What's Up

CSE Department Magazine

Issue: December, 2017

Department Accomplishments

Student Achievements

- Students of Second Year – Deven Sharma and Vivek Mahajan won Finals of Cricket Tournament SUMMIT 2K17 in Pune, organized by MIT WPU

- Rushikesh Sapkal Won the Football match organized at Kalavihangam, 2017 and participated in MAEER's Mit Group of Institutions and Dr. Vishwanath Karad MIT World Peace University, Pune

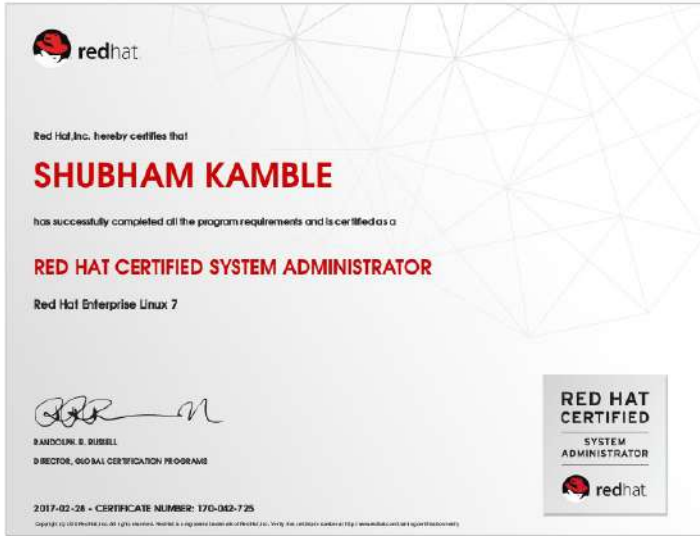- Ms Aishwarya Bampalwar won the Rangoli competition at Kalavihangam, 2017

Success @ RedHat Academy

Mr Shubham Kamble, Mr. Yash Bhatia and Mr. Shreyas Santosh Pattewar have successfully completed Red–Hat Training and were certified as

'**Red Hat Certified System Administrator**'

Red Hat,Inc. hereby certifies that

SHUBHAM KAMBLE

has successfully completed all the program requirements and is certified as a

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Red Hat Enterprise Linux 7

RANDOLPH. R. RUSSELL
DIRECTOR, GLOBAL CERTIFICATION PROGRAMS

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

2017-02-28 - CERTIFICATE NUMBER: 170-042-725

Red Hat,Inc. hereby certifies that

SHREYASH SANTOSH PATTEWAR

has successfully completed all the program requirements and is certified as a

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Red Hat Enterprise Linux 7

RANDOLPH. R. RUSSELL
DIRECTOR, GLOBAL CERTIFICATION PROGRAMS

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

2017-02-28 - CERTIFICATE NUMBER: 170-042-709

Red Hat,Inc. hereby certifies that

YASH .S. BHATIA

has successfully completed all the program requirements and is certified as a

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Red Hat Enterprise Linux 7

RANDOLPH. R. RUSSELL
DIRECTOR, GLOBAL CERTIFICATION PROGRAMS

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

2017-02-28 - CERTIFICATE NUMBER: 170-042-717

Success @ NPTEL Online Courses

- 23 Students successfully completed "Introduction to Programming in C" course at NPTEL

