?" Richard asked surprised.

"It must have cost a fortune, why did you buy it?"

"I wanted to surprise you. I had forgotten your last birthday so I thought..." his voice trailed off into a hurt silence.

I looked up at him. The same faint feminine smell wafted to my nostrils. His green eyes, pock-marked face, long-drawn chin looked comically sad.

My dieting was killing me. When I starved, the initial pangs of hunger and craving gave rise to a pain previously unknown. Only three meals a day with half sized portions, and a measly fruit was all I allowed myself. It was tough. After two weeks of torture, I got used to it. That's when I started walking, taking the stairs, moving about my cubicle every five minutes. When hunger hit me, I drank water. When I panted, I stopped and drank water. When others gobbled food, I drank water. All day the only thing abundantly available to me was water. If I didn't have a strong motive, I would have surely given up.

Seduction classes went on as usual. Michael's soothing drone, kept me listening. The dream of being an extremely attractive and universally coveted woman constantly fuelled my otherwise excruciating regime.

After a month, Michael noticed.

"You look lighter on the top. Your face looks thinner. Have you been working out?"

I wasn't exactly working out; I was starving myself, one day at a time. So, technically my answer was a no. He was surprised, but didn't follow up.

Another month slowly passed. Richard noticed.

Looking up from his cereal bowl, he remarked, "You look weak and perhaps a little thin. Is everything alright?"

I nodded nonchalantly. His gaze settled on my face, moved slowly down to my shoulders, lingered at my neck and then fell back to his bowl. I heard him sigh as he took another mouthful.

Perhaps he wondered why I never wore the necklace.

Things had only got worse. Just like the fat that I had let accumulate, I let my marriage fester in neglect. Things that I could fix went unnoticed. Things I could have cared for went to ruin. Things I should have tended to went rotting. In the last two months, as my body became slimmer, and stronger, my marriage became paler and weaker. Through all this, Richard never complained.

Six months, six long months later, I found myself looking completely different. The roundedness was replaced by straightness. The wobbly, soft fat in my

**"Don't you like it?"
Richard asked surprised.**

**"It must have cost a
fortune, why did you buy it?"**

**"I wanted to surprise
you. I had forgotten your
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his voice trailed off into a
hurt silence.**

**I looked up at him. The same
faint feminine smell wafted
to my nostrils. His green
eyes, pock-marked face,
long-drawn chin looked
comically sad.**

arms, belly and thighs gave way to harder surfaces. My face, the round plump happy one looked gaunt, stretched and thin. When my fat left me, it also took away the gentleness from my features. I looked older than my age. Now I had a body that could fit into smaller sizes, smaller seats and smaller spaces, but I lost the cheery softness that came with it.

'Seduction' class was nearing an end. Michael's lectures had become repetitive. My classmates couldn't stop commenting on my transformation. My diet,

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my regime my routine got discussed, dissected and debated upon. I attained a new position – that of awe and inspiration.

Richard had been mostly absent during the last six months. Business trips had tripled, his personal friend's circle had multiplied, his extra-curricular activities increased manifold. He submerged himself in never-ending engagements. I saw very little of him and heard even lesser.

Sometimes at laundry, I smelt his unwashed shirts, forcing my nostrils to get a whiff of adultery. I scrutinized his clothing to find a red mark of lipstick. I rummaged through his papers to see a loving note. I stole his mobile to see any repetitive mysterious calls. Every single time, he got the better of me. I was never successful in my sorry quest. That neither deterred nor shook my conviction.

One sunny morning I realized that time had come. Looking my prettiest, I went to work. My 'Babel-calling-colleagues' unanimously remarked on my great looks, even my manager stopped by asking about my health. I was getting all the attention that was long due. I felt supremely confident.

For the six months of 'Seduction' class, which was only theory, I had held my own practice. At coffee houses, at clubs, at bars, at pubs, standing in queue close to the next man, I found my targets- painstakingly. Experiments had gone awry, embarrassments were regularity, disgust was inevitable and yet I held on. My weight made me the laughing stock. Now I looked different. I knew I would be successful – now would be different.

It took a little over a month. Every time I faltered, the infidel smell on Richard's shirt egged me on.

Late one night, I sat up waiting for Richard to come home. I had news.

When he closed the door behind him, and turned around, I said, "I need to talk to you."

"Oh! I didn't see you there." He smiled.

I waited for him to get closer.

"I am pregnant."

A wave of disbelief passed into shock on his face.

"But, I don't think..." he stopped abruptly.

Looking intently into my eyes, he paused to think.

I knew what was passing through his mind. It was not his child. To be honest, I didn't know whose it was. When I was obese, doctors had told us, how difficult it would be for me to conceive. It had broken our hearts. Now, when I had finally achieved the miracle, I was an adulteress.

After what seemed to be an eon, Richard spoke.

"Congratulations." He walked away.

<http://www.christinas-home-remedies.com/image-files/depression-drawing.jpg>



Kafka Café

A nondescript café, Kafka Café is the regular haunt of Mr. M. As M settles down to an evening of solitude in the café, the eerie comforts of confiding strangers surround him. Do dreams reflect the reality or distort it?



Soumya Sen, 2001A8PS263

The Kafka Cafe was located right across the University lawns, but hidden from view by a labyrinth of overgrown shrubs. It was a small shop, serving only a limited variety of sandwich, pastry and coffee. Perhaps it was because of this conspicuous lack of choices that most people, preferred to visit the posh cafes on the other side of the campus. But the lack of customers did not seem to bother Joe, the aged proprietor of this cafe. In fact he appeared to be genuinely contented in his frequent declarations:

"You know, with these darn arthritic legs I can't be running around and attending too many customers, I really prefer it this way".

Nevertheless, the cafe's strange air of solitude, which seemed to possess the great power to paralyze even time itself, had earned it a few regular patrons. Among these regular visitors was M., who had found his way to the cafe some fifteen years back after a tiring day at work. That day while sitting next to the glass window, sipping a cup of hot coffee and recollecting memories of bygone times, M. had realized that he was to fall in love with this cozy shelter he had discovered for himself. He had made a few good friends at the cafe, one of them being the proprietor, old Joe, who entertained M. with his rather curious habit

of diligently relaying the news he caught on his portable radio.

M. was sitting at his usual corner in the cafe, leafing through a new architecture catalog, when the little bell on the door jingled and a girl walked in. M. had not seen

her at the cafe before, but from her looks she appeared to be a student at the University. Having got herself a cup of coffee, she sat down at the table adjoining M's. M. sensed that the girl was observing the sketches he was making at the margins of his catalog. A little while later she addressed him,

"Excuse me Sir; I hope I am not intruding. Are you an architect?"

"Yes, I am. I was a professor at the University but I am retired now", replied M., taking a better look at her.

"Hi, I am Julia," she said.

"Well, I have a question with which you might be able to help me. Do you know if there are any Gothic buildings in this area?" she asked.

"Um..I don't think so. No, none in this town as far as I know," said M. thoughtfully and then inquired hesitantly,

"But may I know why you ask?"

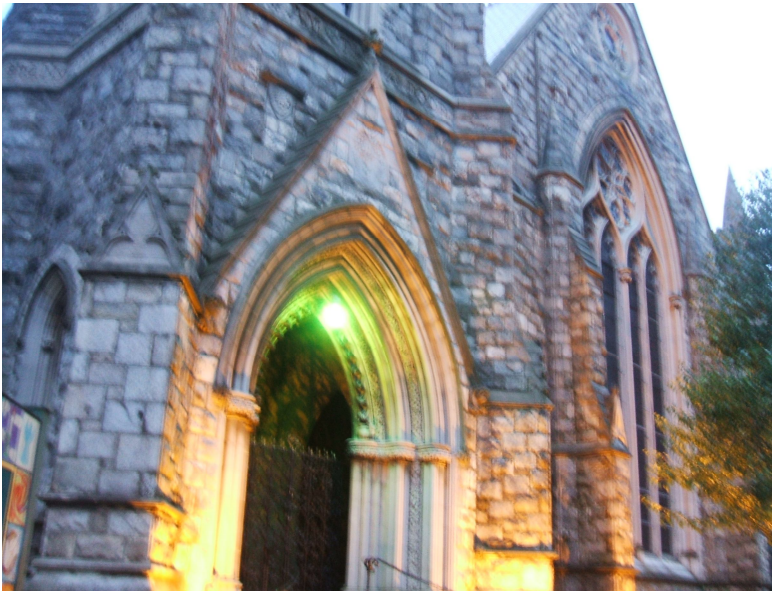


She ran her slender fingers on the outer rim of her cup and with a shy smile,

"It's a bit silly actually. I had a dream last night in which I saw a Gothic building... But strangely it seemed as if it was somewhere in this neighborhood. Although I don't recollect having seen any such building around here, I kept wondering if such a building might actually exist. Is it possible that even if I had not taken a conscious note of it, the unconscious might have registered it only to later reveal it in my dream?"

After a brief pause, she added with a coy smile,

"Maybe I am just reading too much into a dream". Only then M. noticed that the book she was clutching in her hands when she walked in was Jung's *Man and his symbols*. *'She is probably a psychology*



major", thought M.

"I must say that your dream sounds very interesting me. Can you describe this building for me? Or maybe you can tell me the dream in its entirety if that's fine with you", he told her.

