॥ ज्ञानमयो भव ॥

PROGRESSIVE EDUCATION SOCIETY

Pune - 5

Modern College of Engineering

Pune - 5

Department Of Computer Engineering

The Computer Express

2019-20

Term 1

Principal's Message

Dr. Mrs. K. R. Joshi

You are getting your education in an institution where there is healthy atmosphere for your overall development and many good things that shall help you in your future and this is only because of co-operative culture of students, teachers, faculty members and the management of institution.

The aim of this institute is to develop not just top-quality engineers but also well-developed persons. Our motto therefore is "the joy of excellence in a world of high technology".

As professionals you are required to gain knowledge and use it effectively even when you are exposed to pressure. You can surely face the challenges in the world with great courage if you can manage your valuable time and set your priorities, by having healthy competition and team spirit. Working in a team, effectively yields best results, even under tight deadlines.

I am sure that all the students of P.E.S. Modern College of Engineering will fulfill the expectations and simultaneously develop healthy atmosphere where you can enjoy various extracurricular activities organized during the years at the institute.

HOD's Message

The Department is committed to nourish its students in to highly skilled and proficient engineers and it has produced hundreds of professionals and has established a name for itself in the country and abroad. "It gives me pride and pleasure to introduce "The Computer Express" the depart-mental News Letter for the year 2017-18 term-II and I hope you will enjoy exploring our contributions in technical, non-technical activities and achievements in the field of Computer Engineering".

Prof. Dr. Mrs. S. A. Itkar

PES MODERN COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

"The Computer Express "- 2019-20

OUR VISION

"To achieve excellence in the field of computing through quality education

OUR MISSION

1. To develop promising professionals in the field of computing
2. To provide exposure to emerging technologies and inculcate ethics.
3. To strengthen association with alumni and industry.

PROGRAM SPECIFIC OUTCOMES

1. The ability to understand, analyse, develop and evaluate system based on various algorithmic approaches.
2. The ability to pursue career in IT industries, to become an entrepreneur and have zest for higher studies.
3. The ability to solve problems using engineering principles, tools & techniques.

ISR ACTIVITIES

Management Skills by Chhatrapati Shivaji Maharaj: -

The session was held on 29th August 2019 at Mechanical Seminar Hall. The speaker Mr. Saurabh Karade a researcher on history taught the management skills that are required for the students in their educational life and skills that were explained from the life of Chhatrapati Shivaji Maharaj.

Plastic – waste free India Campaign: -

The session was held on 18th September 2019. The main objective was to spread awareness to avoid the use of plastic and spread the message in society how the plastic is dangerous to environment. This was the first workshop after ban of plastic usage.

Paper Bag Making: -

The session was held on 21st September 2019. The activity was held in the central library. The main objective of the activity was to clean the environment with use of paper bags instead of plastic bags. This was the second workshop held after abolition of plastic usage. Students got to learn how to make paper bags in this activity.

Wall Magazine competition on the theme "Say No to one use Planet": -

In this event a cycle rally and poster competition were held. Students were enjoyed cycle rally and also gave message for avoid air pollution with use of cycles. Students also participated in poster competition and they have created excellent posters. Students have shown importance of cleanness of city, street and environment through Posters.

Visit to Anand Dham Old Age Home: -

This activity was held on 3rd October 2019 at Anand Dham Old Age Home. The main objective behind this activity was to sensitize students to social work, know about predicament situations and problems of those people and also to Experience the joy of serving and being with them. Students were told about the Ashram's history and today there live around 15 of aged people under the roof of "Ananddham Vrudhashram". The outcome the activity was that in spite of facing so many hardships those aged people have brave hearts and are still trying to find endless ways to be happy to live.

ACM ACTIVITIES

INVICTA2K19: -

INVICTA2K19 was organized on 25th September 2019. The objective of INVICTA2K19 is to provide exposure to students regarding organizing and planning a state level event .The event was state level event with 400+ participations. Two sub events were planned: Run Time Terror (Coding based event) & Memespace (technical creativity-based event). Students were able to improve their leadership and organization skills as well as technical skills.

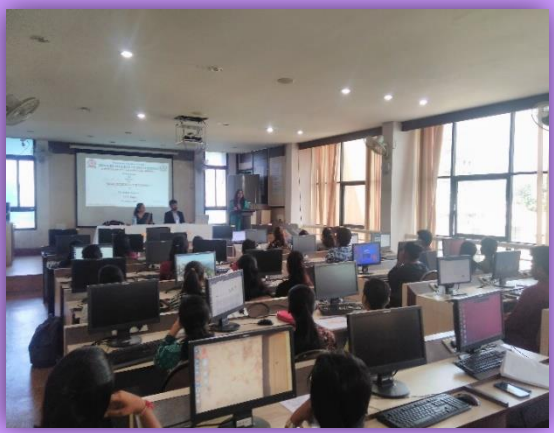
TCS GUEST LECTURE

Guest Lecture on Blockchain Technology: -

The lecture was organized o 4th October 2019 to spread awareness about use of distributed databases in Blockchain technology. Session was delivered by industry expert Mr. Nakul Agarwal, TCS, Pune. Through this lecture student are able to

1] Explain what is Blockchain Technology?

