



# Ping!

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# Felicity

# 2012

Reclaim.Redefine.Relive

## Editor's Word

Many a time in life, we encounter grim situations where we are prepared to face challenges and indeed capable of marvels. But some factor or the other obstructs our path to success. It can be anything – fear of consequences, lack of determination and low confidence. However, one must always keep in mind that it is essential for us to cross the start line and face the consequences, rather than just staring at it and doing nothing.

And well, it seems like IITians have embraced this spirit, as is evident from their preparations for the most awaited festival of the year – Felicity 2k12. With the event just knocking at the door, the organizers have shed all their hesitations, resolved all conflicts and are gearing up to implement new ideas, without any fear. The successful organization of flash mob at Inorbit mall to promote Felicity, despite knowing that several such attempts have failed earlier is a testimony to their enthusiasm. What keeps them going is almost inexplicable. But it can rightly be said that the mature decisions that they have taken are going to shape up the fest like never before.

Same goes for the recent formation of student clubs in the campus. Each one of us has had some latent talent in ourselves, which was a fact unanimously known and acknowledged. Also, many of us wanted to experiment something new and innovative, which they had never done before. But there were several problems – there was no one to take the initiative, and people were too shy to try out new things. Now that some students have taken the lead and come up with various cultural and educational clubs, the students of IIT-H are also ready to shed their inertia and show their true colours.

To achieve great goals, one definitely needs to have the talent and caliber. But before that, it is also necessary that one identifies his/her talent and takes the crucial step in the right manner, at the right time and in the right direction. No one can explain this better than the participants of ACM-ICPC, who hail from amongst us and have proved their mettle in the Regionals and World Finals. Their journey from just another IITian to a rank holder in the World Finals is an inspiration to us all.

We dedicate this issue to such success stories and incidents, which highlight the spirit that taking initiatives is the most important step for achieving success and hence shaping one's destiny. This edition describes the success story of ACM-ICPC participants. It also includes interviews with Mr. Appaji and Dr. Prof. Jayanthi Sivaswamy. Going through these articles you shall realize the fact that identifying your talent and taking initiatives is the key to success.

February is the month of joy and happiness. While it brings rejoice and warmth of spring, it also brings a day, nay, a festival which is popular among the youth – a festival in remembrance of St. Valentine. While this day gives a message of spreading love and affection, it also inspires many of the dumb minds who are too hesitant to confront their loved ones. So for all those demure souls, all we have to say is that if St. Valentine can die for love, why can't they just go and say those three magical words?

Happy Pinging !

Anshul Bhargava

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(For those who might be interested: Of the many prevalent legends about the origin of Valentine's day, the most popular one goes like this - St. Valentine was a Roman priest. The King had ordered that no young man shall get married and raise a family, so that he can be ploughed in the battlefield. He also declared that organizing marriages shall be considered as a punishable crime. But it was St. Valentine who took the initiative and secretly organized marriages for the soldiers. He was later caught and sentenced to death. In his remembrance, each year, 14<sup>th</sup> February is celebrated as Valentine's day worldwide. )

## Campus Buzz

As the midnight of 31st December 2011 came closer, it was time to bid farewell to a year that had been marvellous for most part, peppered with some occasional disappointment. All the students gathered in Felicity Ground to welcome the **NEW YEAR**. A crackling fire, evergreen classics and the company of friends - that's how the IITians welcomed 2012.

The celebrations started at 10:00 P.M. with students gathering around the bonfire, enjoying its warmth and radiance. A round of dumb-charades was played which was followed by An-takshari. People grooved to hits in Telugu, Punjabi and Hindi to welcome the New Year. Finally, people wished each other a happy and prosperous New Year and dispersed from the place, cherishing the memories of the night and a hope for one more memorable year ahead.

A usual morning was accredited with a special feel when the nation rose to salute the glittering tricolor on 26th January - 63rd anniversary of our **Republic Day**. The campus celebrations witnessed a good gathering of students and staff. The guest of honor for the day was Dr. Raja Reddy.

Framing the place with a patriotic thrust, there were speeches by Dr. Kamal, Dr. Rajeev Sangal and Dr. Dipti Mishra. This was followed by the flag hoisting by Dr. Sangal. Marking the serenity of the occasion was the Oath taking ceremony of the Parliament members from UG1, which was assisted by the SLC Chair, Dr. Mishra.

Cultural events comprised singing and a skit performance. Patriotic songs like *Sare jahan se accha* and *Dharti sunheri ambar neela* were enough to rouse the audience. A series of dances were performed by the flash mob dance group too. Also, there were speeches in Hindi and English, delivered by Chetna Gupta (UG1) and Anhad Jai Singh (UG1) respectively.

Later, a blood donation camp was organized in the campus. In the end, everybody left with smiling faces leaving the familiar tricolor

which swayed with pride under the shining sun of what had turned out to be an unusual morning.

And now, the IIT-H community has geared up itself for the most awaited festival of the year – **Felicity 2k12** – with the theme of “Reclaim, Redefine, Relive”. The Design team has been working with great vigour and zeal, to come up with a great look for the brochures and designs for numerous eye-catching posters. The main website has been successfully launched, and the campus decoration has already started with great enthusiasm. The individuals participating in the Inaugural events, which comprise of 7 to 8 dances and a skit based on the theme, "Life is a Cycle" aka "It's never a Doom's day" are practicing extensively despite their tight schedules to make the Inauguration an event that'll truly knock everyone's socks off. One of the major promotional events so far has been the flash mob, held on Republic Day in the Inorbit mall. It had a whopping 70 to 80 people participating. This was the first time that a flash mob was organized for a college fest in Hyderabad! A major change incorporated into this year's fest will be Pulsation which is a separate ECE event. Also, there will be prelims held for the Rock Night this time, tentatively to be held on the 15th and 16th of February. The organizers have certainly put in loads of effort and have brainstormed extensively to think outside the box and come up with new, interesting ideas for this year's Felicity. It has been the unanimous opinion of everyone who has previously been a part of Felicity - that the preparation leading up to the actual event is where the true fun lies. People get to interact with others from different batches. Everyone with genuine interest and true spirit is given an opportunity to perform. All in all, IITians should be prepare themselves for this year's Felicity, which is going to be bigger and better than anything it has ever seen before!