"Sure, it was a rather innocuous dream", she said, moving over to M.'s table. *"In the dream, I was walking back home in the evening when an old lady came up to me for directions. Having shown her the way, I started walking again but suddenly realized that I had lost my own sense of direction. While roaming around dazed, I lost my way in the shrubs. When I finally*

<http://sandpaper.bitsaa.org>

emerged from it, I found myself in a colorful field of flowerbeds that stretched all the way to the horizon. A narrow track led through it to a large gate of elaborate ironwork. Beyond the gate was this ancient structure which was quite grand in its design. The gate was open and I went in to take a closer look. It had a deep arched doorway, supported over a series of closely arranged decorative columns. Above it were three Gothic windows that rose vertically to great heights; the middle one reaching higher than the others. Further above was a large circular window with extensive tracery, placed centrally between the sloping sides of the roof. On either sides of the facade rose buttresses which crowned with decorative pinnacles.

I could only make out the silhouette of this building against the fading twilight sky. I went up to the main door and knocked. Chiseled on the stones above the doorway was the message- "I am the Door; if anyone enters through Me, he shall be saved, and shall go in and out, and find pasture (John 10:9)." I felt an immense joy of conquest rising in me; it seemed as if I had finally found the way I had been searching for all along. It felt as if the secret to all happiness lay beyond that door....But at this point I must have trailed off into a deeper sleep for I don't remember what happened thereafter."

Her words almost had a mesmerizing effect on M. and he too had drifted away to the land in her dream. Suddenly a voice startled him.

"I must apologize for intruding into your conversation but I just could not help it. May I join you?" It was Pat, a young artist and regular visitor at the cafe whom M. knew well. He was sitting at the table behind M. It was quite apparent that he had overheard their conversation and was not making any effort to disguise his curiosity.

"I am sorry if I am bothering you but I had a similar dream yesterday which I feel compelled to share with you." Both M. and Julia had overcome their initial surprise and were willing to hear Pat's story. *"Go ahead, we are all ears,"* said M. with a sudden inquisitiveness.

"Well, I had this dream where I found myself in an old building with tall arched windows like the ones you just described. However I don't intend to imply that we both saw the same building, because all the events in my dream took place indoors. I found myself in the nave of this building which could have been a cathedral, although there weren't any divine motifs to be seen anywhere. The nave was very long, lined with decorated pillars that supported the high vaults above. At the far end were a set of tall windows with stained glass through which light came in. In the place where the altar should have been, there were a few desks and chairs arranged to form a small classroom, and someone was standing there with open arms as if waiting to embrace me. I started to walk towards that illusive figure but the nave's end seemed to recede further and further away. I kept walking till I began to feel fatigue -my legs felt heavy, the air grew thicker and the light dimmed. I knelt down for a while to catch my breath, but when I got up, the figure had vanished. Without that mysterious figure waiting for me at the end of the nave, I suddenly realized that I had been left without a purpose. I felt cheated and humiliated as I wandered around in search for an exit. Finally I noticed an open door. When I, approached, the large bronze doors appeared to be Rodin's 'Gates of Hell'. The little figurines pleaded with me not to go past them, but I did anyway. I found myself in an octagonal chamber which was covered from floor to ceiling with huge mirrors that reflected back only grotesque caricatures of me. As I looked closely I saw my deformed images imploring me to turn away. But there was no where to escape; the door had vanished and in its place stood another large mirror. I had to face my images everywhere I looked. I was trapped amidst my own ugly manifestations which were by then demanding that I blind myself. The nightmare was too much to bear, I woke up at that point," said Pat. He seemed a bit flustered as if he had to relive those moments during the narration.

M. had fallen silent. When he came out of his deep contemplation he said, "I guess I ought to tell you something as well. I wasn't going to... because it is very personal. But since you both have shared your story, I think it is only fair if I tell you a dream that I myself had. I can't help wondering whether our dreams have a common thread, so to say. I had this dream where I was searching for a very rare book at the library. The librarian

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was a friend of mine, and so he had made special arrangements for me to visit the restricted section. When he led me there it turned out to be an octagonal chamber, like the one Pat mentioned; however with the difference that instead of mirrors it was covered wall-to-wall with book shelves. The librarian informed me that there was a mandatory policy to keep that room locked all round the clock, and so it meant that I was to be locked in for the duration of my stay. Soon I found myself left alone amidst the towering racks of books. Each bookcase had fifty racks that reached three floors high and was equipped with a catalog of all books it carried. One had to climb up a long ladder to reach the upper shelves. I searched through the first six catalogs and on the seventh I rested. Unfortunately it showed that the book I was looking for was on the topmost rack of the seventh case although I found the arrangement to be inexplicably inconvenient; I had no option but to climb the ladder. The steps of the ancient ladder creaked beneath my weight. I had to struggle to keep my balance. In the end I managed to reach the top, but to my surprise the book wasn't there, in its place I found a diary titled 'The diary of Anne F.' that is all that I remember of the dream."



M. continued, "I know what you guys are thinking. No, it was not the diary of Anne Frank that I found up there. This one belonged to my late wife, Anne F. M., who had chosen to write her name in that way out of her own little fancy. Ever since her death I have wondered if she too felt threatened and tortured in her life, and in that case, was I her torturer? Was this little gesture not a fancy but a way to perhaps let me know how she felt? In my efforts to become successful in my professional life, I had probably neglected her too much. After her death I constantly felt the pangs of guilt and I couldn't carry on normally. Soon I opted for retirement, and now here I am in this cafe where I come everyday to find some solace in this quiet corner."

Ting-Tong. The bell jingled and Mr. & Mrs. R. wobbled in, arm-in-arm. They too visited

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the cafe regularly after their evening walk in the lawns. They were an old, happy couple. But that day they seemed to be having some disagreements. Mr. R. gruffly said, *"I don't want to listen to all that anymore. Just forget it."*

"You don't understand, I felt so scared and lonely...", sniffed Mrs. R. She clearly wasn't in a mood to drop it. She continued, *"...just imagine being surrounded by those statues, lonely and defenseless. I haven't had such a nightmare in years."*

The word 'nightmare' made M., Pat and Julia turn around instinctively to listen to the old couple. M. knew Mrs. R. quite well, she loved to talk, while Mr. R. was just the opposite; he preferred to brood most of the time, only with the exception of political topics in which he voluntarily joined in to criticize the Government's policies towards veterans and pensioners. Mr. R. was already enjoying his coffee but Mrs. R. clearly wanted to share something more. So M. asked her how she was. That was enough to get her started. *"Oh, thank you for asking. We are doing well, but I have been very upset since yesterday night. I could not catch any sleep last night because of a ghastly nightmare."*

"I am so sorry to hear that Mrs. R. May I ask what was it about?" inquired M. with almost a practiced politeness.

"You won't believe what I saw. I was in this museum or some place like that with high ceilings, gigantic pillars and large marble rooms with thousands of masks hanging on the walls. I had failed to keep in step with R... and had lost my way in that maze of pillars. R... was no where to be seen. I called out his name time and again, and kept stumbling around till I came to a room full of statues of hideous monsters. In the middle of the room stood three towering totem-poles with hawks perched on top of them. Just then the monsters started to come to life one by one; they woke each other up with their howls. The hawks started to circle overhead. I was scared and I cried out for help, but no one appeared. I stood there all alone to face the end. It was horrible!"

"It was just a nightmare; I am here with you now, so drop it. You sound crazy going on and on about it," grumbled Mr. R. as he finished his coffee.

"A thunderstorm is on its way here," announced the quirky old Joe from his counter. He must have picked it up from the evening news on his radio.

"We better get going," said Mr. R. as he got up, supporting himself on his walking stick. Soon the old couple was gone.

Lightning flashed behind the branches of trees and clouds rumbled threateningly. Everyone inside the café had fallen silent. After a while Julia asked M., *"Don't you think all our dreams are linked together?"*

"Maybe or maybe not. I don't think they are necessarily connected. They are fragments that reflect our individual desires, worries and fears, but when taken together they also seem to tell a more universal story. It tells us about the way we sometimes search for higher goals and spend most of our life in trying to realize them. But over the years of struggle we lose sight of the other finer things in life which probably should have mattered more. In the end we are often left all alone, scared, repentant but still clinging on to life with ~~on~~ a hope that salvation is our destiny. But perhaps our souls are born orphans or abandoned at birth, and no one will ever wait to receive us at the end of our journey. Our isolation is an inescapable reality, but I guess it could be made more bearable if we could love and truly value the things that we already have," opined M. *"Well, the rain seems to have eased a bit, so I must take your leave now. It was nice meeting you. Goodnight!"* With these words M. got up.

Outside the cafe, a light drizzle and a chill wind welcomed M. He straightened his coat's collar and started walking towards his home. Before taking a turn at the corner he decided to look back. He saw Pat and Julia coming out of the cafe; they were closely huddled under Pat's umbrella. They both seemed to be enjoying the light rain in the company of each other. M. smiled to himself contentedly and continued on his way. It had indeed been an unusual evening and M. was feeling lighter than ever. He wondered if Anne would return to unite with him in his dream that night. Something deep inside him was telling that she surely would.

Seasonal Memories

"On the day of a classical dance event, the protagonist, a man who has rejected the bourgeoisie ways of life, learns about the arrival of an old friend in town. What follows is a story of love, friendship, nostalgia and procrastination."



Aparajith Ramnath, 2001A3PS050

'Here for the lec-dem?'

