

# NEWSBYTE



## NEWSLETTER 2017

Shyama Prasad Mukherji College (University of Delhi),  
Department of Computer Science



## PRINCIPAL'S MESSAGE

### CONTENT

**1:TEACHERS' WORDS**

**2:STUDENTS' CORNER**

**3:GADGET SECTION**

**4:GLORIOUS GEEKS**

**5:EVENTS AND ACHIEVEMENTS**

*It is a matter of great pride and satisfaction that computer science department is going to release the 2nd edition of its annual newsletter - NewsByte. It is remarkable step towards holistic development of students as only classroom teaching is not enough for all round development. A newsletter is like mirror which reflects the clear picture of all sorts of activities undertaken by the department. I congratulate and express my deep sense of gratitude to faculty members and students for their efforts to launch it successfully. Wishing success for future endeavors.*



**Dr. Sadhna Sharma**

# MESSAGE FROM H.O.D

*Greetings!*

*2k17 was a great year for the Computer Science family of SPM College, to say the least, and I am all grateful about it. In a nutshell, it was a journey of growing together, exploring together, of making mistakes and learning from them together.*



*We took up new ventures, held interactive sessions with learned professionals and collaborated with organizations, with a shared goal of transpiring new ideas and collectively expanding our knowledge and skills.*

*But we have a long way to go. Because we are yet to tap into our greatest potentials, to shoot for the stars after touching the sky. I hope every member of our department continue to stride towards their dreams with belief and persistence, leaving no opportunity to get inspired and motivate others.*

*Looking forward for another year full of new experiences, waiting to be embraced by us all.*

*Goodluck!*

*Dr. Pooja Vashisth*

# Let's hear from this geek .....

Wanna feel inspired?

Here is a chance for you all to take away some whip-smart advice on exploring yourself and striking the right balance in college life from our ace alumna **Anjali Bansal**, as she shares with us her experience as an SPMite and more.

## 1. Congratulations on receiving the 'Best All Round

**Student of the Year 2016' award. How do you feel about this feat? Were you expecting it?**

Hello, Thanks for the warm wishes and featuring my interview in the News Byte. I would be glad to share my experience here. So, if I talk about being the Best Student of the Year, it felt so good to receive such an appreciation at the college level. I'm glad because of this, I'm able to make my parents feel proud and make it to what my teachers are expecting from me.

Though I didn't expect to be the best student of the year, but yes, I aimed at it. I engaged myself in the things I was supposed to do and worked upon my responsibilities with genuine efforts. Being the Best Student of the year is the consequence of my mentors' trust and continuous support, without that, I'd never be at the place I am today.



## 2. You have been a brilliant student for all the three years you spent here. Can you share some tips with your juniors to help them stay motivated?

It's not about being brilliant all the three years but it's about start learning from the very first day. I tried to learn things as much as I can whether by being involved in activities and communicating with seniors and teachers.

Bit by bit, try to learn and utilize the opportunities which came on your way to its best. At every stage, try to be a part of both academics and co-curricular activities. Both are equally important for overall development of an individual. Always try to keep the balance between them.

### 3. How has this college helped in shaping your personality?

I was the NCC Cadet for three years. NCC helped me out in shaping my personality at best. NCC has groomed me into a disciplined person with good leadership skills. Along with it, participating and organizing the departmental activities like fests, workshops, and other event has helped me in developing good management skills. These things boosted my confidence and helped me in shaping myself to a better person than I was before. I'd to pay my sincere gratitude towards our Principal Dr. Nita N. Kumar and Dr. Pooja Vashisth for providing me with the opportunities to enhance my interpersonal skills.

### 4. What are you up to these days? Where do you see yourself five years from now?

Presently, I am pursuing MCA from Department of Computer Science, University of Delhi.

If I can think of myself five years from now, I see myself into being in professional sector. I would like to be in the product development and will be happy to implement the knowledge in real time that I've gained.

### 5. How would you balance academics and co-curriculars together? What would you do under stress and pressure?

It is true that balancing between academics and co-curricular is never a cake walk. It takes a lot in terms of time management. A good time management is key to balance between these things. A good practice is to know about the priorities and prioritizing your work according to their needs. We have many things to do in a day of 24 hours which, no doubt, introduces a bit stress by the end of day. We must perceive this stress in positive way and utilize it to accelerate our performance. Only by this, we can remain calm and be focused.