# Ask Appaji

*Appaji— the name says it all. One of the most popular personalities in the campus, Appaji is a man about whom little is known. Ping! recently had a face-to-face with him, which was undoubtedly an experience like never before. Here are some excerpts of his interview.*

**What is your full name and what do your friends call you? Is the "Ji" added to your name to show respect or is it actually in your name?**

No, my name is Appaji itself. My complete name is Nallgopu Narayana Appaji. My friends either call me Appaji or Appaji Garu.

**Tell us something about yourself.**

My native place was Rajahmundry in A.P. Till 5<sup>th</sup> I studied in English medium and from 6<sup>th</sup> to 10<sup>th</sup> in Telugu medium school. I opted for PCM in +2 level. I pursued B.Sc. in Computer Science and then I started working as a lab faculty to support my father. Thereafter I began working at the CMC Authorized Training Centre, Masab Tank, as a lab faculty, where I was later recommended as an administrator by the officials, owing to some administrative crisis. Following this, I applied for an administrative assistant post in IIIT-H. I joined this institute on 19th September 2001. Here I started as an administrative assistant and was then promoted to Assistant Manager after 5 years.



**Sir, you seem to do all the work from top to bottom in the administrative office. How do you manage it all? How many hours do you work in day?**

Managing all this work is not as difficult as it seems. Though some pressure is there but it is easily manageable. In my case I schedule my time and prioritize the tasks. Also I try to multitask as much as possible. The first thing that I do in office is to check my mail. I work for about 8 or 9 hours a day. If the workload is huge I try to complete it by working overtime.

**You have been in the college for a very long time. So what difference do you find between the students of the previous batches and the current batches?**

Ah..! It has been 10 years since the first batch of IIIT-H passed from the institute. So a generation gap is certainly there. A lot of social and economic changes have taken place over the years. The students have not only gained a greater degree of freedom but have also become responsible.

**Sir, you seem to be very popular in the college. Students consider you just next to the Dean Academics. How do you feel about it? What are your views about it?**

Actually, it's all because of the experience that I gained in the institute during these 10 years. Therefore, I know a lot about the administration. Also, earlier the staff was less so most of the procedures, clearing and resolving issues were done by us manually. So I am quite well versed with the procedures to be followed while doing any task. This is quite helpful when people ask for guidance regarding any issue.

**When any of the students, staff have a doubt they say "Ask Appaji!". Whom do you refer to when you need to know something?**

Oh! In my case, I don't need the kind of guidance that students do. I know whom to ask what in case I have doubts. Mostly I refer to the Dean Academics for academic issues.

**We see that you remain active throughout the day? What is the secret of your energy?**

There is no external source! It's my personal interest and satisfaction that boosts my energy and enthusiasm. Also I know that IIIT-H is a good institute dedicated to the welfare of the students. This also acts a source of inspiration for me.

**Students always complain a lot about the IIIT-H administration process. They say that it is like a government office. What's your say on this and how do you feel it can change?**

To this I would like to say that it is a misconception of the students. It is just that in the institute the students have to handle all the tasks by themselves. There are no intermediates to get the work done, which is quite different from their earlier years. Now they have to go through a formal process before getting any task done. The system of mails and portals is very unusual for them. Also earlier the strength was very less but it is increasing now. So obviously the workload has also increased and it takes time to do all the work.

**The PG students of IIIT-H want to know about the GATE scholarship that the institute offers. Please clarify the status of this scholarship?**

Regarding this issue I would like to mention the procedure for obtaining these scholarships from AICTE. Earlier all the information was conveyed through forms and papers. So for the year 2010-11 the college completed all the paperwork in time and sent it to the AICTE. But then in the same year AICTE changed its policy and wanted all the data to be filled online. Even then the institute did all the work in the given time frame. But due to some technical problems the scholarships haven't been granted yet. However, the institute expects to get the scholarships for the year 2011-12 and is working to get them for the 2010-11 year.

**The students complain that the grades for some subjects aren't released on time. Please brief us on the procedure of grading and why do these delays take place?**

Actually the issue is that between the odd and even semesters there is comparatively less time, and in between we have to a lot of work like compiling attendances etc. So in this case it may take some time to release the grades. Other than this I don't think there is any considerable delay in releasing the grades.

**Who are your friends at IIIT-H?**

I talk to everyone, so there aren't any specific people to be tagged as friends.

**Tell us one good and one bad thing about the present generation.**

Good Thing- They want to learn so many things and want to have everything in life.  
Bad thing- They do everything in a very unorganized fashion..

**Rapid Fire Questions:**

**Name a movie you like the most.**

Hera Pheri (I really liked Babu Bhaiya's character in it.)

**What are your hobbies**

Watching Television - shows like Comedy Circus, Dance India Dance etc. Also I like to read comic story books like *Tenali Ramalinga stories*.

**What is your motto in life.**

Whatever I do, it should be the best! Also my aim is that no one should be able to criticize my work.

**Name a famous personality whom you'd like to meet.**

Given such a chance I would like to meet S.P.Balasubramanyam. I am inspired by the way he lived.

**A change that you'd like to see in IIIT-H.**

Things should function more smoothly and punctually.

which I couldn't.

**Would you like to opt for a job change?**

No, not at all. I'm very comfortable here.

**Describe the following as person in one statement:**

**Mr. KSN** - He's good at teaching how to work. I've learned almost everything from him.

**Mr. Y Kishore** - He's very kind, good natured and responsible man.

**Prof. Kamal Karlapalem**- He's completely work-minded.

**Mrs. Grace**- She is very comfortable with her work and does everything that she is required to do with responsibility.

**What is a message that you'd like to convey to IIIT-H students?**

Since the beginning, IIIT-H considers each and everyone as family. This spirit should be picked up by the students. We must share everything openly and ensure that a healthy environment is maintained in the college. We are all like small leaves in the IIIT tree and must try to serve our part in the best manner possible.

## Group Round-Up

### Dance Group

The beginning of this year marked the commencement of the IIIT-H dance group. The student founders of the group were all very enthusiastic for their new venture. The group aims at improving the skills of the students in various genres of dance. It is based on the principle of mutual learning, an "I will teach you how to do this if you teach me how to do that" philosophy. Events like jamming sessions, workshops and intercollegiate events will provide a platform for all those passionate about the art form.

Take this opportunity to come out of your shell, try something new and showcase your talent. Contact Parag Gupta (7416524684) or Piyush Ahuja (UG3) for details and answers to your queries.

