

# BITS & BYTES

Department of Computer Science



**E-NEWSLETTER**  
**BY**  
**THE DEPARTMENT OF COMPUTER SCIENCE**

Volume 1  
2017-18  
BCWCC

**The Department of Computer Science was started in the year 1989 and offers courses in BCA and BSc. The state of the art facilities and certificate courses conducted by the department enable the students to explore new horizons in this rapidly developing field.**

**We are honoured to bring out the first edition of this e-newsletter this year. Hope it is instrumental in creating an insight into the activities of the department.**

**Events :**

- ◆ Certificate courses were conducted for the I BCA students on ‘ Photoshop and Coreldraw by IIHT ’ and ‘ Networking with Netsim ’ sponsored by UGC.
- ◆ A certificate course was conducted for the II BCA students on ‘ Embedded Systems ’ sponsored by UGC.
- ◆ A certificate course was conducted for the III BCA students on ‘ Java Advanced and Web ’ by IIHT.
- ◆ A one-day workshop was conducted on ‘ Web Designing ’ for the I BCA students.
- ◆ Workshops on ‘ C and C++ ’ and ‘ PHP ’ were conducted for the II BCA students.
- ◆ A workshop on ‘ Cloud Computing ’ was conducted for the III BCA students.
- ◆ Career Guidance was conducted by our alumni of 2009 and 2015 batch on 17th March 2018. They gave the students an insight into the different career opportunities in this area.
- ◆ An inter-collegiate event, ‘ AFFICHE ’ was organized during Disha 2017. It was an on-spot digital poster making event, which attracted many participants.
- ◆ Interclass competitions were conducted for all the BCA and BSc students. The events were IT Manager, IT Quiz, Poster Making, Movie Making and Coding & Debugging.
- ◆ FIELD VISIT: The final year BCA students visited Indian Institute of Science on 10th March 2018. They visited SERC, CSA , CeNSE and DESE and got an opportunity to interact with the research faculty. They got a chance to see the CRAY supercomputers which is the country’s leading computing centre having the state-of-art computing facilities.
- ◆ A one day Faculty Skill Development Programme was conducted on “ *Creating Effective Presentations with animation*”, by IIHT on May 5<sup>th</sup> 2018.

## STUDENT ACHIEVEMENTS

NAME OF STUDENT	EVENT	ORGANISER	POSITION
Tanisha Sharma and Michelle (III BCA)	Paper presentation on “ Virtual Reality and Cyber Security”	National Conference at St. Anne’s First Grade College for Women.	-
Akshita Agarwal and Sriveda ( III BCA )	Paper presentation on “Indian Start-ups, their challenges and Opportunities”	International Conference at SJES College	Best Paper award
Sriveda and Akshita ( III BCA )	‘Coding and Debugging’ at National IT	Christ University	First place
Akshita and Sriveda ( III BCA )	‘Tech Chef’ , Intercollegiate IT Fest	Surana College	First place
Sriveda and Akshita ( III BCA )	‘Coding and Debugging’, Intercollegiate IT Fest	Surana College	Second place
Akshita and Sriveda ( III BCA )	‘Coding and Debugging’, Intercollegiate IT Fest	CMR Institute of Technology	Second place

### Tickle your brain !

1. Phil asks his friend Stan, when his birthday is. Stan says, “I was 32 the day before yesterday, and next year I’ll be 35.”

When is his birthday, and how is this possible ?

2. In the middle of a round pool, lies a beautiful water lily. The water lily doubles in size every day. After exactly 20 days, the water lily will cover the entire pool.

After how many days would the water lily have covered half of the pool ?

Solutions:

1. Stan’s birthday is on 31st December. Stan says this on 1st January. Hence, 30th December is the day before yesterday. He was 32 on 30th Dec, becomes 33 on 31st. As he is saying this on 1st Jan, he becomes 34 the same year, and 35 the next year.

2. 19 days.

Since the water lily doubles in size ever day, it would be half the size one day before.