### Rapid Fire



- **Your go-to book** - The Alchemist by Paulo Coelho
- **Favorite movie** - Three Idiots
- **Your role model** - In the span of three years, the person who constantly inspired me and encourages me to put more efforts is Dr. Pooja Vashisth.
- **Favorite pastime** - Art 'n' craft

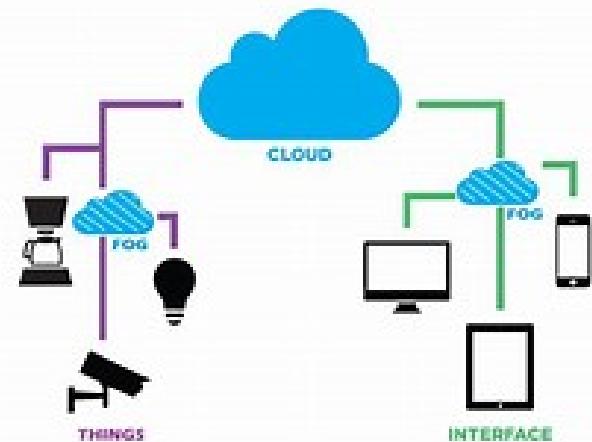
*Interviewed by -  
Yuvika Vinayak  
2nd year*

## Fog Computing

- Ms. Seema Rani

Advancement in the field of information technology has grown very rapidly; huge of technology is in booming era. Day-by-day the technology is becoming more progressive. One of them is Fog Computing; it is the proceeded version of cloud computing features to the edge of network. Similar to cloud computing, it also provides data, compute, storage, and application services at end-users. The term fog computing is introduced by Cisco in January 2014 for internet of things (IOT).

This technology is also called edge computing or fogging. This technology locates small server which is known as edge server in the neighborhood of users and devices and load of data center servers and user's device passing to the main server while cloud computing servers mostly available in remote location, with slow response time and also have some issues regarding scalability, which used for machine to machine communication or services. FOG computing is treated as best platform for IOT applications and services due to several characteristics like mobility, proximity to end-users, heterogeneity, low latency, location awareness.



Fog devices are distributed geographically over heterogeneous platform, and using LISP protocol to provide mobility techniques, it requires real time interactions for faster service. FOG and cloud uses the same resources (networking, computation and storage, mechanism and attributes (virtualization and multi-tenancy)). Fog computing always keeps data right where the IOT requires it. Tech giant Cisco and IBM effectively link IOT with their tools behind fog computing. Fog computing helps to collect data on city activities from traffic and daily utilities of city, and therefore fog computing technology helps to reduce the burden of cloud and all the processing, storage, networking comes closer at the network edge.

# STUDENTS' CORNER

## Life is a Computer

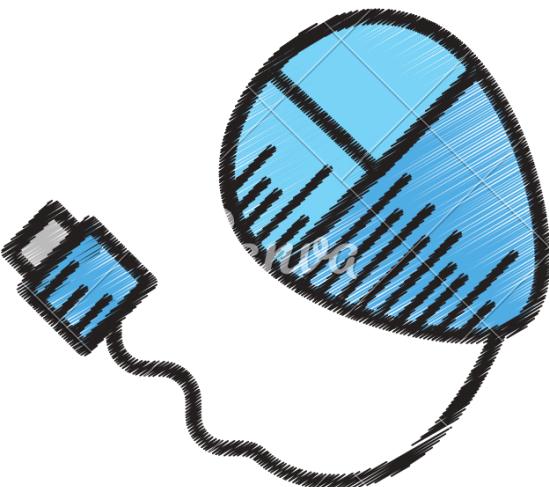
Once a memory lost with age  
Now all those remembering are kept in a cage  
Cache being temporary is required  
Can't we store love which is inquired?  
Iostream.h is for cout and cin  
Wish we could even code to find the sin  
Conio.h erases the past on the screen  
The world would be a better place if we are selfless as a wean  
Compile and run the code with ctrl+F9  
Someday all the things will be aligned  
Install the program of dote in a server  
It will help in other processes further  
Life is no less than a computer  
With a difference that it won't create a blooper  
It doesn't have vocal chords  
But with the knowledge it can throw thousand swords  
Type your deeds on the keyboard to show  
Make sure it won't corrupt your file and be slow  
Learn more so your knowledge will bleed  
To every problem press ctrl+alt+del

-Khushboo Grover

## Know Your Worth

Women face hardships all their life,  
just to become someone's wife?  
No matter how hard they strive,  
Their dreams are always kept under a knife.  
The "norms" always confine them in the four walls,  
Where they are treated like delicate dolls.  
They are strong, fierce and independent  
yet the family always wants a boy as a  
descendent.  
Surrounded by prejudices,  
yet they are expected to show love and care,  
Is stereotyping of gender roles fair?  
Women are fearless and not coward,  
It is a shame that yet they need to be  
empowered.