### Chess Group

The newly found chess group shall provide refuge from the pressures of a busy college life allowing one to pursue one's passion towards the game. The group is structured like a forum where strategies will be discussed to help one in improving their game play and defeating the opponent. Impromptu tournaments and intercollegiate events will be held to allow the students to gain experience in this game. Also, the group plans to have meetings to watch and analyse famous matches thereby learning the tricks and moves that have made the professionals invincible.

Lose yourself in this world of black and white commanding a whole army, happy checkmating! Contact Rahul Sharma (8897868210) or Vivek Hamirwasia (9703270593) for details and answers to your queries.

## Faculty Interview - Dr. Jayanthi Sivaswamy

*Being a faculty in an institute like IIIT-H is definitely a job full of challenges and responsibilities. And when you are an HOD too, the responsibilities increase manifold. Clearly, no one understands a department better than its Head. Our interview with **Dr. Jayanthi Sivaswamy** – the HOD of ECE, strengthens the same fact as she precisely addresses many unanswered queries and tells us more about her personal life.*



### **Q: What is your inspiration?**

A: I had never thought about being in academia while in school; the academic bug bit me when I was getting my Undergraduate degree. It was at that time when I thought I could be at no other place than academia! Apart from that, I had a very good Professor who said that the passport for academia is a Ph.D. So I did my Masters and got a Ph.D, just to be in academia. Currently I work in the area of image processing and medical screening. I have always been interested in computer and biological vision; and image processing is what you have to learn to get into it. I moved into medical because I thought it was an area where image processing can be of immense help, and can solve a lot of open problems.

### **Q: So when you were a B.Tech student, had you decided to be in image processing or this idea came later?**

A: In B.Tech I didn't know about image processing. Also, we didn't have that many electives and image processing was not one of them. I took it up as a graduation student.

### **Q: How did you get into teaching?**

A: I did my B.Tech in the US, so, I had to support myself and part of this support came from being a lab assistant. It was then that I discovered I liked teaching. And then during my Post Graduation I was a teaching assistant which gave me further exposure in teaching. But my family thinks that my teaching roots date back to when I was a young girl and played as a teacher! Add to that the fact that I come from a family of two Professors.

### **Q: Can you tell us something about your family?**

A: My Grandfather was an English Professor, my Uncle is a retired Professor of Electrical Engineering and my brother-in-law is a Professor of Chemistry, so teaching has been there in the family. I come from a small family - one sister and one brother.

### **Q: What came first, marriage or Ph.D?**

A: Definitely Ph.D (laughs)!

### **Q: You got your Ph.D back in 1992, how has the scenario changed since then? Is there a difference?**

A: I don't know if Ph.D has changed but I think there's more change between places, the style of Ph.Ds that can come. Different universities have their own cultures, so from that point of view there is a change. I don't know if Ph.D as such has changed. The emphasis on doing original research, getting publications and then earning a Ph.D has always been there. Because computing is playing bigger a role now and computing power now exists even in a cell-phone, so the kind of work you can do has changed. Still fundamentally I don't think it has changed that much.

### **Q: What do you look forward to in student?**

A: Curiosity, which I think is seriously lacking in most (laughs). A student should be willing to ask questions.

### **Q: Can you name a student who is the best you have worked with/guided?**

A: That would be unfair. Different students impress me in different aspects. In research, original and more importantly, abstract thinking is the hardest. So students who are young and possess

these qualities impress me. But having said that, coming up with ideas does not account for everything. This is not entrepreneurship where you come up with the idea and some VC will fund you. So there are students who are not that good at abstract thinking but will work hard and go the extra mile; they impress me equally. And of course, there are those in between.

**Q: Which is the best project you have been involved in?**

A: I love the project I am doing now. In New Zealand, I had already started some work on medical image processing, but when I arrived in India, I was serious about working with a hospital - the reason being that India has lots of problems and technology should be able to play a role. Currently, we are trying to develop screening solutions. We have a billion people and we need an efficient way to screen everybody in order to detect who is suffering from which disease and how each disease can be provided with appropriate medical care.

The first problem that I worked on was diabetes-related retinal diseases. Right now, I am working on glaucoma. It is a big problem as people don't realize they have it until it's very late. Although there's no cure for it, if detected earlier, it can be controlled.

This is part of a screening project with a hospital in Madurai, which I love to work with. I spent an entire week with them once. Such an experience makes you realize the amount of difficulties they face. And then it makes you wonder what you can do to help them. I don't know if we'll get there, but we have to start.

**Q: How do you manage to be the HOD of ECE even though you are an expert in CSE?**

A: I'm not really a CS person as you put it. If you look at all my degrees, they have all been in the Electrical Engineering. I think students don't understand that there are lots of intersection areas between disciplines. I happen to be in one of them. If you look at CVIT - of the four of us, two have an undergraduate degree and PhD. in Elec-

tronics (officially Electrical, because in US and other places it is also called Electrical).

**Q: What is your take on ECE in IIIT-H — be it curriculum, resources or students?**

A: ECE started late, in 2003. As is the trend, the latecomer has it hard. A problem we face is that IIIT-H already has an established program in CS and thus when people think of IIIT-H, they think of CS. Also, if you look at IITs around in India, there aren't any that offer a degree in ECE, like ours. In that way we're unique. But that works against us in terms of hiring because good people don't look at us. Even when companies come here, they think it is CS that dominates. It's a chicken and egg problem we've been having. Since faculty members haven't increased, we cannot increase the number of seats. But because the critical mass might not be building, the ECE program is not growing as fast as CSE program. If you look at the first two batches of ECE, where not much was known about the program, the students exhibited great enthusiasm and are currently pursuing PhD and doing very well. Due to a combination of lack of growth in number of faculty and we couldn't build the program the way CS did, we haven't seen the growth that is expected. In terms of the program though, I believe it's better off than other institutes, like IITs in some aspects because we had a front runner like CSE. Like in CS, we decided to give as much hands-on experience as possible, to give students confidence and exposure. This means that although we haven't seen as much success as CS, we do churn out better engineers in terms of practical exposure as compared to other institutions.