## ROBOTICS

**Robotics** is an interdisciplinary branch of engineering and science that deals with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing. These technologies are used to develop machines that can substitute for humans and replicate human actions.

Robots can be used in any situation and for any purpose, but today many are used in dangerous environments where humans cannot survive. Let's look at some of the robots that are being used today.

Amazon acquired Kiva for \$775 million in 2012 but only started using the orange robots in its warehouses in late 2014, which made inventory management more efficient. The "click to ship" cycle which used to be around 60-75 minutes when manually done is now handled by robots in just 15 minutes.

A French startup Ekim uses a pizzaiolo robot to speed up the way pizzas are made and served. The robot's gestures have been programmed to match those of real-life pizzaiolos, or pizza makers, and is capable of delivering 120 pizzas per hour !

An inspirational robotic Barbie has been developed to inspire young girls to embark on careers in engineering and the sciences. Girls are given a new platform to play in their imaginary world and learn important skills for their real world, which reinforces the brand's purpose to inspire the limitless potential in every girl!

Daniya Basharith, III BCA



Akshita Agarwal , III BCA

### A Woman's Glory

While it was just about her childhood,  
she played around the enchanted water,  
"just wondering where it came from!!!"  
While she danced around with the chilly winds,  
"she was astonished as to where it blew from!!!"  
While she swings on the trees,  
"she marvelled as to how it was this strong....!"  
And now that she has driven a farther way  
She takes a look back over the questions she had within  
herself  
It is the lady who forms the whole nature,  
It is the zeal within the lady, that gives the gist to bind  
nature eternally.

- Nausheen, III BCA

## ENDLESS POSSIBILITIES IN COMPUTER SCIENCE

When Computer Science students are asked what we intend to pursue after graduation, we often say we hope to work at an MNC or pursue higher studies. And while we understand that such an ambition means sitting in a mundane cubicle and typing away on a PC from 9-5, we've come to accept that this is all computer science can offer us. Right?

Wrong.

The field of computer science is massive and only seems to be expanding with time. From website design and software development to game, app and AI creation, the STEM field offers those with passion an extensive array of options. The languages these fields demand are also easy to pick up if one has the desire to learn.