-Surbhi Sharma



## SPOT ME OUT!

ALGORITHM	NEW	LOOP	EEROM	WIDGET	DYNAMIC	ORACLE
IP ADDRESS	GOOGLE	LIVEWARE	ROUTING	SCAREWARE	NOUGAT	

I	E	W	Y	F	I	Q	F	C	J	H	G	E	U	Y
P	L	L	A	T	H	A	R	A	F	N	T	D	N	N
A	I	S	G	N	E	D	D	K	L	O	A	D	E	P
D	V	A	H	O	T	R	U	H	D	U	D	W	V	D
D	E	F	O	S	O	T	T	E	L	G	D	E	C	W
R	W	H	I	J	Z	G	I	P	A	A	R	I	O	F
E	A	E	N	N	S	K	N	L	Y	T	G	P	P	D
S	R	C	A	F	F	N	G	B	I	T	R	A	I	E
S	E	W	M	S	C	D	U	M	O	R	P	E	E	E
H	C	E	I	I	E	R	L	S	A	Y	B	H	U	D
A	N	X	C	I	I	S	E	R	A	W	E	R	A	C
R	V	S	T	E	G	D	I	W	H	I	L	T	A	P
D	K	H	A	R	D	O	M	G	Y	W	A	S	R	O
S	M	F	T	D	O	A	W	Q	F	U	Z	X	J	O
O	G	O	S	G	B	N	E	B	L	O	O	F	D	K

By-  
Gitanjali Saini  
Priya Chaturvedi

# GADGET SECTION

- *Stuti Chopra (2nd yr)*

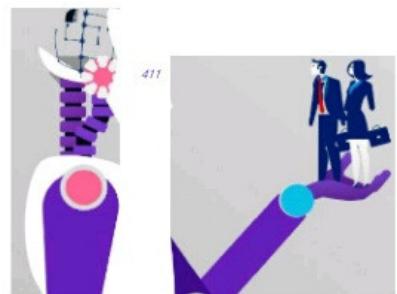
**With the cashless economy seeping in, the digital market is welcoming a whole new slot of gadgets and here are some of them -**

Portronics has launched its latest projector, the Progenie. The device is a 100-lumen projector which offers 80-inch screen-size at 854x480 resolution using Texas Instrument's DLP technology.



iBall has announced the launch of new Slide PenBook. The iBall Slide PenBook is a detachable 2-in-1 device featuring a 10.1-inch display with 1280 x 800 pixels, 2GB RAM and 32GB storage.

Payjo has launched SBI Intelligent Assistant or SIA, an AI-powered chat assistant that addresses customer enquiries and helps them with everyday banking tasks. Users can chat with SIA like a bank representative and it continuously learns from its interactions to get better over time.



Intex has launched its two new 2.1 channel speakers, the IT-3510 FMUB and the IT-3030 SUFB, both of which come equipped with Bluetooth connectivity, Aux port, SD card. The speakers come with a wooden enclosure that amplifies the sound making it clear without any disturbance.

# **Time Table Management Software**

Time Table Management software is SPM's in-house tool developed for easy management, creation and distribution of the time table. The development of the software started in February 2016 with 5 team members - Anchal Dua, Divya Singhal, Anjali Bansal, Sneha Bharti and myself, under the guidance of our teachers - Dr. Pooja Vashisth and Ms. Akanksha Bansal Chopra, to whom I shall always be grateful.

Like any other project, it was not without its challenges. It required us to have a fair knowledge of the PHP language, which we hadn't learnt much by then. So we started taking our "PHP classes". Two of the five of us decided to develop the software from backend, creating databases, writing codes to display the data on the browser, while the other three managed the front end, as to how the data will be displayed, what color scheme will seem fit etc. Apart from PHP, we used several other technologies while making the software like AJAX, HTML, CSS, JAVASCRIPT and JQUERY. The department had organized a seven days long website development workshop which proved to be great source of help for the project.