Natarajan walked up to my table, adjusting his blue cap. I was pouring my coffee from the tumbler into the bowl and back -- pulling the two utensils slowly apart, stretching the falling fluid like a band of elastic, then bringing them together again -- until the coffee was frothy and the granules of sugar in the bowl disappeared. I can never do more than one thing at a time, and now I panicked slightly, caught between acknowledging Natarajan and concentrating on my coffee-mixing. Prudence won, and I placed tumbler and bowl carefully on the vinyl-covered table top before looking up.

'Hello, hello! How are you, Thoppi? Yes, I'm here for the lec-dem. Really looking forward to it. She's supposed to be really good, isn't she?'

'Absolutely fabulous, that's what I heard from Chandran.'

'Which Chandran do you mean? Our Jayaram's son? Since when did *he* take an interest in classical dance?'

'The very fellow. Oh, he's an absolute buff now. He's moved back to town, stays in Ashok Nagar. He saw K at a performance at the Fine Arts Society there the other day and was absolutely raving about it.'

'Well, well, we do have a lot of surprises. Good for him, though. Anyway I'm looking forward to something from the old guard, you know. Just yesterday I was watching



that young MBA-cum-singer -- the seven o'clock concert. He was very correct, but I felt there was definitely *something* missing. Spirit, experience, I don't know what it is.'

'Come on, that's not true. I think he's pretty good. I heard him myself last year.'

'Well, you should have been here yesterday, I tell you. Will you have something? Pongal for you too?'

'No, thank you. You see, I'm very measured in my intake nowadays. Oh, by the way, I forgot to tell you -- remember Shakku? I hear she's in town this year. Might see her around here.' He looked at his watch.

'Anyway, should rush. It's eight twenty and the family's waiting.'

I picked up my Season brochure from the table, settled the bill, and left the Academy's make-shift canteen. The lecture-demonstration was scheduled for eight thirty, when a well-known Bharatanatyam dancer ('danseuse', the papers liked to say) was to explain her art to the discerning and the enthusiastic. But my thoughts were elsewhere as I waded through the crowd. Shakku in town. Now, after thirty years?

~

I looked at the people bustling in and out of the grounds, at the cars parked in neat rows, at other cars honking at the gates and being waved away brusquely by overburdened attendants, and thought of the same environs in quieter days. Around me were the same sights I used to see then, only more raucous, more hurried. There were women in their silks, the inevitable jasmine in their hair, men in crisp *veshtis* and *jibbas*, youngsters in trousers and what we used to call 'bush shirts', children with neatly combed hair and powdered faces, and elderly folk following doggedly a much-loved routine. Back in the 'sixties, though, I saw these sights not only through my eyes but through those of my several friends. We were then in our twenties. We would go to concerts together, repair to Ajantha's for coffee to dissect the performances and while away the time before the next event. Thoppi Natarajan (so called because he had already, back then, formed the habit of wearing a cap everywhere, including indoors) was one of them. So was Jayaram, then studying accounting, who went on to become, among other things, the father of the Chandran we were discussing today. And so was Shakuntala, whom we called Shakku, and who was the most free-spirited of us all.

All that was until the claims of marriage and family tore us apart, while pretending only to gently rearrange our lives.

I reached the auditorium, and brandished my season ticket to the man at the door. I've been in there hundreds of times over the years, but it never fails to excite in me a glow of expectancy and, contrastingly, of comfort. The wooden paneling, the just-about-comfortable push-back seats, the fans hanging from the ceilings by long stems, the subtle lighting, the oil portraits of past patrons on the walls, the frilled silk curtains with little tassels trailing on the stage – all these are familiar sights to a thousand regulars, and perfectly capable of enchanting the skeptical first-timer too. There's calm here, though just fifty meters away cars and trucks and motorcycles and buses honk and push and spew fumes, people are furiously engaged in business and industry, and hoardings proclaim hoarsely that WWF wrestling action is to be had on television at 4.30 pm on weekdays or that so-and-so film star always uses such-and-such motorcycle as it is 'the signature of a winner.' Today the places were getting steadily filled, and some attendees were



already engaged in the sport of identifying the senior musicians arriving by the elite side entrance to occupy positions of honor. (Shakku used to say that it was a mark of our hierarchical culture that we referred to seasoned musicians as 'seniors' and not as veterans. I agreed

wholeheartedly then, though over the years I have begun to say 'senior' like everybody else.)

At length, the voice of the compere came over the loudspeaker, wishing the ladies and gentlemen a good morning and *namaskaram*, and launching into a brief synopsis of the career and accomplishments of today's artiste. (Artiste - that used to be on Shakku's List of Pretentious Words too.) She had been with dance troupes, the Voice said, to the United States, to Australia, to the Czech Republic, Austria, Hungary and Romania, and carried with her the art she represented. She had behind her twenty years of performances, and was the recipient of a number of honors from governments and institutions of art.

The curtains went up amidst applause, and I saw very soon that Jayaram's son was right. K had poise. It was as if dance was 'written on her forehead,' in local parlance: it was her destiny. Her movements were graceful, her face expressive. Her coterie of accompanying musicians was blemish less too. The singer had a magnetic voice, the percussionist's fingers fairly flew, and the flautist's control of breath was commendable. When, between acts, she took up the microphone to explain the *mudras* and other nuances to the audience, K was articulate yet concise.

Hands went up around the hall as questions were invited. K pointed with a dancer's flourish at a middle-aged man in the fourth row. Several rows behind her, I could see Natarajan in his blue cap, sitting with his wife and brother-in-law.

'Madam, which do you think more important – technique or feeling?'

'A good question,' she said, bowing. 'The answer to that is, well, they are inseparable. To be a dancer you must have technique and emotion in equal measure. In all my experience, I have never yet met a dancer with a wooden face, a wooden soul. Nor, may I say, do I know of successful dancers who have neglected their basic training. The two requisites are as twins.'

A prosaic beginning to the interactive session; polite applause from the audience. K scanned the audience once again. This time her eye hovered around the first row, and finally settled on a man in a kurta and a familiar white beard. I recognized him: the writer of reviews, often caustic, in the Friday newspaper supplement.

'Sir.'

'Yes, you were speaking about --' He drifted off into a technicality, something abstract, something I could not quite grasp. Several people seated around him nodded in approval, as if to say it was an intelligent question.

'I am so glad somebody phrased the question so skillfully,' said K, pleased that she could now put across a subtle point that she might have found difficult to express except as an answer to a query. Having

finished a competent explanation, she smiled and went back to the centre of the stage, anklets tinkling rhythmically, to begin her next piece.

When it was over, I strode out to the Academy's adjoining art gallery to have a look at the photo exhibition that I knew was on there. Small knots of people were standing around in the sunny yard outside: children, parents, uncles and aunts, silver-haired grandparents. I'm not one to grudge anyone their happiness, but today my reminiscing had made me sensitive once again to the fact that I live a life that is very different from the majority of people around me. I love my independence, and am thankful for the several excellent friends I have. But to be honest, this isn't the way I thought it would turn out. Susheela, the daughter of good friends of mine, likes to tease me saying that my faithful appearances at the Academy every Season is a form of vanity. 'You go to be seen as much as to see and listen,' she says. She is right, partially -- I go to be among people.

When we used to hang around the Academy all those years ago, I cultivated a sort of disdain for what I thought of as the bourgeois life cycle: college, a job, marriage... What I didn't realize then was that I was built to avoid risk of any sort, and that both I and the friends with whom I discussed these ideas were, at heart, as bourgeois as they come. Shakku was different. She managed to combine spontaneity with pragmatism. She cut a striking figure at concerts in those days, one of the few young women to shun both silk and jewellery on principle. She had opinions on everything, from Ramanathan Krishnan's performance in the Davis Cup to who should be Nehru's successor as Prime Minister. But unlike the rest of us, she made no bones about her belief that a solid family life was essential: everything else would flow from that. We debated these things several times. I always lost. I understood later that she was that rare thing, the skeptic who stops short of being a cynic, the person who is so secure about herself that she can pick or discard what she likes or what she doesn't like about the world she lives in.

The exhibition mirrored the past-ward direction of my thoughts. The walls were

covered with old sepia-toned -- isn't that what the magazines always call them? -- photographs. I walked briskly along a row of photos: here a singer, voice in mid-flight, there a dancer pirouetting, now a violinist, his delicate fingers holding the bow, horsehair about to run over violin strings. Then I froze. I had come suddenly to a scene I recognized, and remembered vividly. It was an unusual angle: the photographer had positioned himself around thirty rows back along the right flank of the auditorium, so that the frame took in both the stage and the front rows. On stage was the legendary MLV, eyes closed in concentration, left arm plucking the strings of the tambura. At the bottom right corner of the photograph was -- I peered closely to make sure -- Jayaram.

We had not been able to get seats together that day. Natarajan sat with Jayaram; Shakku, I, and some of the others were on the balcony. MLV surpassed herself. I can still hear, as clearly as if it was yesterday, the Purandaradasa song she sang in Sindhubhairavi that evening. But I remembered the concert for another reason: it had turned out to be the last one we ever attended together. Afterwards we had walked, humming under our breaths and enjoying the evening sea-breeze, to Ajantha's for tiffin. It was there that Shakku told us that her parents had found her a groom. He was in the IAS, she said, and was now posted in Delhi. She had met him once, and he had seemed a thoroughly decent, liberal sort of fellow. He had assured her he would support her efforts towards becoming a teacher. He had explained, in his resonant baritone, that he saw his job as something more: a calling. The more obscure the place he was posted to, the more he felt he could make a difference. As she narrated all this to us, Shakku's ears flushed red, just as they always did when she was embarrassed or when someone praised her effusively.