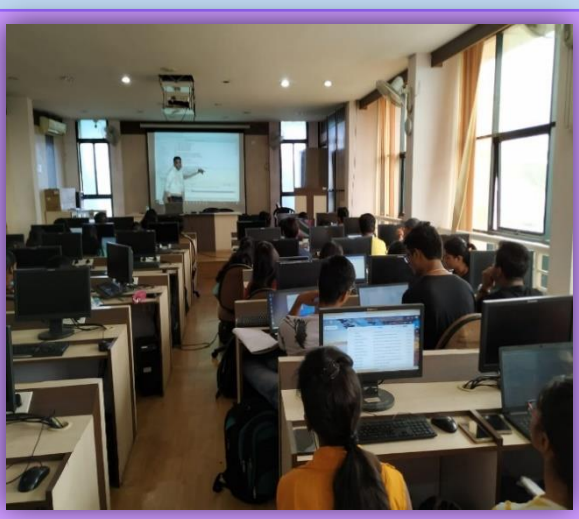
2] How Blockchain Technology used in an incorruptible digital ledger of economic transactions like bitcoins.



CSI ACTIVITIES

Hands-on Session to implement Industry Application using Java Programming: -

The session was held on 18th September 2019 to learn about the implementation of industry application using Java and database. Mr. Monesh explained how the automation is done. He explained industry application and explained a database application connected to mail server through Java. All participants implemented the application with Mr. Monesh.



Opportunities in Artificial Intelligence and Machine Learning domain: -

The lecture was held on 20th September 2019 to make students aware about of latest trends used in IT industry related to Artificial Intelligence and Machine Learning domain. Expert elaborated where students can practice coding for interviews. How their company helps students by taking different activities and mini project development and how that helps students for interview, internships and future. He then discussed in brief about machine learning and artificial intelligence, its use and applicability.

FOSS ACTIVITIES

Session on "Go Language": -

The session was held on 17th September 2019 to understand programming in Go language. The speaker explained what are the recent languages used in industry which are in scope. Also, how go is simpler to learn and code. He showed demo of how to code in Go and what are the appropriate syntaxes to be used. Through this session students understood the basic concepts of Go language.

Mini Project Competition: -

The competition was held on 12th October 2019. The objective behind the competition was to inculcate presentation and communication skills by demonstrating implemented project work. Students got open platform to present their mini projects. They got guidelines and assessment of projects by industry personnel. 20 projects groups from SE, TE and BE participated in competition. Through the competition participants got awareness about fast growing technologies and suggestions for converting mini project into major practical usages.

Placements 2019-2020

52 Students from Department of Computer Engineering have been successfully selected by the esteemed organizations metioned below. **Yash Bhandare**(BE A) has been offered highest package of 30Lac in the firm "**CrowdWorks**".

This achievement would have been impossible if it weren't for our brilliant TPO. Apart from that, it is all about setting yourself apart and going the extra mile by undertaking various projects, internships and seeing them through to the end.

-Yash Bhandare

(Placed at **CrowdWorks** Package : **30 Lac**)

I strongly feel that this would not be possible without the support of our professors and our excellent TPO. Along with their guidance it's also the multiple internships and projects which helped me during my interviews.

- Steve Mendis

(Placed at **Persistence** Package : **8.4 Lac**)

I got a Job as a Digital Profile in TCS via their coding competition Codevita. The interview process required quite a good set of technical as well as soft skills. I'm thankful for all the help I got from faculty, seniors and my family.

- Rohan Hirekerur (Placed at **TSC** Package : **7.6 Lac**)

Tech Speaker: Pranav Mistry

Pranav Mistry is a renowned scientist and inventor. Mistry's contribution to the fields such as Wearable Computing, Augmented Reality and Gestural Computing puts him in the elite list of pioneers and inventors that shape the future of digital world.

For his contribution to the advancement of digital computing technologies, Mistry has been honored by many prestigious international awards. He was awarded the 2009 'Inventor of the Year' Award by Popular Science. He was also named to the MIT TR35 as one of the top 35 innovators in the world under the age of 35. In 2010, he was named to Creativity 50 - the list of top 50 creative people in world. Mistry has been listed as one of the 15 Asian Scientists to Watch by Asian Scientist Magazine. Recently, GQ India listed him as one of the most powerful Digital Indians and was named among the 37 Indians of Tomorrow by India Today. Mistry has been called "one of ten, best inventors in the world right now" by Chris Anderson. World Economic Forum honored Mistry as one of the Young Global Leader 2013. Media across the world has interviewed and covered Pranav's work.