**Q: What is your take on student's mentality of changing a branch on the account of inferior placements?**

A: The pressure is societal. For a long time in India, we've been stuck with this mentality that education is for earning. Most of us come from middle and upper middle class and the mentality is that one should be able to stand on his/her on two feet after college. Now with the IT boom, the expecta-

tions have become skewed: it's not just employment, but employment at a very high earning rate. Parents ask me the same questions in the interactive sessions, which I find sad. When I was your age, I had no clue of such things. Life just brings up these things along the way and you slowly do find your own niche. I mean there's no guarantee, that the branch you're changing to for better remuneration is the one you'll still be in love with 3 years down the line. I can understand to some extent the frustration expressed by ECE students, regarding lack of hardware companies that show up for placements, which is valid. But even to that I say that not all ECE students will get placements in hardware companies because for a single piece of hardware, thousands of lines of software is written. But if placements are compared according to salaries, then yes - I find it to be sad.

**Q: So many good faculty members of ECE left the institute in a short span of time. Why?**

A: These faculty members came with a lot of enthusiasm and interest. When the number of IITs doubled, one of them opened in Dr. Pachori's hometown - Indore, and so he thought he would be better off there. Dr. Sudhir Madhav Rao suddenly discovered other interests in life so he left. The moving of these faculty members can be attributed more to their personal interests.

**Q: It is a general perception that your grading policies are strict.**

A: Well, this could be true. I think you should earn your grade rather than be given freebies. I can understand the pressure of getting good grades upto a point but after that I think you are doing a disservice to yourself if you start choosing things based only on grade. From my own experience, what I have seen is what you really retain while you learn is not correlated to grades. Easy A's do not necessarily mean that you have learnt a lot.

**Q: With reference to the recent supervision of grades by The Dean (Academics), to what extent do you think a Professor's grading must be supervised?**

A: See, intervention happens for one of two reasons. One is if there are unusually high number of A grades given in a course. What the Dean said was he doesn't mind high grades provided that the student has earned it. An intervention looks bad from student point of view, it also looks bad from a faculty's point of view as being a faculty comes with certain independence, so it is never nice to be overridden by someone above. I, however, as a faculty member should be able to justify the high number of A's. A student, working in C-Star - Manan Nayak made a presentation to the faculty members showing that students generally take the path of least resistance. So ask yourself, is that true? And if it is true then there should perhaps be caution about cases where a huge number of A's are given. And I can bet you, 15 years from now you will remember the faculty member who gave fewer number of A's in the course rather than the one who openly distributed it because the former will be a hard-earned A and that person made you work for it.

**Q: Why don't PSUs and several other companies (like hardware based) come for placement in IIIT-H?**

A: We have tried our best. For instance, we invited Dr. Radhakrishnan who is the head of ISRO to our Convocation. Getting into their list is very difficult. We still haven't found what it takes to do it. Companies like TI don't come here because there is a perception problem. They think that we don't do analog here and that is one reason I went back to teaching Electronics Workshop-II. Our students should do more of analog work and enter analog design competitions. Secondly, many hardware companies want the students to do internships first and that too of 6 months. We also invite people working in labs to the R&D Showcase so that they can see the kind of work going on here, but finally it is the Human Resources department that makes calls on campus visits. Another proposal from companies is that students can do internships even after their B.Tech and they will then absorb them. What they basically want is to build confidence. But our students aren't going to agree

to that with the kind of average salaries floating around.

**Q: What are your further plans to enhance the level of ECE?**

A: Two things have to happen. One is we have attract more faculty and the other is we need more students to do good work, good research, good projects, enter competitions and do well in the industry, or, in short, raise the profile of the institute. How do you think the CSE here got its reputation? We have to do the same with ECE. You tell me - how many students in this college of 1200 are actually thinking of an academic career? Not more than 0.1%. There are very few who will do Ph.D and now the industry has opened up so much that most of those who get Ph.D. will join Research Labs for the kind of money being offered. We need to set standards. You are the ambassadors of tomorrow for ECE, IIIT Hyderabad and when you say you are an 8.0, you are setting up an expectation, a standard, which you have to live up to. When we offer electives, what students do is take the paths of least resistance. When they say they have a B.Tech in ECE and don't even know the E or C, it doesn't help! Students have to think how they are going to do in the long run.

**Rapid fire :**

**Q: Is there any unachieved goal that you wish to pursue?**

A: I would like to die thinking that I did something for the society.

**Q: Is there anything that you learn from your students?**

A: Of course, that's one of the reasons I chose his profession: it provides me the opportunity to interact with somebody who is of an increasingly younger age compared to mine.

**Q: What are your interests and hobbies?**

A: I like reading and listening to music, though I indulge more in reading these days.

**Q: What is your favorite pastime?**

A: Reading.

**Q: Which is your favorite movie?**

A: I'll divide it into two: I like foreign movies as well as Indian ones. I love the Spanish director Pedro Almodóvar; I love all his works. Similarly Akira Kurosawa.

In India, as I come from Tamil Nadu and thus like some of the Tamil directors very much. Bala is one of them.

**Q: If you were given a chance to be a famous personality one day, who would you choose to be?**

A: I don't want to be famous.

**Q: If allowed to change something in the past what would it be?**

A: There are lots of things, it's difficult to say.

**Q: Over the years, there have been many changes. Name one change that you would like to have reversed.**

A: That's quite a big canvas, too big actually. But if you look at Hyderabad, when I came here ten years ago, I think something went wrong in between. The growth is great, but the growth has created lots of problems. You can't walk anywhere without the fear of getting hit. I wish the policy that has led to so many traffic jams could be reversed.

**Q: What is one good thing and one bad thing that you see in today's generation?**

A: A good thing is that this generation is extremely confident. For instance, many of the first and second batch of alumni, within one or two years, had decided to start their own companies.

**Q: In your opinion, who is the best Prof. of IIIT-H?**

A: I can't say, because I haven't attended anyone's classes. In CSE the most popular one is Prof. Jawahar. In ECE I'm not sure who the current front runner is.

# Turing Machine

*“Turing Machine” is a coding team from IIIT-H, which comprises of three enthusiasts - Nadeem Moidu, Kunal Jain and Anish Shankar. They have qualified for this year’s ACM-ICPC World Finals, to be held in May. A casual rendezvous with the trio revealed their success mantra.*

## How did you guys come together?

Nadeem: Actually, the 1<sup>st</sup> team was Rahul Gautam, Yash and me in my 1st year. Then Yash, Kunal and me were together for some time in my 2nd year. We participated in Codechef-Snackdown and won there. Though we were not that good, we just won it luckily. Then when I came to my third year, Yash, Anish and I came together. That's when we started the good part of our journey. Last year, we went to ACM world finals and won many other Indian contests. I knew Anish beforehand. Now as Yash has left, we have taken in Kunal.