It is still an ongoing project and currently, we are 4 members who are working on it, since our team leader Anjali Bansal has now graduated. We are in the process of updating the software with more advance facilities to accommodate all the supplementary courses and ease the generation of time-table.

**Manisha Vashisth**  
**3rd year**

# The GE Project

- *Drishti Kapoor (2nd yr)*

*With the aim of bringing ease and convenience to the allotment of GE(Generic Elective) subjects to students, our department came up with the **GE Project** to digitize this whole process. The team involved in this ongoing project has members from all three years of computer science honors, who worked under the guidance of Dr. Pooja Vashisth and Ms. Anuradha Singhal ma'am. To get their feedback, we conducted a Q&A with them.*

## **Ques 1: What difficulties did you all feel while working on this project?**

Ans : If we start talking from the beginning of the project there was a lot of problems that we faced. Either it could be from running it on different systems with different browser settings as it is an online portal or it could be solving those errors which could take less than a minute but actually those errors made us spend our days and nights on it. One of the major problem we faced was that we need to tackle with all the problems at the same time and make all the solutions to those problems work together.

## **Ques 2 : What was your inspiration (and/or) motivation behind this project?**

Ans : Our inspiration behind this project was to digitalise the things as much as we can and to provide ease to the students and concerned authority, so that the workload of faculty and the confusion of students could be eliminated .

As a student we are aware that it takes a lot of efforts to fill those registration forms every new semester. Those long queues sometimes on the sake of our lectures. And after all those efforts that our college staff makes, but sometimes doing this thing manually it causes confusion, students not able to get subject of their choice or there can be few number of forms which gets misplaced. So this was our motivation behind encouraging this project and enduring it so far.

## **Ques 3 : Who was your mentor ? And what did you learnt from them?**

Ans : Our mentor for this project is Anuradha mam. She is very much approachable and friendly teacher to work with and it's because of her support that we have come so far in this project. She is very friendly and supportive. We have learned from her that if you have willpower and dedication you can learn new things and can have good command on them.

## **Ques 4: How do you plan to introduce it?**

Ans : This online portal is easily manageable, comfortable to use , friendly to everyone. We will introduce it by making students and concerned persons aware of it usefulness and how much man task will be reduced.

## **Ques 5: How working on this project helped you in your growth?**

Ans : This project has helped us to polish our coding skills. This project did evolved our theoretical learning of web designing to its practical knowledge and we get to know that reading anything is just the overview of the subject and you won't remember it so far if you don't apply it and use your learning somewhere practically.

## **Ques 6: What is this project about?**

Ans : This project is an online portal in which student needs to register to create their login account and after logging in they need to choose their preferences for GE(Generic Elective) paper. This facility will also be extended to AECC, SE courses.

It will convert all those tedious work of maintaining each and every form and filing them into a more vivacious way and also automatic allotment of seats in any particular subject in a very systematic way.

## **Ques 7: How will this benefit other students?**

Ans : This project will benefit the students as they will not have to wait in queues to get the forms for GE, SECC etc as everything is online. And they can comfortably fill and choose whatever subject they wish to study and anytime they can. It's all about comfort and easiness of everyone.

## **Ques 8 : Would you be working on more such future projects?**

Ans : Few of us are already engaged in some other such projects and we would love to work on such projects in future also as by working on these type of projects we get to learn so much.

## **Ques 9 : How much time did you provide to such projects?**

Ans : Time varies according to the task assigned to us it could be 1-2 hours a day or 5-10 hours a day.

## **Ques 10 : Would you encourage your juniors to work on your footsteps?**

Ans : Yes we would definitely encourage because you get to learn so much on a practical basis and this experience will stay with you your entire lifetime.

## **Ques 11 : How was working in a team ?**

Ans : We all know about teamwork. We all feel lucky that we got a team who have team spirit and love to work as a team. This project is somewhere possible only because of everyone's efforts. If someone was lacking somewhere there was always other person to help them.