Mistry's educational background spans across various disciplines. He has studied Computer Science and Engineering, Design, Architecture, Media Arts and Sciences from some of the best institutions in the world. In past, he has been part of organizations such as MIT, IIT Bombay, CMU, NASA, UNESCO, Google, Microsoft, Japan Science and Technology, to name a few. At present, Mistry serves as the head of Think Tank Team and Global Vice President of Research at Samsung, one of the world leaders in consumer electronics companies. In his current role he is leading research and development of Samsung's future products.

Inventor, Designer and Engineer from heart, Pranav Mistry is best known for his inventions of SixthSense and Samsung Gear. In 2009, Mistry introduced SixthSense - wearable gestural computing technology to the world during TED2009 talk. Since then, he is one of the most watched TED speakers (more than 20 million views) on TED. Among some of his other work, Mistry has invented Mouseless - an invisible computer mouse; SPARSH - a novel way to copy-paste data between digital devices; Quickies - intelligent sticky notes that can be searched, located and can send reminders and messages; Blinkbot - a gaze and blink controlled robot; a pen that can draw in 3D; and a public map that can act as Google of physical world and many more.

Pranav holds several patents and has published many research papers in various academic conferences. In September 2013, Mistry introduced Samsung Gear smartwatch during the IFA in Germany. Samsung Gear is considered the pioneer in wearable computing devices. His research field include Wearable Computing, Augmented Reality, Ubiquitous Computing, Gestural Interaction, Artificial Intelligence, Machine Vision, Collective Intelligence and Robotics.

CHANDRAYAAN-II

What makes Chandrayaan 2 special?
First space mission to conduct a soft landing on the Moon's south polar region.
First Indian expedition to attempt a soft landing on the lunar surface with home-grown technology.
First Indian mission to explore the lunar terrain with home-grown technology.
Fourth country ever to soft land on the lunar surface.

Chandrayaan 2 is an Indian Space Research Organization (ISRO) mission comprising an orbiter and a soft lander carrying a rover, scheduled to launch to the Moon in July 2019. The primary objective of Chandrayaan 2 is to demonstrate the ability to soft-land on the lunar surface and operate a robotic rover on the surface.

Scientific goals include studies of lunar topography, mineralogy, elemental abundance, the lunar exosphere, and signatures of hydroxyl and water ice.The lander can communicate directly to the Indian Deep Space Network, the orbiter, and the rover. The lander will carry a camera, seismometer, thermal profiler, Langmuir probe, and a NASA-supplied laser retroreflector.

Facts in Brief

Launch Date: 2019-07-22	
Launch Vehicle: GSLV-MkIII	
Launch Site: Sriharikota, India	
Mass: 3850 kg	
Nominal Power: 1 000 W	
ISRO(India)	
Planetary Science	

MISSION PROFILE

Chandrayaan 2 was launched on 22 July 2019 at 9:13 UT (2:43 p.m. Indian Standard Time) from Satish Dhawan Space Center on Sriharikota Island on an ISRO Geosynchronous Satellite Launch Vehicle (GSLV) Mark III. The lander-orbiter pair went into an initial elliptical.The pair entered lunar polar orbit on 20 August. The lander and orbiter separated on September 2. The orbiter evolves into a 100 km altitude circular polar orbit and the Vikram lander maneuvered into a 30 x 100 km orbit with a plan to land on the surface in the high latitude areas near the south pole, between two craters, Manzinus C and Simpelius N, on 7 September between about 1:30 and 2:30 a.m. Indian local time (Sept. 6, 20:00-21:00 UT).Contact was lost during the descent at an altitude of about 2.1 km, the data are being analyse.
Spacecraft image credit ISRODescent at an altitude of about 2.1 km, the data are being analyzed. The orbiter portion of the mission is planned to last 1 year. The rover was to be deployed using a ramp shortly after landing. The lander and rover portions of the mission were planned for 14-15 days, one period of lunar daylight.

Achievements

Shraddha Kadgi earned Elite Gold badge in interpersonal NPTEL skills course.

Student

Mrs. Mrunal Arkadi earned Elite Silver badge in NPTEL technical English for engineers course.

Staff

Academic Toppers

B.E. Toppers:-

RUPADE ADITI RAHUL - 9.64

KULKARNI PAYAL NITIN - 9.50

CHOUDHARY SEEMA RAMESH - 9.36

T.E. Toppers:-

DHARANE ATHARVA RAJESH - 8.80

NIRGUDE ANAGHA ASHOK - 8.78

KULKARNI PHANI RAJESH - 8.76

S.E. Toppers:-

BELSARE SWARALI HEMANT - 9.14

LAMKHADE MITALI SANDIP - 9.06

DESHPANDE VEDANT NITIN - 9.02

Newsletter Team

Chaitrali Talekar

Rajratnam Shetty

Aishwarya Joshi

Shriya Deshpande

Akanksha Bankar

Amogh Nanal

Pallavi Bankar

Uma Jain

Kasturi Disale

Nishant Daware