Faculty Mentor : Ms. Preeti Mishra

PRATIK PRAKASH VAIDYA	Successfully completed	
MANASI RAJENDRA BORDE	Elite	
SANSKAR SUBHASH MANE	Successfully completed	
NAMAN CHAKRAWARTI	Elite	Topper of 5% in this course
DEVEN SHIVKUMAR SHARMA	Elite	
OMKAR SANJAY BAHIWAL	Elite	Topper of 5% in this course
KALPAK WABLE	Elite	
APOORVA MANOJ DESHMUKH	Successfully completed	
RUSHIKESH LAXMIKANT SHETE	Elite	
PRATIKSHA PRALHAD SOLANKE	Successfully completed	
SAURABH GADEKAR	Successfully completed	
SWATI KISHAN MULJE	Elite	
ANUSHKA KULKARNI	Elite	
PATHIKA TATKONDWAR	Successfully completed	
RENUKA ABHAY TERKHEDKAR	Successfully completed	
SURYA DEV SINGH JAMWAL	Elite	
TEJAL BHALCHANDRA MULAVEKAR	Successfully completed	
SUYOG PANDURANG MAHAJAN	Elite	
VISHAKHA SIDDHARTH SARDAR	Elite	
PRAVINA RAUT	Elite	
POONAM GOPAL THOMBRE	Successfully completed	
MANALI TAWAR	Elite	
SHIVANGI SINGH	Successfully completed	

NPTEL Online Certification — Elite

This certificate is awarded to
MANASI RAJENDRA BORDE
for successfully completing the course
Introduction To Programming In C
with a consolidated score of 62 %

| Online Assignments | 24.25/25 | Proctored Exam | 38/75 |

Total number of candidates certified in this course: 2992

Jul-Sep 2017
(8 week course)
Indian Institute of Technology Kanpur
In partnership with NASSCOM

NPTEL Online Certification — Elite

This certificate is awarded to
SUYOG PANDURANG MAHAJAN
for successfully completing the course
Introduction To Programming In C
with a consolidated score of 60 %

| Online Assignments | 25/25 | Proctored Exam | 34.5/75 |

Total number of candidates certified in this course: 2992

Jul-Sep 2017
(8 week course)
Indian Institute of Technology Kanpur
In partnership with NASSCOM

NPTEL Online Certification — Elite — TOPPER

This certificate is awarded to
OMKAR SANJAY BAHIWAL
for successfully completing the course
Introduction To Programming In C
with a consolidated score of 85 %

| Online Assignments | 25/25 | Proctored Exam | 60/75 |

Total number of candidates certified in this course: 2992

Jul-Sep 2017
(8 week course)
Indian Institute of Technology Kanpur

NPTEL Online Certification — Elite

This certificate is awarded to
MANALI TAWAR
for successfully completing the course
Introduction To Programming In C
with a consolidated score of 65 %

| Online Assignments | 22.5/25 | Proctored Exam | 42.5/75 |

Total number of candidates certified in this course: 2992

Jul-Sep 2017
(8 week course)
Indian Institute of Technology Kanpur
In partnership with NASSCOM

NPTEL Online Certification

This certificate is awarded to
PRATIKSHA PRALHAD SOLANKE
for successfully completing the course
Introduction To Programming In C
with a consolidated score of 53 %

| Online Assignments | 25/25 | Proctored Exam | 28/75 |

Total number of candidates certified in this course: 2992

Jul-Sep 2017
(8 week course)
Indian Institute of Technology Kanpur
In partnership with NASSCOM

NPTEL Online Certification

This certificate is awarded to
RENUKA ABHAY TERKHEDKAR
for successfully completing the course
Introduction To Programming In C
with a consolidated score of 49 %

| Online Assignments | 25/25 | Proctored Exam | 23.5/75 |

Total number of candidates certified in this course: 2992

Jul-Sep 2017
(8 week course)
Indian Institute of Technology Kanpur
In partnership with NASSCOM

- 7 students successfully completed "Programming, data structures and algorithms in Python course"

Faculty Mentor: Ms. Preeti Mishra

ABHISHEK MANDVE	Elite
PRAVIN PRAKASH DAKE	Elite
PAWAN GOUTTI	Elite
AKSHATA SAHEBRAO SIRSAT	Successfully completed
NIHAL SINGH RAINU	Elite
SHUBHAM DNYANESHWAR BHOSLE	Elite
PRASAD SOMNATH MITKARI	Successfully completed

- 10 Students Successfully completed course of "Introduction to Modern Application Development"