## **Ques 12 : What all did you learn from a team experience?**

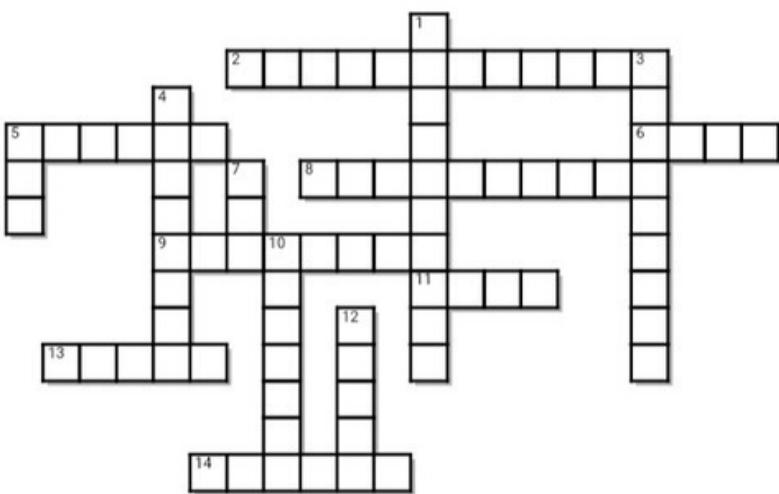
Ans : Only thing we want to say, "great idea requires great team".

No matter how brilliant your ideas are, they are not likely to be achieved without a great team.



# BEYOND TEXTBOOKS....

## CrossNerd



### ACROSS

- 2 First computer programmer
- 5 A protocol used to log into a remote machine
- 6 Android's latest release
- 8 Encoding data to enhance security
- 9 A cryptocurrency
- 11 Apple's virtual assistant
- 13 'H' stands for \_\_\_\_\_ in http
- 14 An object-RDBMS

### DOWN

- 1 File type of extension .rar
- 3 CEO of SpaceX
- 4 Highest memory unit so far
- 5 Mascot of Linux
- 7 Network of physical objects connected through internet
- 10 A test to distinguish between humans and robots
- 12 Someone who annoys others on internet

### A Programmer's Dilemma

Trying to fix the problems I created,  
When, I tried to fix the bug I created;  
It seems like error detection is NOT  
possible,  
But the word NOT itself make things  
possible;  
Helps filter-out things we do NOT  
want,  
And is used sparsely and NOT to want  
to flaunt;  
A quick look at a mirror and NOT YOU  
will find,  
Coding techniques play their own  
games with canny mind;  
May be the combination of 0s and 1s  
will lead you astray,  
Iron out the farrago things show you  
how to find a way;  
Deleting a single semicolon from a  
code,  
Is like, drowning your happiness in a  
pond.

By-

**Yuvika Vinayak  
Khushboo Grover**

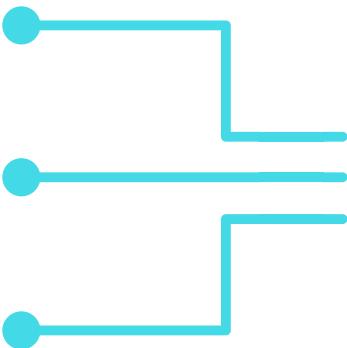
By-

**Shalvi Gupta**

## A Slice of Techilicious Art.....



**Sketched by-  
Simran Atrey**



# EVENTS AND ACHIEVEMENTS

We, at the Computer Science Department, believe in the holistic, all round development of our students. To achieve our aim of creating industry ready professionals, we organize activities to expose our students to the trials and rigours demanded by the industry.

Throughout the year, in addition to holding workshops on topics such as Internet of Things(IoT), Web development and Robotics, we conduct workshops to help our students to refine their interpersonal skills.

The Hadoop workshop held in October'17 gave a major boost to Big Data handling skills of the students.



The department also conducted National Conference on Advances in Computer and Information Technology (NCACIT) in December'16. Total 31 Research papers were submitted out of which 18 were selected.



We host the SPMC ACM Student Chapter, a subsidiary of the Association for Computing Machinery, which organizes learning sessions to update the students on the latest trends with the best minds in the industry. The National Seminar On 'Emerging Trends and Technologies' and the Hands-on learning session on Python organized in collaboration with IIT Bombay and PSSI (Python Software Society of India) saw tremendous success.



Our students have continued to bring laurels to the department. Anjali Bansal (Bsc(H), 3rd yr) was awarded the 'Best Student of the Year - 2016' by our honorable Principal ma'am Dr. Nita N. Kumar.