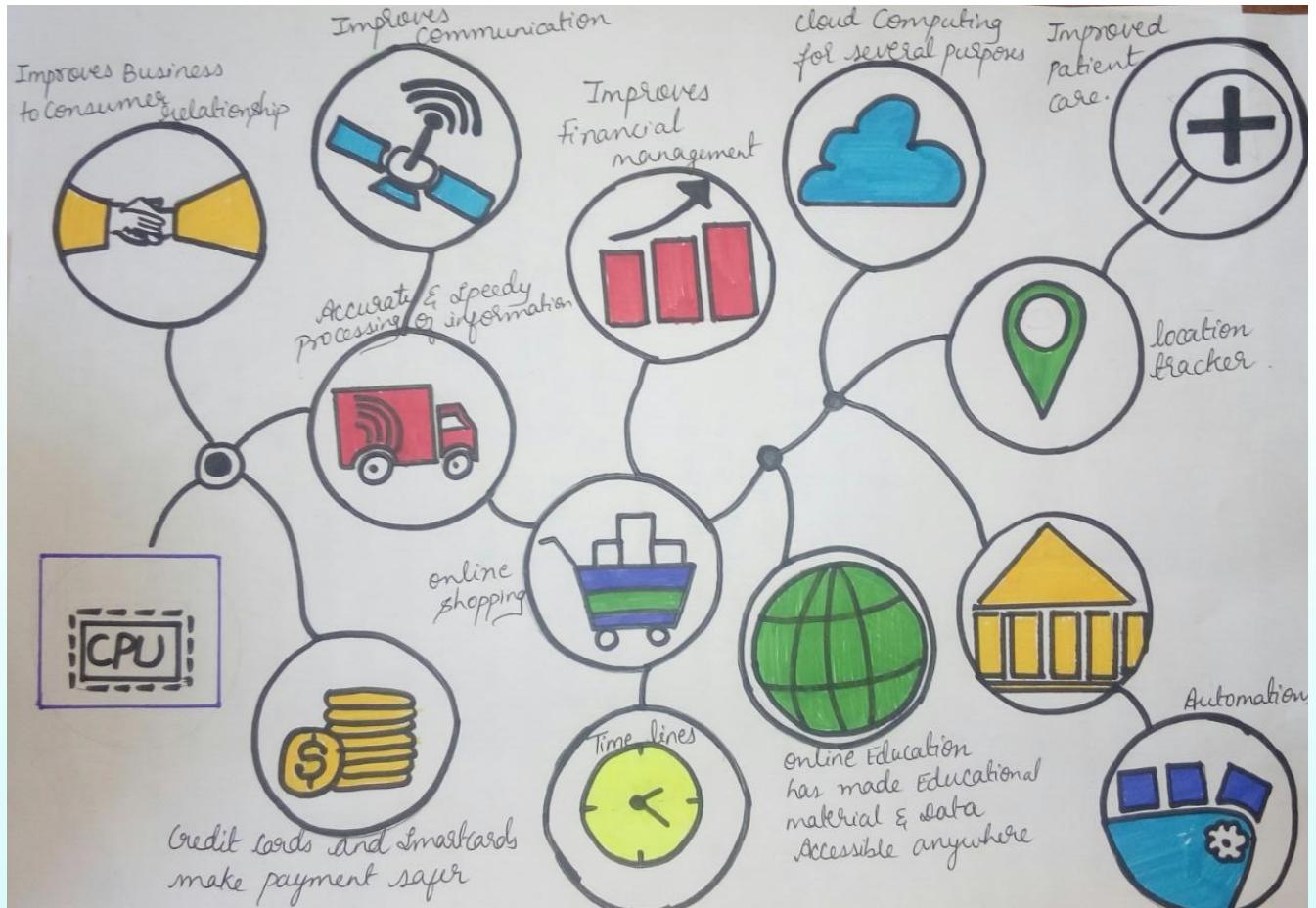
It only gets better, for IT companies around the world are encouraging women to enter computer science as they have a gender quota to fill.

So, don't be a little afraid to be ambitious. Want to enter the AI field? Learn Python. Interested in game design? Learn C++ or C#. Want to develop websites? Start experimenting with the various software oriented with t.

Go forth! The possibilities are endless!