Anish: I met Nadeem in IOI. When I participated, Nadeem was there as a coach, so we knew each other before coming here.

## When and how were you first introduced to the world of Computers ?

Anish: I used to be afraid of computers long ago. That time I used to use computers just for gaming or browsing, that too from class 8 onwards. I started coding properly in class 11. So, programming is all quite recent. I participated in IOI in both class 11 and 12 but got through only in 12<sup>th</sup>.

Nadeem: I did some basic coding in the language BASIC in 8<sup>th</sup> or something — simple loops without algorithms. Later I had some basic C++ course which was twice a week in school. I did some graphics with it. After class 11, I too went to IOI training camp just like Anish. In this, 20 to 30 people are selected from all over India and are trained in the camp for around 2 weeks.

Kunal: I was introduced to computers when I was around 2 (laughs). I had always seen my father doing stuff and I tried to emulate him. He used to

create software in Visual Basic which I was fond of. So, I read the books on my own, learnt from them, made software and sold some. In summer vacations, I would join in with my dad and try to help him. I made two softwares which were later sold. In class 11th and 12th I did nothing. I heard about algorithmic programming only after I came to IIIT. So, that's where it all started.

## How was the ACM-ICPC experience, from registration to Regional followed by the World-Final?

It all started in the beginning of the previous academic year. We used to take part in a lot of online programming contests hosted by different Indian universities. We ended up winning many of them too. That time we realized that we were better than most of the Indian teams. So, we knew we had a good chance.

Then two months before the competition, it got serious. We would practice 3-5 hours a day solving problems, including previous years' contest problems. It was as if a real contest was happening. Preparation time used to be a lot of fun. We used to crack many jokes, discuss a lot of bizarre things and then we would fight on who should code.

Coding is boring and is the least fun part of programming. Its finding the algorithm which is fun and followed by that, debugging is fun too.

Before going to the Kanpur Regional, we spent more than a month solving problems daily. In Kanpur we managed to solve seven problems. The last hour of Kanpur Regional was pretty interesting as we were confused about which problem to solve. So, we simultaneously started solving 3 problems and had two solutions. The fun part though was when couldn't debug any of them. Finally we ended up solving none of them! We finished second.

Next was Egypt in February, 2011. There were 2

more months to go and at first we thought there was a lot of time. It then got postponed to May due to the Egypt riots. Hence, we stopped practicing. April was taken up by end-sems, meaning that we couldn't practice then either. In this way, we kept procrastinating. Subsequently we had to go home for vacations or internships and returned just one week before the Finals.

Therefore, I don't believe we got to practice as much we wanted to (laughs). Moreover, there was some issue with the tickets in that week.

We ended up getting our tickets one week later than planned and thus just reached in time. When we reached there one team commented that all teams got more time to practice. We were laughing inside that we didn't even practice. Though they were a strong team, we did eventually beat them. They solved three problems and we managed four.

Honestly though, we were lucky in the world finals. 42 was a good rank as compared to how much we practiced for it.

### **You are in this year's World-final too. What are you expecting this time?**

The next world-final will be held in mid-May in Warsaw, Poland. It is one of the most competitive places for programming, where any random person will be better than the best in India. According to Top-coder rating there are around 20 coders who are ranked better than the top ranker from India.

### **Where did the name 'Turing Machine' come from?**

The names mostly have nothing to do with coding. We tried different names since we knew we'd have to register. So until the last day of registration we hadn't decided. In the end, we stuck with 'Turing Machine'. It's a prototype of a computer.

### **How often do you code?**

We are supposed to code but we don't. Top-coder has a contest like almost every week. SPOJ doesn't have contests. It only has a huge archive of prob-

lems. We usually take part in Top Coder and practice on it sincerely. There is 1:30 hrs time for three problems. So, you get the time pressure. This pressure is what makes us work.

### **Q- Who is your Inspiration/Motivation?**

Kunal: When I came here I met some of my seniors like Ajay and Anshuman who were high on SPOJ. They helped me a lot. Sometimes you just try, try and try and you don't get anything. You don't do anything for the next two weeks. You do everything other than this coding and then when you come back something happens. So, it is in phases. There will have to be some problem in between or else you will get saturated. After that when you let it go and come again, you'll have some idea.

Nadeem: I usually don't do problems alone. I either do during contest or as a team. Doing as a team is always fun. That's a good part of a team, you don't really get bored. On the other hand, if you take-up some problem and sit for it, you don't get so easily. Instead you get demotivated. The longer you keep sitting on the same problem you get stuck on the same problem. Just getting stuck and not doing anything is of no use. So, try problems which are tough for you but it shouldn't be unsolvable for you. That doesn't really help.

Anish: Usually while debugging I go through it line by line. Sometimes it helps, sometimes it doesn't. Sometimes you have just forgotten to put a semi-colon, put an extra semi-colon, or your whole algorithm could be wrong. Taking a break usually helps. There are some common-errors for which we carry a list.

### **Who is your role-model?**

Anish: I don't have a role-model really. There are people I admire - like Petr Mitrichev and Gennady Korotkevich but I don't have any role-model as such.

Nadeem: There's this guy - Gennady Korotkevich. He's 17 years old now. The IOI competition which I mentioned before has participants who are very brilliant in programming. Some of them are from

class 10<sup>th</sup> itself. So, the medal cut-off is such that around 25 get gold, 50 get silver and 100 get bronze. Hence getting a gold is pretty tough. When Gennady was in class 6<sup>th</sup>, he came very close to a gold. And after that, he has been a champion gold winner all along.

Kunal: Even I don't have any role-model. But I do admire a lot of people. My seniors like Anshuman Singh were a motivating factor for me.

### **What are your views on Open-Source Coding?**

Kunal: It is hard to start. I tried but I couldn't really do much. Moreover, there is no one really to guide you. It is not easy to find bugs. Even if you download the whole source-code, there are million lines of code you have to go through. Over that they don't have good resources where one can read up and proceed further. If you want to do it, you should really be into it. I tried Android too but couldn't do it.