There had been much cheering and clapping. Jayaram ordered an extra round of coffee for everyone, and Natarajan took his

cap off as he contemplated the news. Six months later, Shakku was married and went off to Delhi to start a new life. I wrote her the odd postcard, but then she began to move around every two years, and eventually I lost track of her life. Meanwhile Jayaram was accepted by Indian Bank, with whom he began his career in Calcutta. One by one we were scattered like playing cards in the wind, until the only person I saw somewhat regularly was Natarajan.

I turned. Ignoring the rest of the photos, I went out into the sun. Thoppi said this morning that Shakku was in town. I must ask him if he knows how to contact her -- I haven't seen her since she first left for Delhi. I must ask Thoppi. But do I really want to know? I stood there, undecided. Then I unlocked my cycle, rode out through the side gate, and turned in the direction of Ajantha's. Let me sit down to a hot cup of coffee and think it over.



Always a BITSIAN

Author's Note: This poem has been inspired by a discussion on bits2bschool where the members vehemently argued that the phrase "ex-BITSian" didn't apply to them. A "BITSian" is always a "BITSian" and never an "ex".



Rahul Misra, 2000A2A7722

Have you ever wondered if those narrow
lanes still exist?
The yellow walls and green doors that you
banged with your fist
To wake that sleeping wingie before a Mech
Sol test
Or tell him that you had a message at the
warden's behest.

Do you remember that canteen surrounded
by barbed wire?
Where Fried Maggi was cooked over an
almost open fire
As everyone crowded the tables with cups of
tea and biscuits
Some wore shorts in the winter cold, utter
and complete misfits.

Every October do your thoughts go back to
the OASIS theme?
Does your boss tap your shoulder as you lay
back and daydream?
What would you give to be back in the BITS
audi again?
To watch those FashP models or that contest
for the biggest brain?

Or maybe APOGEE is your thing, do you
remember the night-outs there?
What about when the model didn't work and
you cried out in despair,
Did you miss Mithali because you were
hanging the last chart?
And was it worth it when the judges said
that poster set you apart?

Did you spend your evenings in C'not, was
Sky your daily hangout?
Or was it Nagarji's chai that you could never
do without?
How many tuts did you miss because a sam-
chaat was more important?
Or because it was bloody 8 in the morn and
FD3 was too distant?

They tell me things have changed, new
buildings all around,
RAF has lost its charm as on the LAN, new
movies can be found,
But somehow in my heart I know, when I
enter those gates again,
BITS will welcome me with open arms, her
son I'll always remain.



BITS Pilani, Cricket, and Rocky Mountain High!

A hostel wing, C-lawns or the banks of Colorado, a BITSian will sniff out cricket anywhere!



VV Ramanan, Class of 71 Electronics

I walked off the cricket field on a typical Pilani spring day after my team had taken a beating at the hands of the 4th year team that played like professionals. My team was a rag tag band of final year and graduate students. The finals of the 1971 edition of the VT Shah Memorial tournament had just ended. I assumed that it was curtains for my brief and rather undistinguished cricket career. Little did I know then that my best cricketing days were yet to come.

In the intervening years I sharpened my cricketing skills by playing imaginary strokes in front of a full-length mirror and visualized tossing out well-flighted leg spinners in the manner of a Dwight Stones taking a practice jump in his head. I was passionate about cricket -- playing it, not following the exploits of the national team heroes -- but opportunities to actually hit a few balls were hard to come by.

It was the summer of 1984. I had just moved to Fort Collins, Colorado and one lazy weekend afternoon as I was driving through the campus of the Colorado State University, I came upon an incredible sight -- a full-fledged cricket match in progress. The setting was surreal -- the sky a brilliant azure, the field a verdant green, the smell of freshly cut grass and the cricketers in their whites and full battle gear. And looming large out west was the snow-capped Longs Peak in all of its 14,259 feet glory. As I stood near a boundary flag and watched, my spinning fingers started itching and I just had to get in.

It turned out I had to earn my cap. I was 12th man for the next few matches and finally a vacancy opened up. It was not that unusual for people to skip a match or two in favor of going camping in the pristine wilderness areas of Northern Colorado around the headwaters of the mighty Colorado River, the very same river that carved out the Grand Canyon over millions of years. I offered myself as a wicket-keeper batsman hoping that this two-in-one deal would cement my place even though my work behind the stumps was almost as pathetic as my batting. My offer was accepted. I was thankful for the opportunity and had every intention of holding on to my spot at any cost, even forgoing backcountry camping trips with pack mules for company.

The Fort Collins Cricket Club was made up entirely of expatriates -- Indian, Pakistani, Aussie, Kiwi, West Indian and Brit graduate students and professionals working in the area like myself. There was the occasional American baseball player wanting to know if he could try his hand at it but finding the objective and the rules of the game rather confusing.

The team chemistry was perfect. It was a curious mix of the melting pot and the salad bowl; melting pot when it came to the camaraderie and the desire to win one for the team but clearly a salad bowl as far as retaining individual national idiosyncrasies -- the Brits with their dry wit and cool demeanor, the Aussies with their biting sense of humor and intensity on the field, and the *desis* with their laid back attitude and self-deprecating jokes. Occasionally,

when wickets were hard to come by and the situation rather tense, a guy would yell to a fellow-*desi* bowler to try the *run out wali ball*. Needless to say, the non-*desis* on the team did not catch on to the joke. We would explain that this deadly weapon needed much practice and great deal of deception to deliver (much like the *doosra* these days!) but sadly the craft can only be learned on the dust bowls of the Indian sub-continent!

I made life-long friends on the cricket field much as I did at BITS. There was the Aussie Mike Riley, feared for his fast bowling and strong admonition when there was a misfield to his bowling but a fair dinkum Aussie if ever there was one and a great friend. He used his vacations in Sydney to perfect his batting technique against the bowling machine at the Adelaide Oval. Once while he was at the nets, he saw an old gentleman walk by. He thought he recognized the man and so caught up with him. Once he was sure who this gentleman was, Mike went to the bookshop at the Oval and picked up several copies of a coffee table book on this man and had them autographed. I have one of these and will treasure it for more than one reason. The front page says, "To Venki Ramanan, Best Wishes, Don Bradman"

In early spring 1998, during the waning days of my career as a club cricketer, I was laid low by an illness and spent six weeks in an ICU. During a particularly low point during this episode, Mike showed up at the hospital. My wife, who was playing gatekeeper to keep out everybody but the closest friends and relatives, told Mike he could not see me. Mike was incredulous. You have only known Venki for 9 years, he told my wife, and I have played cricket with him for fourteen! Nobody could stop him. Mike teased me about my hapless situation and mentioned that practice sessions had started now that spring had arrived. You better buck up, he told me. I had not seen daylight in six weeks but I could start feeling spring in my body – the brilliant Colorado sunshine, the smell of freshly mowed grass and the banter of my cricket buddies; not to mention the crocuses and the daffodils that I had planted with my little daughter the previous fall that undoubtedly would have flourished by now. I was out of the ICU in a jiffy.

Here I come to the *piece de resistance* of this narrative. I was behind the stumps as usual; the bowler was my wonderful friend Vinod, a brilliant all rounder. Wickets were tumbling <http://sandpaper.bitsaa.org>

like ninepins and there was a new batsman at the crease. Vinod let go a fast, rising delivery, which hit the batsman in the clavicle region. The batsman dropped to the ground. I ran forward to help him and started talking to him to calm him down. I asked him where he was from in India. He told me he was from Trichy. I then asked him where he went to college in India.

"You won't know, it is small college in the North."

I persisted.

He said, "It's called BITS".

I said, "Dang, why won't I know it, I went there too!"

He looked at me and said "I graduated in 1979, you are probably several years junior to me."

Obviously, he had not had a chance to study my face under my panama hat and had assumed that I was a graduate student. I put on my best BITS senior demeanor and told him, "If you were five years older, I would have probably ragged you and oh by the way don't ever insult BITS again by calling it a small unknown college in the north".

The batsman Lakshmipathy was a professor at the University of Denver.

All this while, the bowler Vinod was looking exasperated over the delay -- the same Vinod Malhotra, who is now a professor at the University of Hawaii and a 1981 graduate of BITS!

Little did I know in March 1971 after my team had taken a pasting that cricket and BITS would intersect with my life again. More incredibly, that this will happen in far away Rocky Mountain west of the US of A.

I was to run into a few other BITSians on and off the field. But it was a special thrill when Subbu from the class of '71 joined the team. I had played with him during our final year at BITS as well as in our high school. As I watched his familiar run up to bowl his off-spinners, it was as if time had stood still.

I gave up playing cricket in 1998 – my body could not take it any more, my wife was complaining that I was away entire Saturdays in the summer playing and my

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little daughter was missing her gardening buddy. In 2006, we moved to India, the Mecca of cricket. Cricket became something I only saw on TV and I must say I saw lots of it to make up for years and years of starvation. Every time a batsman played and missed, in my mind I would go through how I would have played it – lead with the left elbow pointed, head over the ball, perfectly straight bat, bat and pad close together.

This past July, I was back in the Rocky Mountain region. I had a Saturday to kill and was aimlessly driving around Fort Collins. It was picture pretty – beautiful blue skies, trees fully leafed out, flowers in full bloom and the unmistakable smell of freshly

cut grass. This must have triggered some chemical reaction in my body and soon the car was on autopilot driving towards the cricket field.