Faculty mentor: Mr. Nihit Agrawal

OMKAR SANJAY BAHIWAL	Elite
PRATIK PRAKASH VAIDYA	Successfully completed
TARANDEEP SINGH CHHABDA	Elite
KASHYAPI ABHIJEET DHARURKAR	Successfully completed
POOJA ATUL ZINGADE	Elite
SONALI RAJENDRA ZAGADE	Successfully completed
MAZHARUDDIN QUTBUDDIN SHAIKH	Elite
RUTUJA RAMJI BANSWAL	Elite
PRANAV PRAVIN SHETTY	Elite
ABHISHEK BURKULE	Elite

Department Accomplishments

Faculty Achievements

- **Dr**. **Saurabh Deshmukh** won Best Paper of the Session Award at 3rd International Conference on Computing, Communication, Control and Automation (ICCUBEA–2017) organized at Pimpri Chinchwad College of Engineering, Pune. Title of paper "Performance Evaluation of Audio Descriptors using Weight Assignment in Sound Information Retrieval Applications"

- **Ms**. **S.B**. **Bangar**, successfully completed "Foundation Skills in IT" a faculty training program supported by DTE; NASSCOM for teaching staff from IT, CSE; Electronics fields of Engineering. The FSIT program was organized by Govt. College of Engineering. It has been developed to facilitate the acquisition of the foundation skills required in IT industry today.

- **Ms. Bharti Choudhari, Mr. Nihit Agrawal and Ms. Preeti Mishra** successfully completed and earned Honour Code Certificates for following courses from IITBombayx :

   1. IITBombayX – CS101.1x : Programming Basics

   2. IITBombayX – CS101.2x: Object Oriented Programming

   3. IITBombayX – ET611Tx: Pedagogy for effective use of ICT for school teachers

   4. IITBombayX – ET612Tx: Pedagogy for effective teaching learning of CS in Schools

- Ms Preeti Mishra received Elite Certificate for NPTEL online course"Outcome Based Pedagogic Principles for Effective Teaching"

- Mr. Nihit Agrawal and Ms Preeti Mishra Successfully mentored the NPTEL online courses of – Programming, Data Structures and Algorithms using Python, Introduction to Programming using C and Modern Application Development, and received certificate from NPTEL, in all 40 students got ccertified.

Technology News

The rise of cryptocurrency

If you hadn't already bought into the bitcoin craze, 2017 became the year you wish you had. Cryptocurrency grabbed our attention when hackers demanded it as ransom following the HBO hack, and as payment to unlock computers infected with WannaCry ransomware.

But that was only the beginning. Prices for bitcoin and ether shot way, way up, and pretty much everyone and their grandparents started to get in on the cryptocurrency market. Big banks bought in with the start of futures trading, and exchanges like Coinbase

were even forced to remind everyone to just chill for a second. Someone even started selling cryptocurrency sweaters.

Tesla, and self-driving tech

This was the year self-driving cars became real. Sure, various forms of the tech existed before 2017, but over the

 course of the last 12 months we saw supposedly fully autonomous vehicles actually hit the streets of a major U.S. city with no driver behind the wheel. That is a big deal.

Tesla, of course, has grabbed headlines with its Model S, Semi, and new Roadster, but when it comes to autonomous tech, Waymo, Uber, and Lyft are all nipping at the company's heels.

Self-driving cars are here, and they're not going away. The technology developed in 2017 will have a profound impact on how goods and people travel around the country in the future.

Cool Tips for Smart Phones

1. Digitise your documents

Thanks to the increasing quality of smartphone cameras, you no longer need a scanner to get all of your paper files up into the cloud. Evernote, Google Drive and CamScanner are three of several apps that can do the job.

2. Identify songs in an instant

You can use apps such as Shazam or SoundHound to work out what you're listening to, but you don't have to: Google Now, Siri and Cortana can all respond to the voice command "what song is this?".

3. Put your contact details on your lock screen

If someone else finds your phone, will they be able to get it back to you? Put your details on the lock screen to make sure: the option is in Settings on Android, Health on iOS and on Windows Phone you'll have to edit the wallpaper.