### **How much does software engineering involves algorithmic problem-solving?**

Kunal: There isn't much relation between the two. When I was an internee at Google, there were people who were doing algorithmic problem-solving and had also participated in the world finals. But now all they do is write for loops, nothing else. So it is not related as such, but it does help you when companies come to hire you. They test your analytical skills on your problem-solving aptitude, to determine how you arrive at solutions to different problems.

Nadeem: It helps in the way you think. If you want to write a software, and you are good at problem solving, it'll help you write a better piece of code. Either way, the level of questions they ask while hiring is something any IITian can match up to. Our assignment questions are really tough. Eventually problem solving isn't what most of us end up with while at our jobs, but fortunately for us, while hiring they rate us based on our problem-solving ability!

### **What other aspects of CS you like?**

Anish: I generally like tweaking with stuff on Operating Systems. I like to find out the inner working of the system and making small script-based stuff.

### **What are your future plans?**

Nadeem: Obviously software engineering pays a lot, so I would like to try it out for some time, but not for long. I don't want to sit and code all my life. Later, I would like to enter into academics or probably research.

Anish: I plan to enter the software engineering world but after that I just want to see what I really like - whether it is coding or something else. So, I would decide after a few years.

Kunal: I think I'll quit the coding job sometime soon. And probably I will venture into start-up or some business. I already have an offer from Facebook but I am not really planning to stay in US for long. So I'll come back to India and see what I can do.

### **And how has been your CGPA's been ?**

Anish: Well I am not a person who is interested in having a really high CGPA, I just like to maintain an average grade.

Kunal (laughs): Well, all I would say is that if the course is interesting, you don't really have to study for it.

Anish : Yes. I agree with Kunal. Otherwise it is usually the last-minute study.

### **What are your hobbies?**

Kunal: I watch a lot of TV shows. It is relaxing. I sometimes read novels which people suggest to me.

Anish: I watch a lot of movies and TV shows. I also like gaming.

Nadeem: I play football and small computer games.

### **Any piece of advice for the students?**

Nadeem: Work in groups for any activity, especially coding. If you have a team, it is much more fun. You have people around to motivate you.

## Woes at a Wedding

One of the most intimidating social forums for a young adult is The Great Indian Wedding of Someone You Do Not Know. Forget the actual occasion itself—marriage—we’re talking about the main stars of the wedding: the aunties and uncles who have quite forgotten why they’re actually there. After a while, all the aunties merge into one single, shining image: freshly dyed hair done up with countless pins, a diamond encrusted neck, a shimmering net sari dragged down by the weight of the silvery work on it, and God forbid we forget the most frightening bindi to match that horrific red shade of lipstick. The uncles begin to look the same even earlier: same suits, same bald heads, and same white handkerchiefs wiping the sweat off these heads. And suddenly you look down and find yourself similarly dressed!

But enough of that. Getting dressed for such an event is another nightmare in itself. Instead, we’ll look at the most common stress factors at a wedding.

Firstly, the introduction: your mother takes care of most of this while you do a Penguins of Madagascar (‘Just smile and wave, boys..’) before noticing the scrutinizing gaze of The Auntie. You break out in a cold sweat. Your smile falters. The decorative lights seem to glint in her eyes evilly. And before you know it, her mouth seems to open, open... and speech flows.

Your mother has a very horrible impression of your communication skills (with good reason, too) and she turns The Gaze on you, too, to watch you falter and stumble over societal niceties. She provides no help when you’re asked, “What are you doing now?”

Now, usually there are several motives behind this question. Sometimes it really just is plain curiosity, or even just an attempt to include you in the conversation. Whatever you say might not be heard in the din of the celebrations and you’ll still receive an emphatic, understanding nod. You might even say you’re studying the composition of vapors from a compost pit and she’ll look impressed.

On the other hand, it might be their diplomatic way of inquiring about your future status in life. Doctors, engineers, and CAs are all safe. Off-track careers and other degrees receive the felicitation of The Eyebrow, and God forbid you’re doing aimless things like saving the environment, or The Auntie’s eyebrows might accidentally merge with the white roots of her hair.

More diabolic intentions include the need to broadcast to society that so-and-so’s daughter/son is studying this (!) in so-and-so place (!), or even worse, to determine whether you are of marriable age. A day over twenty and they’ll follow it up with, “Have you started looking for matches yet?” Your face crumples, as does your mother’s. Excuses are waved aside and offers of introductions are made by The Apparently Well-Connected Auntie.

Let us assume you haven’t encountered this question yet. 9 out of 10 times it is because The Auntie has an unmarried offspring your age. You call him/her ‘The Offspring’ as the very sight of ‘it’ is distasteful. It is taller than you, better-looking than you, dressed better than you; confident and ever-smiling. Your mother adores it. You doubt it is smarter than you, though. These supposed societal role models for peo-

ple your age are usually rather silly, obviously. The mothers begin to ignore you in a subtle nudge to get you talking to The Offspring. Neither you nor The Offspring seem to find any interest in each other, and stare at your respective mothers with polite, socially acceptable smiles instead. The gravity of this stare pulls the women apart and just when you think it's all over, The Uncle arrives. This necessitates your father joining the group.

The Uncle repeats The Auntie's questioning procedure: academics, future plans, and dear me, have we run out of topics already? Let's talk about something only The Uncle likes!

This seems to alarm The Auntie who sees the conversation heading in a direction that cannot include her. She throws out her anchor: "Where did you get that? It is so lovely!"

'It' varies from person to person. It can be jewelry. It can be clothes. In desperate situations, it can even be you.

Like a deer in headlights, you stare at the pudgy finger in your direction. Your eyes follow the loops of the bangles that sit tight on the arm. The lights in the periphery of your vision seem brighter. But you cannot answer this question, for your brain has been dumped in liquid nitrogen: the necessity to answer an unexpected question after the introduction is over. Your mother comes to the rescue and names locations that fly over your numb brain. Now that at least one awkward moment has been achieved, you know that it is time for the families to part. Time for dinner, finally!

Let us assume The Auntie does not throw out this sort of anchor. Instead, her eyes will glow. Slowly, steadily. Until she reaches either "You've grown so much! You were *this* little the last time I saw you!" or "Have you made friends in college? Do you miss home?" The exclamations about growth tend to exasperate, because it only reminds you how long it's been since you've actually grown other than your steady horizontal expansion. And as for the question about missing home... the polite answer in front of your parents is yes... but a stubborn streak in you refuses to give up loyalty to college and cast it in a negative light... and so the war begins. College or home? Your parents do not fail to notice this. A plan to diffuse the situation that is sure to occur at home begins in your head, effectively distracting you for a minute.