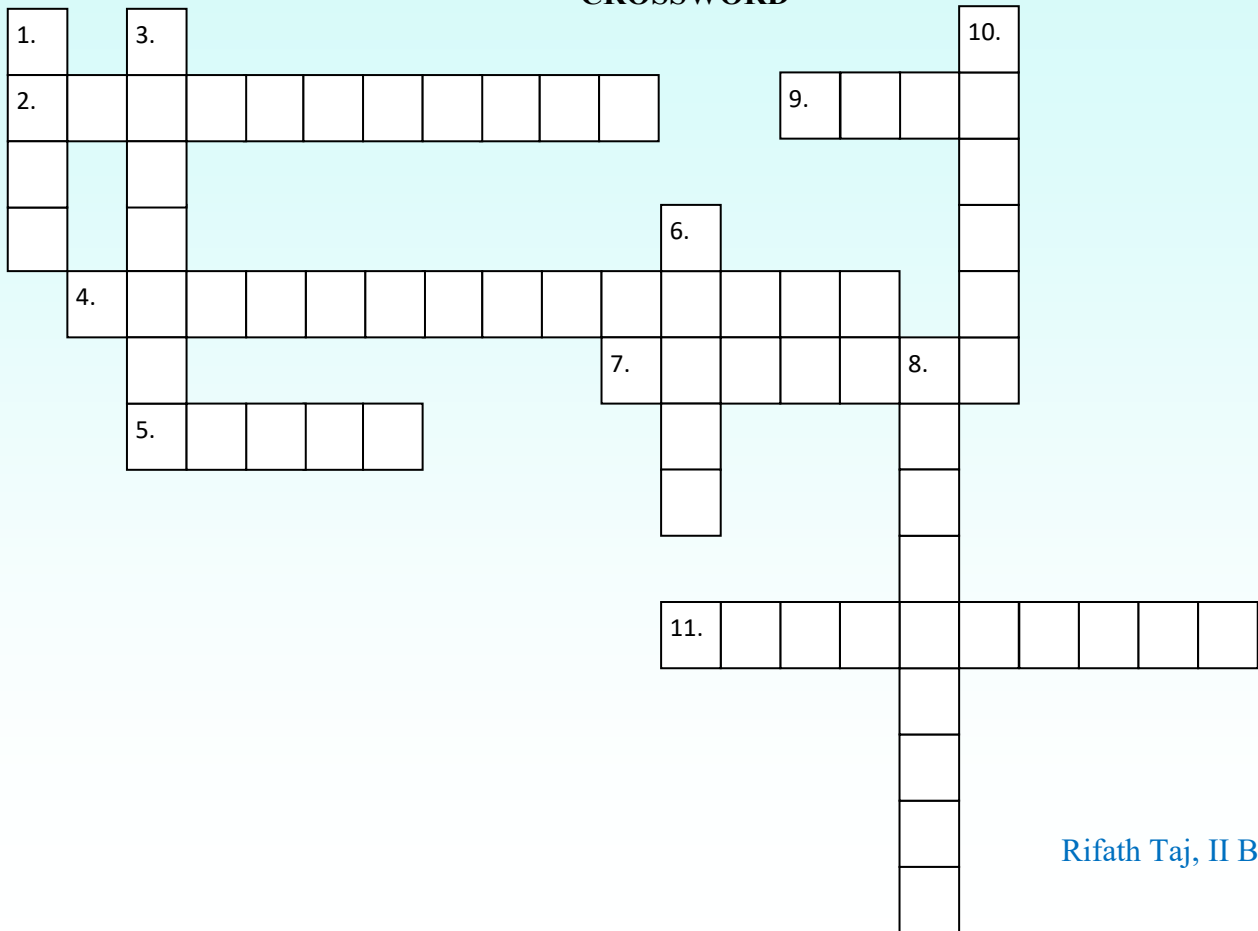
Meher Aisha, I BCA

## ADVANCEMENTS IN TECHNOLOGY



Priyanka Kumari, II BCA

## CROSSWORD



Rifath Taj, II BSc

### ACROSS:

2. \_\_\_\_\_, the daughter of an English poet, is considered to be the first female programmer. (3,8)
4. in 1972, C programming language was developed by \_\_\_\_\_ - \_\_\_\_\_. (6,1,7)
5. \_\_\_\_\_ is the function used in C programming when an input from the user is required. (4)
7. The 1st high-level programming language developed by IBM. (7)
9. The name of this programming language is also a precious gem. (4)
11. \_\_\_\_\_ is the main programming language used by Apple for the iOS operating system. (10)

### DOWN:

1. Which programming language was first called Oak when it was first developed? (4)
3. The coders who study and write malware are known as \_\_\_\_\_. (7)
6. Which programming language is used to develop apps for iPhone ? (5)
8. In 1960's, low-level programming language using compiler were commonly called \_\_\_\_\_. (9)
10. Applications like Pinterest, Instagram and YouTube are built using which programming language ? (6)

### SOLUTIONS:

**Across:** 2. Ada Lovelace 4. Dennis M Ritchie 5. scanf 7. Fortran 9. Ruby 11. ObjectiveC

**Down:** 1. Java 3. Hackers 6. Xcode 8. Autocodes 10. Python

## **INCORPORATION OF TECHNOLOGY AND HEALTH IN MOBILE APPLICATIONS**

### **FITBIT**

Fitbit is an activity tracker, wireless and wearable technology. It measures the number of steps walked, heart rate, quality of sleep, steps climbed, calories burned, and other personal metrics involved in fitness. This activity tracker offers a website in mobile apps for iOS, Android and Windows 10 mobiles. The device can be synced via Bluetooth or through a computer running on windows or Mac OS using the Bluetooth USB dongle. It is a very useful technology for people who are concerned about their health and fitness.

