

coffee & CODE;

an initiative by **Department of Computer Engineering**

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Computer Department's Vision

To be recognized globally, as a department which provides quality technical education that eventually caters to helping and serving the community.

Computer Department's Mission

- 1) To develop human resources with sound knowledge in theory and practical of computer science and engineering.
- 2) To motivate the students to solve real world problems to help the society grow.
- 3) To provide a learning ambience to enhance innovations, team spirit and leadership qualities for students.



Shiv Khera
Author,
Motivational Speaker,

Designed By:

Mr. Robin Patoliya
Mr. Ashutosh Jena

Faculty Coordinators:

Mrs. Hezal Lopes
Mr. Sridhar Iyer



Winners dont do different things,they do things differently



Departmental Activities

Workshop conducted on “*Internship awareness cum Overview of Machine Learning*”

Conducted on : 30th January, 2019

Venue: First Floor , Seminar Hall

Time : 1 pm to 2 pm

Target Audience: Computer Engineering Pre Final and Final Year Students

Aiming to provide an intense training on Internships at undergraduate level for college students, a one-hour workshop on ‘Internship Awareness’ was held on January 30, 2019 at Universal College of Engineering by Internship Cell of Department of Computer Engineering. (Hall- 212 at 1pm)

The purpose of the workshop was to get students to know more about the internships and different opportunities for supporting and expanding their career in Engineering.

The seminar was conducted by three interns Jeet Patel, Nikunj Patel and Rishikesh Gadkari. All the students from second year and third year attended the seminar.

Workshop participants identified several key contextual factors to be taken into account when thinking about the Internship, Importance about the Internships, how to apply for it and what are the factors to be taken into consideration like Location, Personal interest, Availability etc. The list of websites was provided to the students where they can apply for the Internships.



The interns told about their experience that they gained during Machine Learning Internship cum workshop. It was a paid internship which helped them gain real time experience and learned professional values and ethics. The interns explained about the application that they made in the internship. They made stock market prediction application. They showed the predicted values and the original values with there being only 0.1 % difference between the predicted amd original values.

The seminar was ended by giving more stress on the importance of doing an internship for Jobs and Future studies.

Workshop conducted on "Pulse Diagnostic Camp"

Conducted on : 19th January, 2019

Venue: Ground Floor , BCR

Time : 10 Am

Target Audience: Students and Staff

CSI student's chapter of Universal College of Engineering organized Pulse Diagnosis Camp which was conducted on 19th January, 2019. Students as well as Professors attended this camp that was conducted in the BCR.

This Camp was conducted by Dr. Abhinav Choudhary. The medical check-up was done, following which the required treatment module was explained. The response by the group was positive and the camp was deemed successful.



Workshop conducted on “R Programming”

Conducted on : 24 th January 2019

Venue: Lab 517

Time : 11:00 am to 1:00pm

Target Audience: Students and Staff

A Workshop on R Programming was arranged by the CSI committee at Universal College of Engineering. The workshop was delivered by Mr. Hrishikesh Gadkari & Mr. Jeet Patel .47 students attended the workshop with keen interest.

R is a programming language and free software environment for statistical computing and graphics supported by the R Foundation for Statistical Computing. The R language is widely used among statisticians and data miners for developing statistical software and data analysis. Polls, data mining surveys, and studies of scholarly literature databases show substantial increases in popularity in recent years. As of January 2019, R ranks 12th in the TIOBE index, a measure of popularity of programming languages.



R.A session conducted on “Basics of Quantum Computing”

Conducted on : 30 th January 2019

Venue: Lab 506

Time : 12:45 am to 1:45 pm

Target Audience: Third Year Computer Engineering students

The session was being conducted by Mr. Sushil Kalsekar of B.E Comps A, who is a Research Assistant for Mr. Sridhar Iyer. The session was aimed for the Third Year Computer Engineering Students who are currently having a course named “*Cryptography and System Security*”. The topic covered has a practical significance associated with the subject being currentl taught to them. These sessions not only enhance the confidence and coomunication skills of the R.A but also develops a team building and problem solving attitude among the senior and juniors. The summary of the session is as follows:

Topics Covered:

1. Quantum Mechanics:

- Why is quantum mechanics needed?
- Key difference between quantum mechanics and classical mechanics.
- Basic understanding of quantum mechanics
- On what things or quantities is quantum mechanics applicable.
- Behaviour of quantum particles.