Sangtaraash—our annual technical fest provides the students the opportunity to learn what it takes to organize a mega event. This year, the fest saw an even larger footfall with students from colleges from all over Delhi putting their best foot forward to reveal their talents and win some coveted prizes offered in the various contests.

# EVENTS AND ACHIEVEMENTS

## Hadoop Workshop

Shyama Prasad Mukherjee College for Women organized a two-day workshop on BIG DATA MANAGEMENT and HADOOP in association with National Students' Space Challenge, Indian Institute of Technology, Kharagpur on 24-25 October 2017.

The workshop was held in the college premises and attended by students from SPM and other colleges as well. The workshop was designed primarily for managing huge amount of data generated in today's world and concerned with managing and organizing results. Participants covered a spectrum of topics including basic Linux usage, Hadoop, Heap, Apache-Pig etc.

Big data is a term for data sets that are so huge or complex that traditional data processing applications are inadequate to deal with them. The workshop effectively dealt with the challenges and provided valuable insight on the working of big data and its management using non-traditional methods.

The workshop concluded with a small competition amongst the teams. The second-year team of SPM (Drishti, Mable, Soumya, Akshita, Mansi) won.

The students benefited a lot from this informative workshop. Here are some of their experiences:

*"The workshop was quite informative and helped me develop interest towards big data management." -Soumya (2nd year Bsc Comp.Sci.)*

*"The workshop was an enriching learning experience, especially for a beginner like me. I found the teacher very knowledgeable about the subject as well as adept at handling the students. Overall, it was a great opportunity." -Aarchie (1st year Bsc.Comp.Sci)*

*"Hadoop workshop has been full of new experiences. We got to learn a lot about this emerging aspect of technology which helped us to get a better view of the upcoming technologies"*

*-Akshita (2nd year Bsc Comp.Sci.)*

*"I found it really insightful and interesting (as expected)." -Manisha (3rd year Bsc Comp.Sci.)*



**- Drishti Kapoor  
2nd yr**

# EVENTS AND ACHIEVEMENTS

## *The Pursuit Of Happyness* - a movie screening

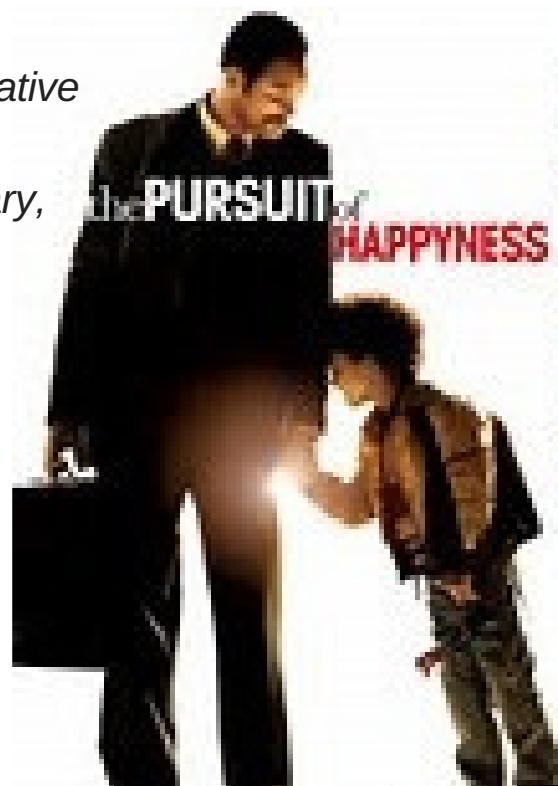
The ACM(**Association for Computing Machinery**) Society of SPM college, presided over by Dr. Baljeet Kaur along with the support of Dr. Pooja Vashisth, organized the screening of the movie 'The Pursuit of Happyness' , which amazed the students and the teachers with its valuable lesson of life, that life can turn and take a new road if you stay optimistic. It is based on the rousing, true-life story of a single dad who went from living on the streets to owning his own brokerage firm, facing his struggles with a never-say-die spirit. Here are the experiences of some of the students

*"The movie was a great inspiration for all of us. We liked it a lot and enjoyed watching it. It taught us very significant things about life and relations." - Pooja Garg (Membership chair, ACM society)*

*"We found the screening of this movie as a very innovative way of teaching students the critical and essential parts of life. It was a fun event." - Anchal Dua (Secretary, ACM society)*