Either way you approach The Awkward Silence that indicates that the meeting is over. The Offspring cordially takes its leave from your parents. Now you're expected to do the same (or so the looks of reproach indicate) and after your less graceful attempts at the same, The Offspring's good wishes bestowed upon you unwillingly are received with some resentment. Now etched in your parents' memory, The Offspring will come to haunt you again and again for every failure of yours, starting from your inability to remember The Auntie's name ("Did you see how The Offspring greeted me by name? And it remembered your little sister's name too!").

But it's over with now, the umpteenth interaction of the evening, and soon you'll leave and reach your safe, comfortable abode, curl up with a book or laptop, and forget about everything.

The spread is scrumptious and the desserts look fantastic. The real reason you've come here is splayed out in front of you, just within your reach, if only you could reach that plate through the crowd!

Someone hands the plate over to you. You decide to thank them, looking into their face, only to see—  
Another Auntie!!!

Disclaimer: Pure fiction, pure humor, and nothing serious about stereotypes. =)

- **Monica Reddy (UG1)**

## Kites

I hail from Mhow, a small town 22 km's from Indore in M.P. We *mhowwaalas* have a bad habit (and no I'm not talking about our well-known love for our *poha*, *jalebi* and *samosa*) which is that we tend to take our festivals too seriously. Big or a small festival, our enthusiasm and the splendor of our celebrations is unparalleled. Couple that I'm a *mhowwala* with the fact that I live in a marketplace and you get an explosive amalgam of energy, fun and frenzy (albeit a little annoyance too). There will be a series of LEDs, forming a canopy of sorts above you, lighting on and off in sync. Then you'll have the noisy loudspeakers positioned near the crossroads so as to extend their 'notes' to all the four corners. Combine the two and voila, we have our humble miniature version of 'A Symphony of Lights'.

Take our Makar Sankranti celebrations as an example. It would take you a moment or two to spot the blue of sky amidst the multitudinous red, green and yellow of the kites as they flirt with the air, dance with it, soar high and tease the ones that fail to catch up. Beneath the sky, on the terrace, the atmosphere is no less playful (even a little warlike at times).

The battlefield is all set with a dozen or more kites piled up, the *manjha* forming an interweaving treacherous net and the loudspeakers set up to play our popular song as the war anthem. The kite is flung over the balustrade and we pull the string hoping the wind will pick it up. Meanwhile, the opposition on the neighbouring terrace looks at us with a menacing glee as their kite is already high in the air. We increase the volume of our loudspeaker, bellow into the newly arrived gust of wind and pull the string. We loosen our grip on the string, let it unroll and behold! Our kite's in the air, flying proudly. But it's not over yet... the two kites are perilously close now. The smiles vanish... there is a furious intensity on our faces as we manoeuvre our kite to the left and to the right of the other one, pulling at it, steering it and then we jerk it towards us... landing the final blow. 'Kaataaaa Haiiiii', we yell as our neighbour's kite flows with the wind, uncontrolled. Somewhere, we are sure that someone must be gauging the wind speed so as to determine where the kite would fall. We savour our small victory with a 'tilli ka laddoo'. But we know that there are still plenty of kites in the air that remain to be cut. The battle is not over.

When you have experienced vigour such as this, it is difficult to be satiated by anything less. And when you are a *mhowwala*, you approach any other celebration outside of Mhow with doubt. Now that I'm in IIIT, I could not help but compare the celebration here with the one I used to have.

Makar Sankranti was celebrated in IIIT-H on the 15<sup>th</sup> of January at football ground. Though it remains arguable what would be a more befitting description, a celebration or a get-a-kite-if-you-can challenge. The swarm of kites, *tilli ke laddoo* and the shouts of *Kaata Hai* were all too conspicuous... but by their absence.

And yet... all those who were present there were having fun. You could sense it (not if you had the perspective of a 'paranoid android' though). Five friends were sharing a single kite, each mocking the other's skills but performing even worse on his turn. Everyone was busier pulling their friend's leg than they were busy pulling the string of their kite. There was kite-stealing in IIIT too, only here people did not wait for the kite to fall from the sky but they snatched it out of their friend's hands. The onlookers laughed and the two friends laughed as one chased the other asking for his kite back. There was swearing when one lost the kite the other had got into the sky with great difficulty. There were pats on the back as one managed to finally get the kite into the air. But most importantly, there was love, highlighted by the joys a festival brings.

This Makar Sankranti, I learned something - It isn't always about maintaining your kite in the air for longest. Sometimes it is merely about getting it up there.

- Nikhar Agrawal (UG1)

# Ping! Recommends

## Ping Recommends (tech):

After covering a few Android apps in the past two issues of Ping! Recommends, this issue covers a few useful and handy PC software.

### 1. Media Monkey:

A media manager on the lines of iTunes, Media Monkey does a whole lot more while occupying a lot less space than iTunes (not surprising really). The user interface will look familiar to anyone accustomed to iTunes, with the playlists and libraries on the left, the details of the current library in the centre and the current playlist info on the right. Media Monkey has a really strong focus on sorting based on the id3 tags, a good thing if your library is organized but not necessarily a negative if it isn't. Also, editing the id3 tags is very comprehensive and intuitive. Another major feature of the software is that it allows users to compile and run scripts to determine it's running, a feature which is also included in Data Crow (a more geeky but rather unintuitive data manager). A bonus with this software is that it supports media syncing on any device, be it your i-pod or your mobile phone or even a pen drive. It does have a few niggles, but overall this media manager stands head and shoulders above any other similar ones.

### 2. BenVista photozoom:

This software, as the name suggests, enlarges images. However the way it goes about doing it without pixelating them is simply astonishing. It's image enlargement technique yields better results than doing the same thing in Photoshop. BenVista's unique S-Spline technology manages to enhance the resolution up to 1million by 1million pixels. I have managed to enlarge/enhance images by almost 60 times (5MB to 300MB)! This software works as a standalone application and also as a plug-in for Photoshop, integrating well with the layer, mask and various other functions of Photoshop.

The free version available however watermarks the image, an issue that can be either resolved by

spending some time on Photoshop or by purchasing the full version (available for 79 Euros).