2. Superposition:

- How to visualise what exactly superposition might look like.
- Demonstrated examples like cat in the box, flipping a coin, etc.
- Idea about superposition.
- Idea about Observation theory

3. Qubits:

- Introduction to Qubits.
- Representations of Qubits.
- Significance of probability and phase in pictorial representations.
- Schrödinger’s thought experiment of cat in the box.

4. Quantum Search:

- Efficiency of quantum search over classical linear search.
- Algorithm of quantum search.



Cookery Contest organized by the "Women Development Cell"

The Women Development Cell (WDC) of UCoE had organised a cookery contest for the female staff members. Five female faculty from our department had participated in the event. Mrs. Vishakha Shelke won the first prize for her healthy grain mix dish. Mrs. Apurva Chaudhari bagged the Runner-up position for her dessert Gajar halwa.

The prepared delicacies were judged on the basis of three parameters health aspects, taste and presentation. The judging panel consisted of Mr. Pranit Gaikwad, Mr. Asir Khan and Mr. Allan Lopes.



Event Location: Universal college of Engineering, Kaman, Vasai.

Event Date: 5th January to 11th January.

Students from all the departments (Computer, IT, EXTC, ETRX, Civil) enthusiastically participated in the Annual Sports and Cultural meet Aurora 2k19. It was a week-long event starting from 5th January, 2019 with Aurora inauguration by Saad Bilgrami. Ex Sports Secretaries Shakib Lohia and Karan Wagh lighted the Aurora torch and further, as a tradition passed it on current ones' Shantanu Pawar, Parth Tulaskar and Priyanka Said. Later with Cultural Secretaries: Natasha Talesara, Abhinay Ashara with all the faculty co-coordinators: Masiyuddin Khan, Shivam Shukla, Naveed Ansari, Sridhar Iyer, Sushant Gawade, Kanchan Dabre and Snehal Sherkhane; Aurora spirit was called open!

With more than 500 entries, sports teaches us sportsman spirit and management, cultural events boost your creativity and team work. Departments compete with each other and within themselves to earn the prestigious '**SHIELD**'.

Sports began with great energy. After 5 days of sweating events, sports ended with BE Civil A at the top of score board, with BE IT not so far behind. On the 6th day, **Cultural** started with a fresh air of creativity. With two days of grace, rhythm and war of words, conclusion ceremony began which was graced by Naval Off. who explained us with importance of sports and cultural in Navy.

*Finally **BE Civil A** bagged the **SHIELD** with whooping 570 points!*

Event List

Sports Events:

Boys:

Cricket, Relay (100,200m),Aba Dubi,Kabaddi,Tug of war,Volleyball,Kho-kho,Shotput,Long jump,Triple Jump, Sepak

Girls:

Box Cricket,Relay (100,200m),Kabaddi,Tug of War,Langdi,Throwball,Shotput,Long Jump,Triple Jump,Dodge-Ball.

Indoor Events:

Table Tennis,Carrom,Chess

Cultural Events:

Group Events:

Folk Dance,Group Singing/ Qawwali,Fashion Show,Drama,Group Dance

Solo Events:

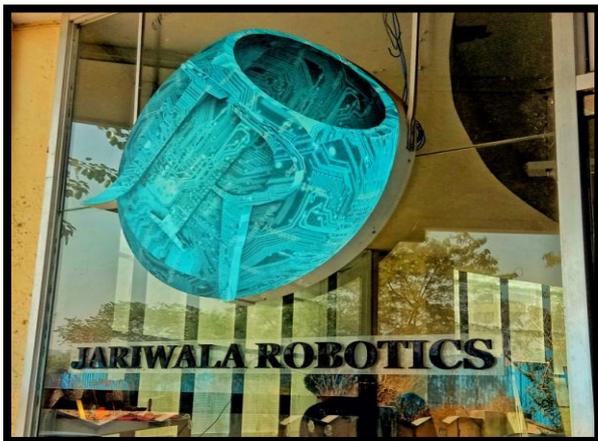
Singing,Dance,Instrumental,Minute with twist,Story Telling,Cartooning,Rangoli,Photography,Debate,Cooking without Fire,Standup Comedy.

Industrial Visit at “JARIWALA ROBOTICS PVT.LTD”

Event Date: 16th January 2019.



Students of Computer Engineering department with two coordinators (Asst. Prof. Pranit Gaikwad & Mr.Sushil Dube) visited the 3D-Printing industry of Jariwala Robotics at Mira Road. This unit mainly focus on preparation of products from 3D printing process which is in trend.



Unit was divided into many sections such as Technical department, Marketing department, Production department and Packaging department.