*"The movie instills the idea of true happiness in one's mind. We wish to have more such events by the society." - Sumishree Das, 2nd year*

**Manisha Vashisth**  
**Vice chair, ACM society**



# EVENTS AND ACHIEVEMENTS



**ICACCT-18 (International conference on Applications of Computing and Computer Technologies - 2018) to be held on 9-10th March, 2017** focuses on Intelligent and Complex systems, Information Processing and Latest Computation Techniques using principles of mathematics and engineering. The conference is being conducted to provide a platform for presenting innovative ideas, approaches, developments, and research projects in the area of Computing and Computer Technologies. The researchers are encouraged to submit their unpublished contributions that illustrate original research results or surveying works related to the areas of Computer Science and Information Technology. The conference will see keynote speakers from all over the world.

For more details, visit the conference's official website - [www.icacct.net](http://www.icacct.net).

## GLORIOUS GEEKS

### THIRD YEAR --

1ST: ZEENAT	95.81%
2ND: RAJNI	95.30%
3RD: AYUSHI GOYAL	95.09%

### SECOND YEAR --

1ST: PRANJAL BAJAJ	9.04
--------------------	------

### FIRSTYEAR --

1ST: YUVIKA VINAYAK	8.95
2ND: SHUBHAM SRIVASTAVA	8.78
3RD: NEERAJ	8.74

*Congratulations on your success!! Hope you keep bringing laurels to our institute.*

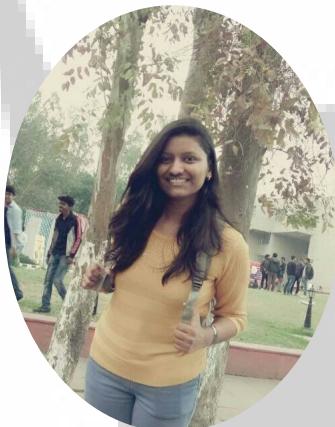


# YOUNG ACHIEVERS



*"Most look up and admire the stars.  
A champion climbs a mountain and grabs one."*

To kindle the spirits of its bright minds, our department leaves no chance to recognize their efforts and dedication. We herein give credit to these students for lifting the esteem and repute of the department –



Anjali Bansal  
Best Student of The Year  
2016-2017



Divya Singhal  
Best Student of The Year  
2017-2018



Manisha Vashisth  
Outstanding Student of The Year  
2017-2018

## Outstanding Performers of The Year 2016-2017



Rajni Dabas



Nidhi Bansal



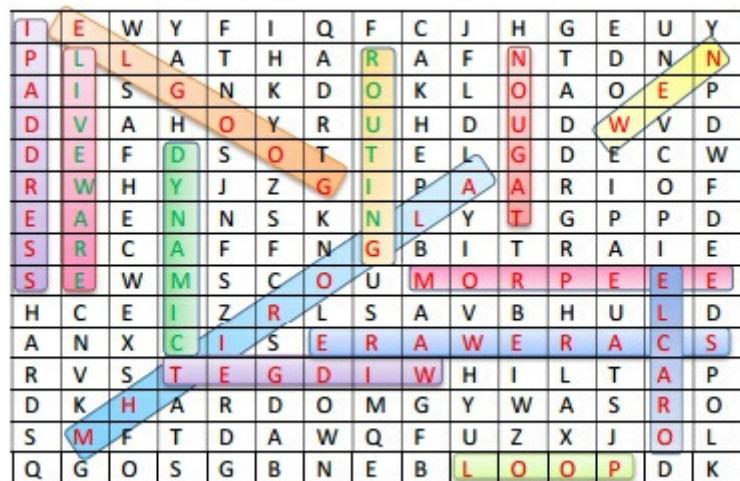
Nikita Deswal

# SOLUTIONS

## CROSSNERD

WORD BANK: ADA\_LOVELACE, BITCOINS, CAPTCHA, COMPRESSED, ELON\_MUSK, ENCRYPTION, GEOPBYTE, HYPER, IOT, ORACLE, OREO, SIRI, TELNET, TROLL, TUX

### SPOT ME OUT!



### Editorial Team

Teachers-in-charge

- Dr. Pooja Vashishth
- Ms. Anuradha Singhal

Student editor

- Yuvika Vinayak

# OUR BUDDING STARS