### **GOOGLE NEWS**

Google News is a mobile phone application. It helps people get updated about day to day news. The working class population finds it more convenient and time-saving to access news via their phones rather than a physical newspaper.

### **GOOGLE ASSISTANT**

The Google Assistant is a virtual assistant powered by Artificial Intelligence and developed by Google that is primarily available on mobile and smart home devices. The Google Assistant can search the Internet, schedule events and alarms, adjust hardware settings on the user's device, and show information from the user's Google account.

[Kamala Santhoshi, I BCA](#)

## **THE GIRL I USED TO BE**

Just like the college changed me from a mere student, to the class representative, and now to the literary coordinator, I know that it has and will keep bringing miracles for all its students.

I remember how in the first semester the teachers used to ask me to talk loudly whenever I called out an answer. I owe a lot to this college, but mostly for helping me grow up into a confident woman from the scared little lamb I used to be.

During that first year, I would never have imagined that I would stand for and even get elected to be a student council member. I had teachers and friends who believed in me more than I did in myself, so the most important point to overcome anything is believing. Believe you can, and you will. Each one of us is a leader. Maybe not today, but definitely in the future. It does not matter if you are the loudest one in class, or the quite one in the corner, you are all going to be a leader someday.

A short message to all the students who would join the college, this is the start of a great journey, you will find yourself evolving into a better version of yourself. The lessons you learn here are for life. So hold tight and put on your seat belts, as you drive towards the future.

[Anjali S Nair, II BSc](#)



## THE GALLERY



**CERTIFICATE COURSE CONDUCTED FOR BCA STUDENTS**



**CAREER GUIDANCE CONDUCTED BY OUR ALUMNI FOR III BCA STUDENTS**

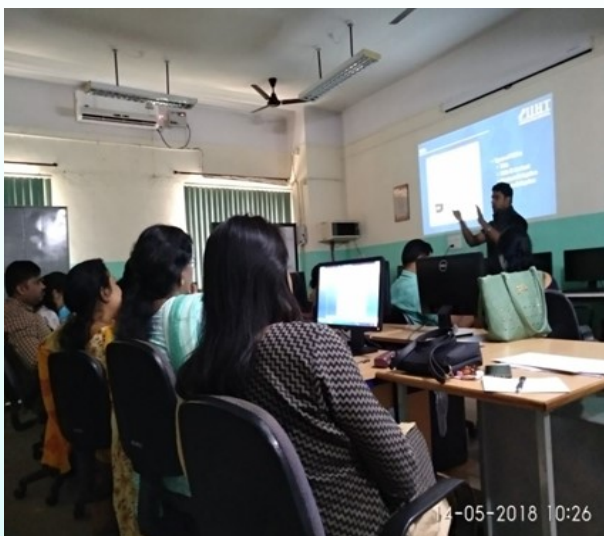


**AKSHITA AGARWAL AND SRIVEDA OF III BCA PRESENTED A PAPER ON "INDIAN START-UPS, THEIR CHALLENGES AND OPPORTUNITIES", DURING THE INTERNATIONAL CONFERENCE AT SJES COLLEGE AND WON THE BEST PAPER AWARD.**





**FIELD VISIT AT INDIAN INSTITUTE OF CAMPUS ON 10TH MARCH 2018**



**FACULTY DEVELOPMENT PROGRAMME CONDUCTED ON 5<sup>TH</sup> MAY, 2018  
“ CREATING EFFECTIVE PRESENTATIONS WITH ANIMATION ”**

## **STUDENT EDITORS**

**Meher Aisha, I BCA**

**Anjali S Nair, II BSc**