I parked the car and was just getting out, when a big fellow got out of the car parked next to mine, flashed a brilliant smile and said, “Venki mon, where have you been all these days?” The last time I saw Neil, the Jamaican, was in 1998. I walked over to the nets with him. Mike was there to throw a few at me from about 15 yards, the full 22 looked too formidable. I played at and missed every one of them.



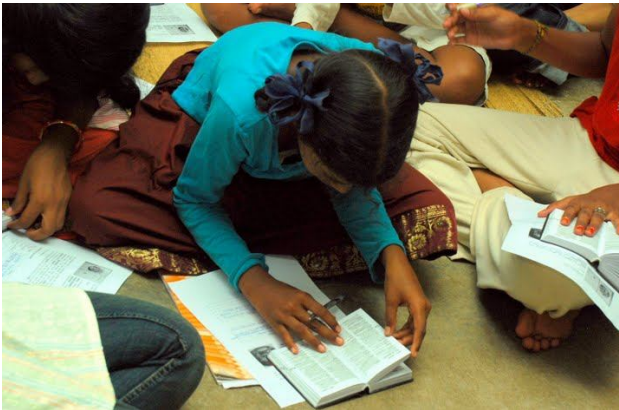
Deepam

A BITSian initiative readying youngsters for the information age of tomorrow.

Meera Sivakumar, 2000A7PS013

Clay P. Bedford famously said, *"You can teach a student a lesson for a day; but if you can teach him to learn by creating curiosity, he will continue the learning process as long as he lives."*

Deepam, a non profit organization with the goal of bridging the divide between literacy and education among the lesser privileged children of Chennai, was started by Karthikeyan Vijayakumar, BITS Batch of 2000, and a few friends, in April 2008. It was conceived to instill in a child the curiosity to learn and to give him the "keys"



to the greatest pool of knowledge out there, the Internet, by suitably augmenting school curriculum. Along with it was born *BridgeTheDivide* - a group to unite people who are keen on 'Lighting the spark and leveling the playing field' for these children.

Deepam was officially rolled out in the summer of 2008 when a group of volunteers, mostly fresh graduates and working professionals in Chennai, with a couple of their own laptops, started teaching at Nalamdana (a self help group) in Perungudi, Chennai. Nalamdana had a mix of bubbly, reserved, bright, boisterous and quiet kids; but with clear and big dreams for the future. During the course of the next few weeks, the children were taught how to handle laptops, introduced to the Windows operating system

<http://sandpaper.bitsaa.org>

and other tools like Microsoft Paint and Microsoft Office. The summer session lasted a few weeks was a great experience for volunteers and for the children too, going by their enthusiasm and performance in the informal end-of-session hands on tests. Over the last one year, Deepam has expanded to four centers (one school and 3 community centers) in Besant Nagar area of Chennai. Children are taught for 2 hours every weekend. We currently now reach out to about 120 children through our weekend classes, with plans of further expansion in the near future.

Though we started off teaching computers, we realized with time, that in order to fully appreciate what the internet has to offer, the children needed to hone their reading comprehension & basic communication skills in English. We therefore streamlined our curriculum and now focus on four pillars - each complimenting the other - English, Computers, General Awareness and Personality Development. This, we felt, would be a great way to sustain and enhance the intellectual curiosity of the kids while also putting them on the track of the information explosion. And finally, what good is any information or idea if it isn't communicated effectively? Soft skills and interpersonal skills are as important as any of the 'hard' skills. We try to encourage the kids to be forthcoming, bold and speak without fear in front of the class. We also discuss famous achievers in several fields, and qualities one could imbibe from their lives. We constantly tweak and improvise our lessons based on active feedback from volunteers.

With a dedicated bunch, we are now onto our second year at Deepam. Our aim is to reach 1000 kids by 2015. Volunteers have been our biggest strength in our journey so far. One can contribute to Deepam in many ways - volunteer to teach at any of our centers, work on the curriculum or raise

funds. We also welcome college students interested in community service to intern with us during their breaks.

If you are interested in volunteering,

donating laptops, money or material or getting to know us better, please write to us:

Karthikeyan – kk@deepam.in (BITS Batch of 2000)

Meera –
meera.sivakumar@deepam.in (BITS Batch of 2000)
bridgethedivide@googlegroups.com



BITS.aid – The origin and evolution...

BITS.aid -- An initiative that channels the strength within the hearts of a BITSian volunteer.

Nishi Gaddam, Sudip Dutta (95A4PS241)

BITS.aid was founded in 2005 to help bridge the gap between socially responsible initiatives and the BITSian volunteering community. Since inception, BITS.aid has served as a platform for BITSians volunteers and social entrepreneurs alike to seamlessly work together across boundaries towards a common goal – a better tomorrow for the world we live in. By teaming up enthusiastic BITSian volunteers with BITS.aid registered projects, volunteers were able to directly impact the quality of life of thousands of recipients. BITSian social entrepreneurs were able to leverage resources and execution support offered by BITS.aid.

It is every man's obligation to put back into the world at least the equivalent of what he takes out of it.

- Albert Einstein

Over the years, BITS.aid has been successful in taking up a number of initiatives in the fields of education and community development under its umbrella. Over 120 volunteers got together and contributed towards 12 projects spread across India and US. Some of the early registered BITS.aid initiatives such as Gyanbodh, MyIndia and Lend-A-Hand are still immensely popular among the current BITS.aid volunteers. Gyanodyaya, operating from Chennai and Bangalore, sponsors deserving students in government schools and colleges by providing textbooks and stationery while volunteers conduct weekly classes. MyIndia, was setup by students at BITS Pilani with the objective of improving literacy levels and to provide quality and value based education to the underprivileged.

We make a living by what we get, but we make a life by what we give.

<http://sandpaper.bitsaa.org>

- Winston Churchill

After the huge success of the program since



its inception, BITS.aid was re-launched this year with the vision of providing a truly global platform for BITSians to make a lasting impact on socially responsible initiatives. BITS.aid is the first of its kind amongst any Indian institutions and alumni bodies. Drawing upon its uniqueness and the altruism within the BITSian community, a new core working group of alumni and current students was formed to make it a truly global operating platform and to execute on its mission to

- bring BITSians across the globe together and provide a forum for exchanging ideas to make society better
- establish new frontiers for BITSians to connect to the global volunteering community
- support socially responsible endeavors by means of

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opportunities, resources and execution support

The core group has also embarked upon recruiting additional projects under various operating themes such as education, rural development, youth empowerment and sustainable environmental practices. Grouped into tactical functions of project management, marketing & strategy and fund raising, the diverse global team is defining and executing on a plan to transform various BITSAA communities around the globe into agents of change to tackle social and environmental needs. The team is currently managing active projects such as

- "Plan100, Lend-A-Hand" - equips youth in India's rural areas with job and life skills, -
- "Nirmaan" - works towards poverty free, knowledge and livelihood opportunities for underprivileged people,
- "Small Steps Foundation" - focuses on education of underprivileged girls,
- "Gyonodhaya" - imparts basic education to the physically challenged meritorious children

If every American donated five hours a week, it would equal the labor of 20 million full-time volunteers
- **Whoopi Goldberg**

Nomination:

Sudip Dutta, the founder of BITS.aid was nominated for Heroes for Humanity by veteran social worker and BITSian alumni, **Anuradha Gupta**. Heroes for Humanity is an Art of Living event to be held this November where stalwarts in social work are honored. We wish Sudip the very best in his endeavors and nomination.

All of these projects were either founded or headed by a BITSian and BITS.aid helps these projects by raising funds, recruiting volunteers and conducting events. Some of the prominent events conducted by BITS.aid in the past include **Run for a Cause**, aimed at raising funds for various community volunteering activities and **Young Stars**, a platform for children from under-privileged backgrounds to showcase their talents.

If you can't feed a hundred people, then just feed one.

- **Mother Teresa**

During the course of the year, BITS.aid plans on organizing several events during the **Joy Of Giving Week** with the objective of getting people from all walks of life together to engage in acts of giving - money, time, skills or simple acts of kindness towards activities identified by GiveIndia. The BITS.aid team is also in the process of spelling out details for **Donate-a-Dollar-a-week** and **Sponsor an event** drives where donors can contribute to programs of their choice.

BITS.aid would like to hear from the BITSAA community of any social causes that they are passionate about and would like to see them taken up under its mandate.

Reach out to us! Together, we can make a difference...

- **The BITS.aid team**



India's First Microprocessor – The BITSian Connection

Did you know that the Intel Xeon 7400 series has been completely developed in India? Did you know that more than a dozen BITSians were involved? Read on for more...

Sriram V, 1996A3PS080
Rahul Misra, 2000A2A7722

Do you remember your Mom complaining that she needed more than just two hands as she prepared your tiffin, combed your hair and polished your shoes, all at the same time? For a few years, microprocessors have been similarly crying out for help. As your YouTube video streams while you check your mail and the anti-virus is running a daily scan in the background, the microprocessor requires as much power as possible. The challenge gets compounded exponentially when you are dealing with the server platforms of today. With more and more people turning to the internet and Web 2.0 resulting in much greater client-server interaction, it is essential for tomorrow's computer chip to have the greatest multitasking abilities ever imagined.

This challenge was thrown to Intel India's Enterprise Microprocessor Group (EMG) and the result is a computer chip with six brains, all packed in a single piece of silicon. Codenamed Dunnington (DUN), the processor is the first fully owned CPU product developed in India. More than a dozen BITSians were involved at various stages of this project which began in 2006. The green-field team, based in Bangalore and led by a BITSian, Mr. Ravishankar (Ravi) Kuppuswamy, put in two years of intense efforts in planning and execution to deliver the final product.

