



**B.M.S. COLLEGE OF ENGINEERING**  
Autonomous Institute, Affiliated to VTU



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

# SYNERGY

**Newsletter: July-Dec 2018.**

The **Protocol Club** of the Computer Science Department of BMSCE has conducted several events and workshops during July-December 2018. The success of these events and workshops and the positive feedback received from the students and faculty has increased the reputation of the club and also raised the bar for its future endeavors. Here is a brief overview of the events and workshops and also some other interesting articles.

## Events and Workshops

### Insync



**Date :** 18<sup>th</sup> September, 2018

**Venue** : Multi-Purpose Hall

**Conducted By** : Protocol Core Team

**Number of Participants** : 180

Insync 2018, formally introduced the Protocol club to the first year students of CSE. The former President of the club, Purbid, gave a report of the activities of the club in the previous year and also told about the plans of the club for the ensuing year. He also told about the opportunities Protocol would provide to all the CSE students. The event was attended by the former HOD, Dr. B G Prasad, and the Faculty Coordinator of Protocol, Mrs. Asha G R. This formal session was followed by various fun activities that the Core and planned for the first year. The event was loved by all who attended it and made them eager to become Protocol members.

## Linux and Networking Workshop



**Date** : 9<sup>th</sup> November, 2018

**Venue** : Classroom 5002, PG Block

**Student Coordinator** : Saifur Rehman

**Number of participants** : 25

This hands-on workshop made students familiar with the Ubuntu interface and the command line prompt and helped grasp the basic concepts of Linux and Networking. Information about various kernels and the advantages of using a virtual machine over a dual boot system was also provided in this session. Oracle Virtual Machine for Ubuntu was used to make the workshop interactive.

## Server-less Computing Workshop

**Date** : 17<sup>th</sup> November, 2018

**Venue** : CSE Lab

**Student Coordinators** : Aditi Awasthi

**Number of Participants** : 20

Conducted Aditi Awasthi, the participants were taught the advantages and disadvantages of this form of computing. The reasons for switching into server-less computing were explained,

along with information on various server-less frameworks currently available in the market. A hands-on experience was provided by using Apache OpenWhisk to write server-less functions. The workshop gained positive feedback from all the participants.

## Articles

### Nutanix Interview Experience

Here is Samrakshini R S sharing her experience when she appeared for an interview for Nutanix. The first round of the interview was conducted on HackerRank. With a time duration of an hour, two questions were to be solved, the first about merging intervals and the second was a snake and ladder problem. Only 14 members advanced to the next round.

The second round was the debugging round in which a C++ code which merged different lines from files into a single file was given. The candidates were supposed to debug the code and explain the errors. Samrakshini pointed out 6 errors which earned her a place among the 9 candidates who advanced to the next round,

Round 3 was an F2F Technical Interview round in which the candidates were given three different scenarios which they would solve by using various concepts learnt during their Computer Science course. Pleased with Samrakshini's answers to all the questions, she advanced to the final round along with 5 other candidates.

The final round of the interview was also a Technical Interview in which an unsorted array of numbers and a search element are given. An algorithm was needed to be implemented which gave the number of swaps required for the search to give the correct location. Candidates were given 30 minutes to solve the question. Samrakshini was able to solve it in 20 minutes.

Overall, Samrakshini describes the interview to be a truly rewarding experience.

### Bored with Rubik's cubes? Check out these !

Solving the same Rubik's cube again and again has no fun! There are In fact 45 different known varieties available that can make your cube time more interesting. A few of them being :

- ❖ **Pancake cube:** The name is mouth watering, but the cube is mind twisting. It consists about 27 layers of pieces arranged one above the other.



- ❖ **Geared Hex cube:** This cube has its own 'twist'. It's hexagonal in shape and is crossly arranged with similar pieces.



- ❖ **Spinning Dials cube:** In this cube Spinning dials are added to each side of the cube. These dials can further be shuffled. Hence, This makes its difficulty level almost out of this world.



- ❖ **Krystian's cube:** It is a new type of twisty puzzle cube. Its turn is enabled when a  $2 \times 2 \times 2$  piece is turned by 45 degrees.



- ❖ **Youcube:** As the name goes, the cube is U in shape, Hence Its more of 2 cuboids joined by a small cube at the bottom. It costs about \$268 to buy this cube.



- ❖ **Mirror cube:** This is a very famous cube. It is a Rubik's cube with pieces of different sizes but same color. Its solution is almost same as the Rubik's cube solution.



- ❖ **Axis cube:** Unlike Rubik's cube, this cube doesn't have regular square cuts to twist the puzzle. It has cross axes which makes the pieces triangular in shape, which are mostly isosceles.

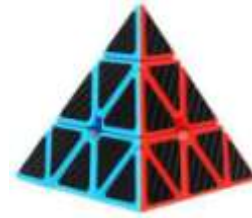


- ❖ **Ghost cube:** It is a combination of mirror cube and axis cube. It has many more pieces in an irregular fashion than the axis cube.



- ❖ **Pyramid cube:** Again as the name says, It is in the shape of a pyramid. This also has triangular

- ❖ pieces but all of them are equilateral unlike the axis cube



*Happy solving! 😊*

## Exemplary Students

### Siddharth Pai



Siddharth is a third-year Computer Science student. Apart from being an all-round exemplary student, he is a Placement Co-coordinator and also the Student ambassador for GE Appliances. He is an active participant in many of the events held on and outside campus, and was one of the organizers of Phase Shift. Passionate about technology, he regularly attends workshops and conferences on Computer Science. It is also noteworthy that he has taken the Microsoft Certified Course on Security Fundamentals. Unlike most people, he is also interested in mathematics, and participates in events held by Pentagram, of which he has won one held in 2017.

We wish him the best for all his future endeavors.



## Shlok Sablok



Shlok Sablok, a Red Bull student brand manager in BMSCE has successfully organized numerous events in college, starting from Women's Day Hack to appreciate all the strong and beautiful women around us to fun events like Red Bull Bucket Ball, which was a massive hit among the students in BMSCE. Being an extremely active and popular brand in college, Shlok had recently launched the Red Bull ummer can, the coconut edition which is a limited edition can and also a must have in this scorching heat. Also, he has done several hacks for our the hostilities, like the Red Bull exam hack to help them stay up and focus all night. He had successfully organized an event, Red Bull River Runes, in the college's annual tech fest, Phaseshift and along with Red Bull, Shlok is an active participant in UTSAV as well.

Right from seeding cans for the sports teams to organizing "shuttle up " for all the budding shutters out there, Shlok has always been an enthusiastic part of this college

He has also been nominated for the best student brand manager (SBM) hack for his Red Bull vending machine hack. BMSCE is privileged to have students like him.

## Protocol Newsletter 2018

This newsletter was created by Protocol team

under the guidance of Prof. Asha G R

and encouraged by the Head of the CSE Department  
Dr. Umadevi