4. **Get automatic weather alerts with IFTTT** (**Android and iOS**)

Set up a recipe on IFTTT (or the accompanying mobile apps) and you can get alerts sent straight to your phone if the weather's looking bad – handy if rain or snow means you'll need to leave for work earlier.

5. **Fix the Google Calendar time zone** (**Android and iOS**)

Delve into the Google Calendar app settings and it's possible to fix the time zone (rather than have it update every time you travel somewhere). That way, you'll always know when something's happening at home.

6. **Turn Wi-Fi off with your voice**

The future is here: Siri, Google Now and Cortana let you turn off Wi-Fi with your voice. Just launch your app of choice and say "turn off Wi-Fi" to achieve the desired result. It works with Bluetooth as well).

7. **Email huge files from your iPhone (iOS)**

iOS 9.2 added Mail Drop to iPhones, so when you email a large file from your phone you'll get a prompt to use it. Instead of attaching the file, Mail uploads it to iCloud, with the download link valid for 30 days.

8. **Control your computer with your phone**

A host of apps, from Spotify to YouTube, have some kind of remote control functionality built in. If you want overall control of your laptop or desktop, take a look at the likes of Unified Remote and Alfred.

9. **Change the keyboard (Android and iOS)**

Both Android and iOS now support the use of third-party keyboards, which can do everything from add extra emojis to apply some neural network processing power to your phone's autocorrect feature.

10. **Find out where all your battery power is going**

All the major smartphone OSes now have detailed readouts of which apps are using up most of your battery juice, so have a

root through the Settings app to find the worst offenders and uninstall them if necessary.

SOPHIA –An Intelligent Humanoid Robot

Sophia is a social humanoid robot developed by Hong Kong–based company Hanson Robotics. Sophia was activated on April 19, 2015 and made her first public appearance at South by Southwest Festival (SXSW) in mid–March 2016 in Austin, Texas, United States . She is able to display more than 62 facial expressions.

Sophia has seven robot humanoid "siblings" who were also created by Hanson Robotics . Fellow Hanson robots are Alice, Albert Einstein Hubo, Bina48, Han, Jules, Professor Einstein, Philip K. Dick Android, Zeno, and Joey Chaotic.

FEATURES–

Cameras within her eyes combined with computer algorithms allow Sophia to see. She can follow faces, sustain eye contact, and recognize individuals. She is able to process speech and have conversations using Alphabet's Google Chrome voice recognition technology and other tools. Around January 2018 Sophia was upgraded with functional legs and the ability to walk.

Sophia is conceptually similar to the computer program ELIZA, which was one of the first attempts at simulating a human conversation.The software has been programmed to give pre-written responses to specific questions or phrases, like a chatbot. These responses are used to create the illusion that the robot is able to understand conversation, including stock answers to questions like "Is the door open or shut?" The information is shared in a cloud network which allows input and responses to be analysed with blockchain technology.

David Hanson has said that Sophia would ultimately be a good fit to serve in healthcare, customer service, therapy and education.[] Sophia runs on artificially intelligent software that is constantly being trained in the lab, so her conversations are likely to get faster, Sophia's expressions are likely to have fewer errors, and she should answer increasingly complex questions with more accuracy.

Sophia the robot, **uses artificial intelligence technology**, a platform, and a concept shared by government, industry, and academia. AI is not an individual, object, or sentient being. And AI definitely doesn't have a gender.

Paying with Your Face

he 360-Degree Selfie

Face-detecting systems in China now authorize payments, provide access to facilities, and track down criminals. Will other countries follow?

Inexpensive cameras that make spherical images are opening a new era in photography and changing the way people share stories.

Botnets of Things

Reinforcement Learning

The relentless push to add connectivity to home gadgets is creating dangerous side effects that figure to get even worse.

By experimenting, computers are figuring out how to do things that no programmer could teach them.