Ravi is a 13-year Intel veteran and had worked on several generations of Intel microprocessors in Portland, Oregon USA. He moved back to Intel-India to work with the green-field Bangalore Design Center, taking up the challenge to design Dunnington (Intel® Xeon™ 7400 processor) for Caneland, the 4-socket server platform. This enterprise server CPU, which is now sold in the market as the Intel Xeon 7400 series brings home a lot of accolades in terms of power and performance. Starting

from scratch, the design and development of this wallflower is based on the latest Intel Core Micro architecture. It is built on Intel's latest 45nm process technology and within it a mammoth 1.9 Billion transistors (Now remember the Pentium III packed about 9 million transistors only!).

This new CPU team delivered key milestones at a blistering pace. Within just 14 months from the start, DUN A0 version was taped-in 6-weeks ahead of commit schedule. Within 24 hours from receipt of parts, a complete 4-socket Caneland platform booted all major Operating Systems. In just a few weeks thereafter, DUN A0 silicon achieved record-breaking 4-socket TPC-C performance – a rock-solid tribute to its high quality design. The top-quality Dunnington design and validation effort enabled launch one quarter ahead of schedule. This combined with Dunnington's ~1.3X performance improvement over the predecessor chip makes it a product par excellence. DUN delivers a record-breaking 1.2 million tpmC result on an 8-socket platform winning praise from around the industry. "It's pretty bone-crushing performance," said Jim Gargan, Vice President of IBM's x86 Server Unit. DUN provides power feature (CC3) and virtualization (CPUID spoofing) leadership – key criteria for server purchases.

It is to be noted here that the debug teams worked in tandem with the design team to isolate the bugs in the design and hence fix it to qualify the product! A state of the art CPU Debug Lab (a clean room in manufacturing parlance) was set up in Bangalore to conduct Component and Physical Debugging of the Silicon, a step that proved critical to ensuring the product qualifies after all. The post silicon efforts duly supported by the Server Development and Manufacturing Team proved to be a

catalyst in the sojourn of making a clear proof point in the history of semiconductor development in India. It was indeed a proud moment for Ravi when the NASSCOM IT Innovation Award 2008 was handed over to him for the category "Market Facing Innovation - New Technology Advancement" for successfully developing India's first Microprocessor.

Praise from the industry

"It's pretty bone-crushing performance," said Jim Gargan, a vice president in International Business Machines Corp.'s (IBM) x86 server unit. [Wall Street Journal: Intel's New Six-Brain Chip Getting Strong Reviews]

"There is a realization that we will be able to bring things to market that weren't feasible four years ago," MySpace vice president of technical operations Richard Buckingham said while discussing the new chip's potential. MySpace is among a growing number of Internet companies using "virtualization" to essentially multiply the usefulness of computing hardware.

Several computer makers are

Journal: Intel's New Six-Brain Chip Getting Strong Reviews]

Dunnington looks like a very solid chip," said Charles King, an analyst at Pund-IT Inc. in Hayward, Calif. "It looks like the products based on Dunnington will offer enterprise customers a lot to smile about. Higher performance is a very good thing, especially among enterprises that have a great deal of money invested in their x86 infrastructures. There's a growing desire to consolidate those servers and workloads on as few a machines as possible." [ComputerWorld: Blowing past quads, Intel launches 6-core chips]

The performance is heads and tails above our previous products and where the competition is," Poulin said. The chip uses less electricity and is as much as 48 percent faster than previous models, he said. [Bloomberg: Intel Debuts First Server Processor With Six Cores (Update1)]

Ravishankar Kuppuswamy, Project Leader for Dunnington

Ravi joined BITS in 1989 and did his dual degree program in Chemistry and EEE.



Figure 3: [BITSian Ravi Kuppuswamy receiving the NASSCOM IT Innovation Award 2008]

reporting test results of machines using the chip that they are calling a milestone for x86 technology, which was originally developed for use in personal computers. [Wall Street

Nicknamed c/2 (as in half chom) at BITS, he was the Swimming Team captain in 1991-92. He later did an MS in Electrical Engineering from Arizona State University in

USA. and then started working for Intel, spending 11 years in Portland, USA working on 5 generations of Intel's Pentium II, III and IV microprocessors.

At Intel, he got the opportunity to work with some of the smartest engineers in the world. "That experience and confidence motivated me to want to do something like this in India". He really wanted to work on and manage the team that built India's first microprocessor." Microprocessor development and development of complex chips in general really thrill me ". He used to really wonder at the sheer complexity of the design and the ability to get all these components working together with great precision to power the world's fastest computers. It still amazes him to this day!

List of BITSians Involved

1. Ravi Kuppuswamy, Engineering Director, Enterprise Microprocessor Group (1989B2A3698)
2. Suresh Kuttuva, Micro-architect and Front End Execution Lead (1984A3PS045)
3. Sreekanth Nallagatla, Engineering Manager Uncore RLS and Speed Path Debug Lead (1992A3PS145)
4. Sriram Vaideeswaran, Optical Probe Engineer with Server Development and Manufacturing Team (1996A3PS080)
5. Shivaram Chandrasekaran, Component Design Engineer with Logic Synthesis Team (1996A3PS080)
6. Karthikeyan Balakrishnan, Component Design Engineer with Logic Synthesis Team (1996B5A3586)
7. Subashini S, Verification Engineer with Full Chip Validation Team (1999A3PS103)
8. Hemant Kumar Sivaraj, Post Silicon Validation Engineer with Multi Processor Test Content Team (1994B4A7PS367)
9. Sanjukta Mitra, BIOS Engineer with System Validation Team (2001B4A7475)
10. Sivashankar Ramamurthi, Component Debug Engineer (1999H105427)
11. Sekhar Vakada, Component Design Engineer with Logic Synthesis Team (2001H081)
12. Virat Sharma, Design Automation Engineer (2004K103416)



Figure 4: [Intel Xeon 7400 Series – BITSians inside!]

The Death of Formal Introduction; the End of an Era

Students at Pilani explore how ragging and the absence of it have changed the cultural chemistry between seniors and freshers. The Era had finally come to an end.

BITS Pilani Campus TEAM

"Intro?" booms a great voice, resounding with the weight of seniority, as a poor, cowering first *yearite* makes an attempt to gather his wits and not blabber hopelessly under the hawk-like scrutiny of the fearful seniors around him.



http://merachandigarh.org/thumbnail.php?file=3682RaggingLogo_793724522.jpg&size=article_medium

"I see English seems to be a problem for you..." a sarcastic voice quips from a corner. "Is there any other language in which 'we want your intro' can be driven into you?" A nervous smile escapes the first *yearite*. The moment it comes, he tries hard to wipe out its existence, but too late. They've spotted it. "Let's teach him how to bury that smile, boys," Fade out...

Cut to a year later. Our fickle first *yearites* in the above tale have now grown up to be lanky, unshaven men with long hair and in unwashed T-shirts. They own the Earth, they rule the show. And after the indignities they've been put through in their first year, they feel entitled to a little poetic justice from the guy up there. So while wending their way back to the wilderness amid the cactus shrubs, they dream of a day when

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they too shall surround some innocent *freshie* and demand in raspy voices "Intro?" Nothing fancy, you understand, just the old intro and maybe a few questions and perhaps a little fun with a bucket and floor mops...

But before the happy film over their eyes has time to dissolve, a rude shock awakens them from their reverie.

"I ----- bearing ID number----- hereby pledge that I shall neither indulge in nor abet any form of ragging as I know it to be a punishable offence under the Indian penal code..."

Their throats dry up, as those pleasant images of reclining on a bean bag with two first *yearites* fanning them and a third running to order food at Sky, suddenly dissolve into Technicolor pixels before vanishing altogether. They gulp. They sign. They leave, with broken spirit and broken heart.

Once out of the sight of authority, however, the thoughts come creeping back to them. Courage seems to return. They band together and soon, raucous cheers are heard. "This will not stand! This hostility will not stand! We have the right to get to know our juniors!" And so the Brotherhood of the Brave is formed.

Finding a poor unsuspecting junior proves harder than ever because now, first *yearites* are no longer allowed to share meat, mead and computers with seniors in the same *bhavans*. They've instead been sequestered away in Ashok *Bhavan*, far away from the poisonous breath of the vile seniors. There are rumors of a spot-fine of 500 rupees if a second year beast is found molesting the virtue of a first *yearite* by talking to him or her.

But luck seems to favour the brave indeed for all of a sudden a first *yearite* practically

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drops into their hands. The little innocent being approaches them with a friendly smile and wants to know the way to C'not. A slow smile of pleasure spreads across the face of the Brothers. "We'll show you the way, little one," they assure him as they usher him along. Their grins become wider as they approach the gates of Budh *bhavan*.

But no sooner do they attempt to cross the border when the 'little first year' stops and turns around to face the nearest Brother. "This isn't C'not. Let me go." he says softly. The Brothers look at each other, grinning mischievously at the naive one. One Brother places a hand on the first *yearite's* shoulder and says "That's not the way it works, boy. You leave when we say you leave."

"I don't think so." The first *yearite* whips out his phone and waves it in the air, arrogance oozing from every pore. "I've got the UGC hotline on speed-dial number 1. Anti-ragging committee on speed dial number 2. And the first year protection squad, number 3. Take your pick."