## Ping Recommends (Music):

There are certain albums which light in you that fire of optimism, certain albums that make you go all mushy and melt you into a vulnerable sucker-for-love, certain albums that rekindle faith in you and a few which leave you gawking at the improbable-yet-true existence of its awesomeness. But there are even fewer that manage to do all of this and some more. **Hum Dono** is one such album.

Hum Dono, originally a black-and-white movie released in 1961 (recently re-launched in colour on its 50<sup>th</sup> anniversary), starring Dev Anand, Nanda and Sadhana, has Jaidev as its music director and Sahir Ludhianvi as the lyricist. The album packs in it more flavours than an Indian cuisine, ranging from sweet love to bitter introspection.

First up is '*Abhi Na Jao Chodh Kar*', the eternal romantic duet has Mohammad Rafi and Asha Bhonsle at the helm of the affairs. The hero in Rafi saab's alluring voice implores his love to stay to which Ashaji, in her playful tone, so correctly replies, '*Agar main ruk gayi abhi / To jaa na paungi kabhi / Yahi Kahoge tum sada / Ki dil abhi nahi bhara*'. Just like the protagonist, you end up wishing that you could continue to hear Ashaji's melodic voice. But, alas, she must leave, she says. Well... in that case, the replay button would have to do.

Jaidev, Mohammad Rafi and Sahir Ludhianvi seem to have unleashed their entire prowess in the making of this next gem-of-a-song, '*Main Zindagi ka Saath Nibhata Chala Gaya*'. Brilliant music, unparalleled singing and awe-inspiring lyrics make this song an unforgettable experience. Particularly notable is how Rafi saab finishes the line '*Har fikr ko dhuye me udaaa...*' - Splendid! You need to lis-

ten to it to know what I mean. The song makes you optimistic and teaches you to take the lows in your life in a spirited manner.

Next up is the evocative bhajan '*Allah tero naam, Ishwar tero naam*'. Lata Ji's soulful singing lends a magically peaceful aura to the song. There is another bhajan '*Prabho Tero Naam*', again beautifully rendered by Lataji, present in the album.

*'Kabhi khud pe kabhi halaat pe rona aaya'* on the surface may appear to be one of those self-indulgent sad songs but it is so much more than that. Sahir Ludhianvi, through his mesmerising poetry, brings out the pain very effectively. Rafi saab is once again impeccable in his performance of this introspective song. With so many excellent songs, you might almost feel overdosed. But when the dope is such awesome music, you should definitely take all the pills.

## Ping! Wall

### Immortality

The wheel turns and dust is scattered ,  
The rivers flow and flood the land,  
Winter turns to spring and then to autumn,  
The cycle of hope and despair begins....

The majestic waves rise and fall,  
The heart forever keeps its beat,  
Seeds turn to trees and then to dust,  
The cycle of hope and despair continues....

Voices die out and silence takes over,  
The darkness and stars quietly watch on,  
Joy turns to laughter and then to tears,  
Hope and horror rule the land.

The tender shoot on thrives on rocks and stone,  
The sun sets against the mountains tall,  
Life turns to death and then to immortality,  
Hope and despair forever live on.....

- Aditi Gupta (UG1)

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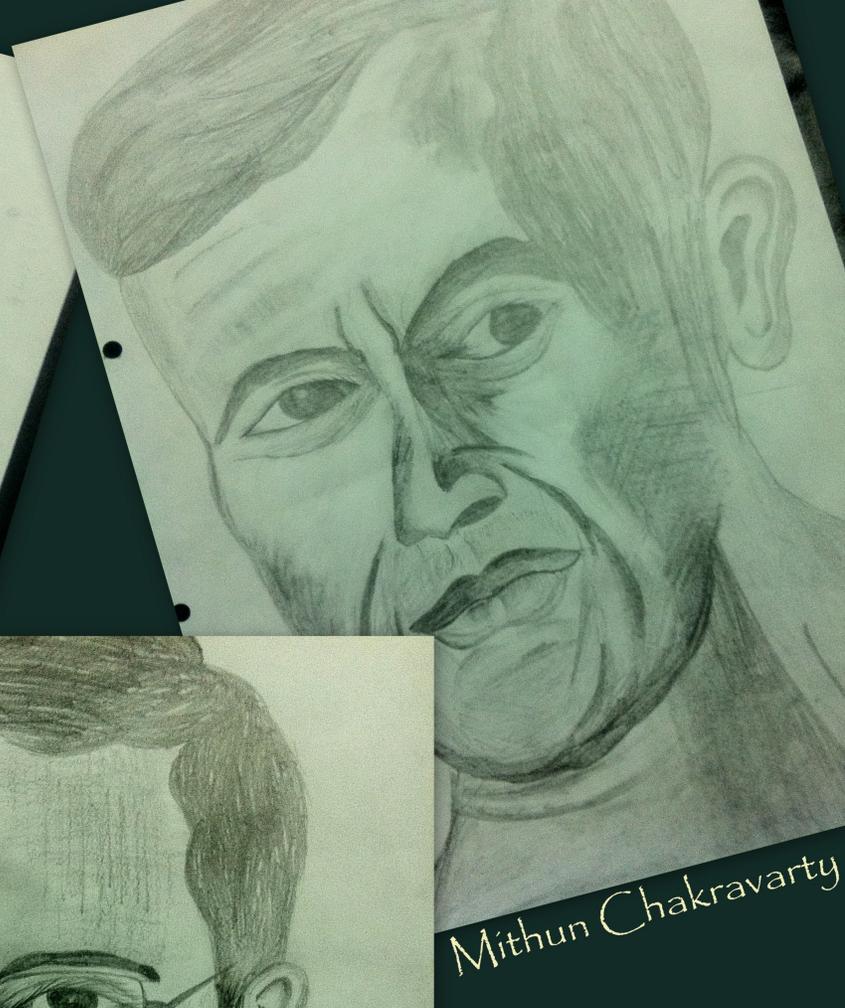
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### About the back cover

The back cover consists of sketches of some famous personalities. These sketches have been made by **Anoop Bera**, a security guard working in IIIT-H. Though these sketches might not seem to be perfect, they give us the message that talent can be found hidden anywhere — even in the least of expected places. We appreciate such latent talents and wish to give them a platform in future too.



M.S. Dhoni



Mithun Chakravarty



Kareena Kapoor



Rahul Gandhi



Pawan Kalyan

Azera  
8/1/14