The main agenda was to understand the working process of 3D printing machine and to see the live demonstration.

Technical Team showed the different types of machines with live demonstration and explained about the system.

They also explained about Designing part of products which is done through CAD softwares.

3D printing is any of various processes in which material is joined or solidified under computer control to create a three-dimensional object, with material being added together (such as liquid molecules or powder grains being fused together), typically layer by layer.

The chief marketing officer explained to us about the various products which they have manufactured with 3D printing machines and explained the marketing strategies. They told about internship opportunities also.



DO YOU NEED A SMART MICROWAVE ???



Over the holidays, droves of consumers bought video door bells, connected lights, and smart outlets that work with Amazon's Alexa, Apple's HomeKit, or Google Home. Plenty of people unwrapped connected speakers and image-processing cameras on Christmas morning.

Many of these purchases will get returned. Or they'll be thrown away after one too many updates or a security scare. Perhaps luckier devices will find homes with tech-savvy friends. But most will be abandoned, in one way or another, because most of the smart devices on the market are stupid. Over the six years I've covered smart home devices, they've presented their owners with four real problems: First, the devices were expensive. They also didn't offer much

functionality beyond remote control from an app. Even more frustrating, getting devices from different vendors to play nice together was tough. But perhaps the biggest problem is that consumers had no idea what to do with these devices. Thankfully, that's changing: Now there are more meaningful uses for smart devices because smart devices are finally living up to their name.

Companies are now designing products that use artificial intelligence. Alongside that intelligence, the growth of voice as a user interface can now provide effortless interactions. To see how important intelligence is, consider a camera. There's a big difference between a camera that can tell you it saw *something* and one that can tell you what it saw. Adding face recognition and computer vision to that camera turns a product that pesters you with useless notifications into something actually helpful. The kitchen is a great place to see the growing usefulness of smart devices. My connected June oven has a camera and a graphics chip inside, so it can track what food is in the oven and recognize how it needs to be cooked. But true intelligence goes beyond just computer vision.

With a connected device, manufacturers can embed intelligence into its accompanying app so that the user doesn't have to think about it. For example, the Joule Sous Vide cooker doesn't have an interface: Everything is embedded in the app to help cooks take the guesswork out of cooking. The cook tells the app what meat or vegetable is in the bag and its approximate thickness, and from there the Joule sets the temp and timer on the user's behalf. This abdication of thought to the device is why voice has been so essential in making products smarter—and more useful—even if at first glance it seems superfluous. Take the new Alexa enabled US \$60 microwave launched last year by Amazon as an example.

When the company launched the oven, people reacted with confusion: Why give a microwave voice control if you have to put the food inside it anyway? In this case, the voice control offers an intuitive way to interact with the artificial intelligence that provides the cook times and settings for various foodstuffs. At the end of the day, the microwave can offer a better result than if you just punched in 60 seconds—even if you still have to put the food inside the oven yourself.

That's when the high price of a connected gadget becomes justifiable. Now the challenge is to explain why these devices are worthwhile. Given how many people mocked the Alexa microwave as silly, it seems manufacturers haven't succeeded in that last bit yet.

Article Courtesy : Mrs. Hezal Lopes



Ajinkya Jadhav can be described as persistent. This is true in the array of accomplishments he's had at just 19 years old.

Jadhav has been at Youngstown State University for the past nine months studying mathematics. Prior to YSU, the India native was studying at Harvard.

His accomplishments were not made in a classroom at either university, but on his own time as he tried to determine any way in which he could help people.

Prior to attending YSU, much of Jadhav's research dealt with science and military defense. In 2015 he began working on ideas to stop suicide bombers, for which he eventually created a patent and earned a \$25,000 scholarship from Google.

He also worked with the Indian Army, where he designed a suit for soldiers that protects them from below freezing temperatures and aids bullet wounds.

"There are six medicated packets within the suit, so if you were to be shot in your shoulder, the packet would sense the blood flow and burst from inside and relieve the soldier."

Since coming to YSU, Jadhav has turned his focus to researching drunken driving. He chose to study this at an Ohio college because of the state's high rate of accidents involving intoxicated drivers.

Jadhav helped create a design that uses sensors to detect a person's blood alcohol level, and will not allow a car to start if the driver has had too much to drink.

In addition to this, he's conducted TED Talks and is the founder of We All Teens, a platform which Jadhav describes as bringing the world's smartest students from currently 25 different countries to attempt to solve different global problems.