The Brothers back away from the first *yearite* as men away from hot coal, confused, "Listen boy, relax. We haven't even asked you for an intro yet..." "Yeah, put the phone down. We're from a department; we just want to talk..."

A menacing smile spreads across the first *yearite's* face, "Well, I can't take that chance. I don't plan to be ragged. Now turn around and walk away, I don't want to see your faces ever again."

The Brothers step away humiliated and saddened. As they slowly walk down the road towards the *redi*, they are joined by another group of disheartened seniors from Ram *Bhavan*. They pat each other on the back. "Drinks are on me", someone shouts. They raise their *shikanji* glasses in a toast, "To the death of 'The Formal Introduction' - To the end of an era."

We have used the license of dramatic exaggeration to a some extent in this article. However, it is based in ground reality. The UGC regulations for anti-ragging are being imposed in colleges across the country. This strategy does comprise of a three tier support system for first *yearites*- a student

level anti-ragging squad, an institute level student anti-ragging committee and an overseeing faculty group.

And of course, every Indian is well aware of the nation wide fine for 'ragging'- fifty thousand rupees.

In addition, wardens have been on the prowl in Pilani, covering careful rounds, checking every room that might hold seniors indulging in "questionable activities". They are doing all they can to make sure that these juniors feel at home, just stopping short of escorting first *yearites* to their rooms after meals.

And in the light of all these arrangements to make the juniors on campus feel 'comfortable', we are faced with certain questions. Can no one see over and beyond the 'ragging' to see the good it brings? Is this what the bond between a senior and a junior has been reduced to? Next year, how close will the new batch be to their juniors on campus? The BITSian traditions, unheard of in other colleges, of knowing seniors better than your batch mates, having some of your best friends in senior batches and going to seniors for help is dying. We can only hope that a balance is struck between these anti-ragging measures and BITSian traditions, else the BITSians of tomorrow will definitely be nothing like the BITSians of yesterday, the bond will stand broken. A sad day that will be for Pilani.

<http://1.bp.blogspot.com/->



K7y_iMR4go/Sb00TAEpQvI/AAAAAAAAAGFQ/3QqI_gDCVm-Y/s320/raggingJuly16-703361.jpg

Vijender Singh visits; BITS-Dubai Sports Festival 2009

The Olympic Bronze Medal Winning Boxer, Mr. Vijender Singh signaled the commencement of the 6th edition of the annual BITS Sports Festival by lighting the Torch at the event's first ever Torch Lighting Ceremony. BITS-Pilani, Dubai campus reports the events.

BITS-Pilani, Dubai TEAM



Every good Sports Meet requires a Torch Lighting Ceremony and every good Torch Lighting Ceremony needs a memorable Chief Guest to do the final honors. Mohammed Ali did so at the 1996 Atlanta Olympics and this year on April 5 BITS, Pilani – Dubai had its very own 'Ali moment' when the Olympic Bronze Medal Winning Boxer, Mr. Vijender Singh signaled the commencement of the 6th edition of the annual BITS Sports Festival by lighting the Torch at the event's first ever Torch Lighting Ceremony.

The fanfare surrounding just this one moment required an entire day for itself. It began with a massive Torch Rally as each and every volunteer, organizer and participant, totaling well in excess of 300 students, ran alongside the selected Torch Bearers who passed it hand-to-hand along a 2.5 km long route that eventually terminated at the BPD Campus. The noise from the crowd that gathered to watch the

culmination of the Rally grew to a crescendo as the procession neared the Campus buildings, all of them eagerly awaiting a sight of the Torch and especially the last Torch Bearer.

The Director – BPD, Prof. (Dr.) M. Ramachandran was the penultimate Torch Bearer and a huge roar went up from the crowd as he handed the Torch over to Vijender to complete the remaining distance and set alight the BSF Lamp. This was accompanied by yet another thunderous applause.

Later on the champion addressed the crowd, candidly admitting that he was overwhelmed with the support showed for him by all the BITSians and was immensely glad that even sports like boxing had such a huge following. He also wished the best of successes to the organizers of BSF 2009 and expressed his desire to have a look at the venues and preparations for the event personally. Almost on cue, Mr. Rafiuddin – the man behind the creation of the BITS Sports Festival, escorted Vijender away from the addressing podium to give him a whirlwind tour of the various venues for the numerous sports being conducted all over the Campus.

First was a stopover at the office of Prof. (Dr.) M. Ramachandran and an interview with photo-op with the Press. There were T.V., Radio News Crews and Newspaper Correspondents to cover every word that the Olympic Hero had to say.

After this brief tête-à-tête with the Press, he was toured around the college sports facilities. Coincident with his arrival was the conclusion of the first ever Inter-University Boxing Coaching Camp that was also

organized by Mr. Rafiuddin as part of the BITS Sports Festival. It was indeed a great moment for the dozens of budding boxers to have the Olympic Bronze Medal Winner among their midst for the final day of the camp. Vijender was himself extremely excited at seeing the number of attendees and duly took some time out to give some valuable tips to the youngsters.

And so it ended and quite true to form the visit was a short and quick one, much like the way Vijender admitted he likes to keep his matches! But BITS had been smitten by the confidence and charisma of the young man from Bhiwani and would not lose its adoration for him so easily, a fact that was more than evident when the pugilist made an encore appearance at the BSF Awards Ceremony a week later. Once more he was assailed by a flood of fans eager to get a photograph, an autograph or anything for that matter. As he himself said while receiving a memento from the Director on the behalf of the Institute, "Adoration is not what I'm aiming for. What would really please me would be for these youngsters to finish what I have started and bring more glory to our country in sports." Amen to that!







What are you waiting for?

Some buy them to relive old memoirs, some, to attend a reunion or a get-together and some, buy to flaunt them. What will you buy them for? Choose from a wide range of products like t-shirts, coffee mugs, caps, calendars and magnets to shop online!

Announcing the all new...

BITSAA eStore



Flaunt.

Hey! What's that sitting pretty on your desk? Wow! That's a nice coffee mug... Is that from your college BITS-Pilani?

Attractive discounted prices!

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ENGINuity 2009; BITS-Pilani, Dubai

BITS, Pilani - Dubai joined its cousins in Goa and Pilani in organizing a National Level Inter-College Technology Festival - 'ENGINuity 2009' on February 25th and 26th of this year. Here are the details.

BITS-Pilani, Dubai TEAM



BITS, Pilani - Dubai joined its cousins in Goa and Pilani in organizing a National Level Inter-College Technology Festival - 'ENGINuity 2009' on February 25th and 26th of this year. The Fest was the brainchild of three students, Abhinav Gupta (IVth Year), Piyush Singh, and Rohan Trikha (both IIIrd Year). It was also supported through the efforts of Deans, Dr. G. Vijaya and Dr. Tanmay Panda.

The word 'ENGINuity' is a play on 'An Engineer's Ingenuity', an apt one considering the level of technical expertise and engineering acumen that is demanded of the participants (and which they displayed with much aplomb). Participants came from seven of the very best Universities of the U.A.E. Preparations for the event began well in advance. An enthusiastic team of over 40 volunteers got down to getting everything right planned to the very last detail.

The events comprising ENGINuity were:

- The Computer Gaming competition emerged to be a popular one. The participants competed in COUNTER STRIKE 1.6 (shooting game), FIFA

09(a soccer game) and Defence of the Ancients (DotA) (a war craft game).

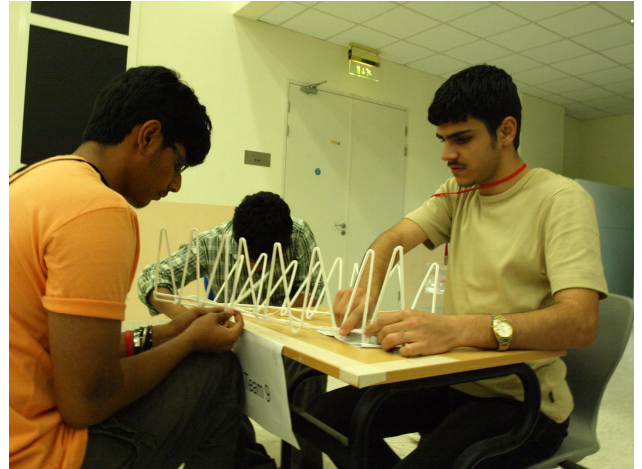
- The Computer Programming Competition challenged the participants to prove their programming skills in one of three programming languages.
- "Jargon", the tech-themed quiz tested the students' knowledge on various science and technology topics.
- The Bridge Building competition was a unique designing competition where the students were supposed to design a self supported bridge capable of withstanding static load on the pathway, using only drinking straws and tape. The competition was an excellent example of being creative with minimum resources



which is the need of the world today.

- The On the spot model making gave a simple task of making two paper planes using a single sheet of paper for each plane but the challenge was to make one of them travel the maximum distance and the other to stay airborne for the maximum amount of time. This event in fact drew the maximum participation.

The entire event got off to quite a spectacular beginning with the Inauguration ceremony. The Chief Guest was the Secretary of the IEEE – UAE branch, Mr. Eesa Bastaki who committed the wholehearted support of his organization behind ENGINuity so that it would become a shining example for other universities to follow. The next two days were a gala of competitions, which provided a rare opportunity for students from the various universities to interact with one another and get involved in the side attractions, such as the food and game stalls that had been put up all over Campus.



The events themselves were quite keenly contested but BPD had that extra edge in majority of the events to finish as the Best Overall College, ending up as winners in the maximum number of events.

The Fest concluded with the Prize Distribution Ceremony where the Winners and Runners-Up in each event got prizes sponsored by Siemens, Bosch, Razer, Radio 105.4 and IEEE. It brought a successful end to the first edition of this (hopefully) annual competition.



Living after Midnight; BITS-Pilani, Goa

It's none short of freedom at midnight which India achieved in 1947. The feelings of ecstasy resonate in the heart of every BITSian in Goa as "life after midnight" becomes a reality.



Rohan Menon, 2008A4PS208G



<http://news.thomasnet.com/IMT/fireworks%20materials.jpg>

The inevitable finally happened. The 11:30 rule, which bore more curses than a Pharaoh's tomb was done away with once and for all for the boys of BITS-Pilani Goa Campus on 1st of September 2009. The 11:30 rule has been a source of great ire for all the students because it would send us running back to our hostels as soon as the last whistle was blown resulting in some important club meetings being cut short. Well no more. As an eyewitness to that momentous occasion, let me narrate what

exactly took place on the historic night of the scrapping of the rule.

The administration did anticipate trouble with indulgence in hooliganism topping the list. So some of the faculty was deployed to make sure the situation did not get out of hand. Well their fears weren't unfounded. Some of the boys had stocked up on fireworks purchased from Vasco to usher in the new era. Come 11:30 and all hell broke loose. Dancing, screaming, and

jeering outside the girls' hostels, all directing their glee at the hapless girls. They tried feigning disdain and indifference but had to do so inside their hostels! Well, the girls wistfully watched us guys revel in our new found freedom. By 12:30, the supply of firecrackers had been exhausted. Still basking in our new found freedom, we trickled back to our hostels and went to sleep.

And the story has remained the same since!

<http://sandpaper.bitsaa.org>

WINTER EDITION | Sandpaper2.0

Fresher's to Sophomores; BITS-Pilani Hyderabad

This is a journey of two freshers to their second year as told by the young BITSian writers themselves.



**Abhishek Chandna, 2008B2A3493H,
Vivaswan Pathak, 2008A7PS130H**

The more difficulties one has to encounter, within and without, the more significant and the greater inspiration his life will be.

Loads of luggage, water clogged city expressways with the first feelings on reaching the campus being "Run Away Fast!" Well, BPHC is not that bad. Although we have had many problems, starting with the late registration- a lacking maintenance for the registration process, the registration completed successfully.



http://www.openpr.com/images/articles/1/4/14d1f00a90b6dd4db4cfc567d447eae7_q.jpg

Finally everyone was trying to accustom themselves in the new environment of our 'very Beautiful' BPHC. Sad feelings of departing parents, but equally enthusiastic and proud feelings of being called 'the BITSIAN' overwhelmed the freshers.

<http://sandpaper.bitsaa.org>

Suddenly there was good news (bad for some though but awesome for us - "Campus postponed till 29th August!")

BPHC had its first batch commence on 29th August 2009...we had just entered into a completely different biome with new faces in an all new environment.

"Our minds were as different as our faces: we all were trying to travel to one destination-'Satisfaction'; but few were going by the same road."

We were just trying to feel 'satisfied' by the facilities and the 'Heavenly' mess food. So commencing with our journey forward came our 'Teacher's Day' and we all planned to do something out of the world for our very beloved faculty members. However resources were scarce. No suitable props, no acoustics, no stage and with a very short time of only 3 days, it was a big challenge for us to present something exceptional.

But not only the event turn out to be a great success, it was also appreciated by one and all!!!

Then came the usual BITSIAN life -enjoyment, *masti* and *dhinchak hungama*, with sprinkles of studies.

Proposal of clubs (many of which were rejected by the SWD for unfathomable reasons), Club formations, association activities, and the Elections or highly biased selections for our so called-'leaders'!

The next mega much awaited event was our very first intra-college cultural fest- **PEARL!!**

Shades,clicks,colors,Disco jockey-NYT... all this made PEARL an unforgettable event in the yet to start history of BPHC.

So with the wonderful memories alive in our minds came along a number of DISCO cases-(real serious work ahead) and then came our compre (toughest time of our sem). We managed to cross the hurdle realizing what BITS stood for -"BIRLA INSTITUTE OF TEST SERIES!!!!

The happiness of life is made up of minute fractions—the little soon-forgotten charities of a kiss, a smile, a kind look, a heartfelt compliment in the disguise of a playful raillery, and the countless other infinitesimal pleasurable thought and genial feelings – my romanticism is a result of the semester gap!

Entering the second sem with music and enthusiasm and some fear as it was time to get our CG cards.

The tune of vigyaan divas was heard all over. Students portrayed their best in technical arenas enriching the campus aroma with every imaginable flavour.This event saw the screening of our very first BPHC documentary-"DAWN TO DUSK".

Students working with the campus divisions also expanded their frontiers in unknown territories. The second semester saw various clubs, associations – budding. They came to their full bloom as the Foundation Day arrived. Extravagant sponsorship, cool arts, pro lights and awesome sound arrangement made '28th April 2009' a day forever to cherish!!

COMPRES struck! Maths, Physics, Chemistry and Workshop and then the ordeal was over! Yipeeee!!! Vast Multitudes at the bus stop were to be seen, two months at home was coming up. The thought was amazing and boring at the same time. During the holidays continuous chatting went on —how would the juniors

be? Will they allow us a bit of ragging, or is it going to be the simple intro?

We all were missing our own BPHC!!!Each one of us desperately dying to get back to the marvelous place! Finally the 3rd semester arrived but with 'not so good' memories. Firstly the management imposed very serious restrictions on ragging, and then the change in the mess caterers. But meeting our friends after this hiatus made us forget our complaints.

So all in all the first year was a Roller-coaster Ride for all of us. We went through ups and downs, experienced various amenities and showcased our talents in events like SPREE, OASIS, WAVES, BOSM, and of course in the very techie APOGEE!!!

"Happy are those who dream dreams and are ready to pay the price to make them come true."

We the first batch of BPHC can proudly say that in the previous one year, we as a college have tremendously developed and made sincere efforts in making Hyderabad reach the exceptional standards of our mother campuses-Pilani and Goa,and the process is still on! So folks keep your fingers crossed because here at BPHC there is a lot more yet to be revealed.

"We are what we repeatedly do. Excellence, therefore, is not an act but a habit."



<http://www.indiastudychannel.com/attachments/Resources/70882-19524-BITS%20Pilani%20Hyderabad%20Campus.jpg>

Zibika – The Next Big Thing

BITSians have known to excel as entrepreneurs. In our Business and Strategy section, we have chosen to showcase Zibika, a BITSian startup which can become “The Next Big Thing”.



Kaushik Mukherjee, 2000A3PS130



Zibika.com: Simplifying Insurance and Money Matters in the Indian Internet Space

Zibika.com is one of India's fastest-growing online Insurance Retailer and Content Aggregator in the Personal Finance Space. At present, the portal presents the largest comparison portal of Insurance policies and Loans products (over 600 in each category). Apart from this, the portal also contains rich data on over 300 cards and 2000 banking products.

Late last year, ex-BITSian Kaushik



<http://sandpaper.bitsaa.org>

Mukherjee had teamed up with one of his batch mates from IIM Ahmedabad, Arun Balakrishnan and Insurance Industry Expert Vivek Doraiswami to raise seed funding for this ambitious project. Since their launch in April 2009, they have grown rapidly to scale across Insurance verticals and were even selected as the top 14 Internet companies in the ET Power of Ideas Contest 2009. With the portal touching 100,000 page views, Zibika.com has also attracted the attention of venture funds in India/abroad and is in talks for raising a second round of capital.

Unique offering:

Every aspect of Zibika has been designed to provide a simple, clutter-free experience that presents the complicated world of personal finance in an easy-to-understand way. One of the common pain-points in applying for insurance, loans and cards is the many pages of fine print that is almost always impossible to make sense of. Zibika makes it easy for users to understand the pros and cons of every insurance policy, loan product or credit card by providing the 'Fine-Print-In-A- Nutshell' as a part of its search results.

The Zibika StockBot:

Probably the simplest way to check Indian Market stock prices on the BSE and NSE. A first of its kind innovation, the Chatbot

WINTER EDITION | **Sandpaper2.0**



allows users to fetch share prices during and after trading hours by means of simple 'chat messages' on GoogleTalk. For example, to check for Sensex levels, all a user has to do is add the email address, market.zibika@gmail.com to their Google Talk friend's list and type 'Sensex' as a chat message. Individual stock prices on the BSE/NSE can also be fetched by means of simple messages. For many retail traders, it is a painful task to keep visiting a website and refresh a page multiple times to check for stock prices. The Zibika StockBot is clean, quick and lets users check scrip values within seconds. The popularity of this portal site has seen a jump of almost 100%

since the launch of the StockBot. As of today, the portal is in its beta stage and the team has plans of launching a second version of the Stockbot after accumulating user feedback over a period of 60 days.

Industry Alliances:

Zibika has partnered with Swiss-based VIG Insurance brokers to sell Insurance through their portal. Although at present, online policy requests are closed offline, by the end of next month, visitors will be able to purchase health and travel policies online in a matter of minutes. In keeping with Insurance as their central vertical, Zibika has also tied up with some of the leading brands such as ICICI Lomard, Future Generali, ICICI Prudential, TATA AIG, Reliance Life and Bharti AXA to name a few.