"Our platform is confidential and we are supported by the government, intelligence bureaus or the armies of any particular nation,"

Jadhav said. ***"Today, We All Teens is partnered with National Geographic, Scientific American and Business Insider."***

Femi Fabiku, senior criminal justice major at YSU, met Jadhav while both living in the Lyden House dorms and said he's been impressed by Jadhav's work so far.

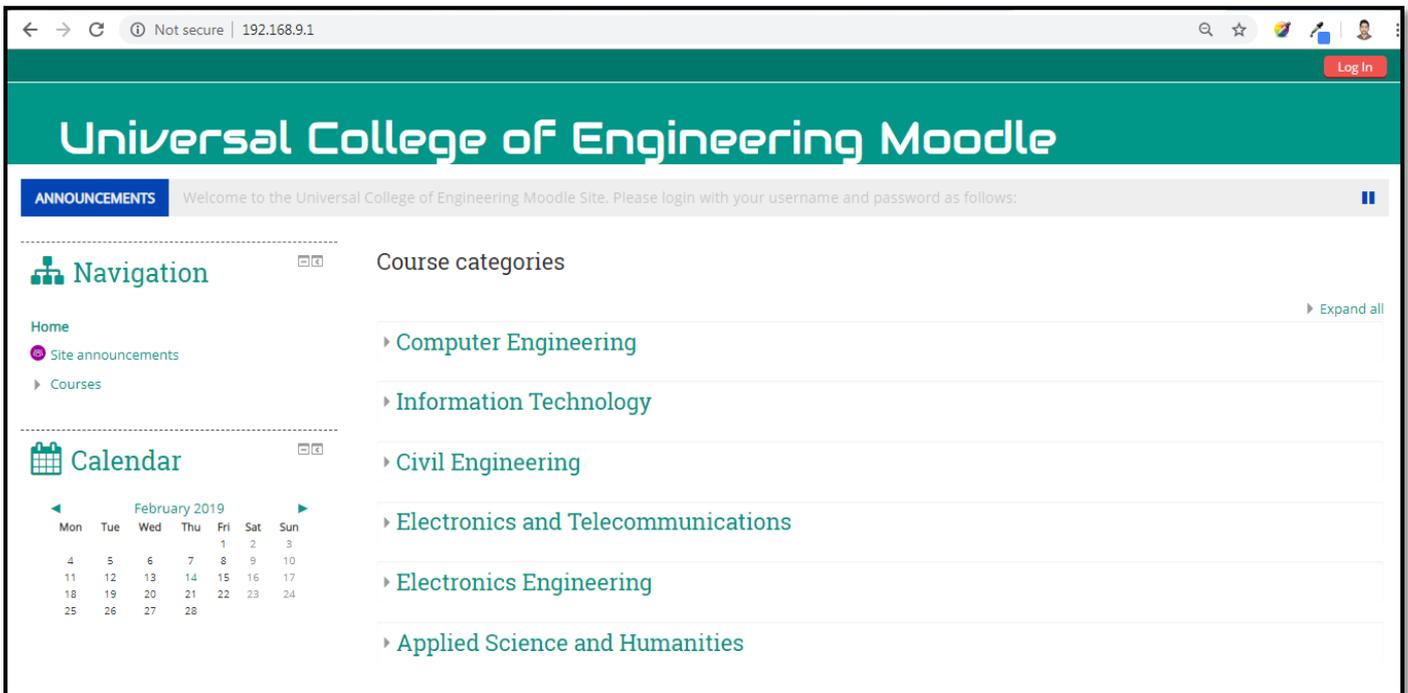
"Lots of people talk about the military suit he designed for his country's army," Fabiku said. ***"Since I'm a criminal justice major, I like to support his dedication towards society."***

Article Courtesy : Mr. Aniket Kore

Departmental Initiatives

Department of Computer Engineering has come up with the implementation of an effective Learning Management System , Moodle (acronym for Modular Object-Oriented Dynamic Learning Environment). Moodle is a free and open-source learning management system (LMS) written in PHP. Moodle is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors.

With customizable management features, it is used to create private websites with online courses for educators and trainers to achieve learning goals. Moodle allows for extending and tailoring learning environments using community sourced plugins.



This pilot project is carried out with the prime intent of making the teaching and learning process more effective. Here, the teachers can upload the study resources and make it available for the in-campus students for easy access and download. The teachers can easily interact with students with the help of the easy interface. Students too can remain updated with the activities happening in their respective courses. The teachers can take daily attendance online which will be stored and maintained in a central database, which will effectively ease the report creation and monitoring.

The Moodle Team is as follows:

1. Mr. Sridhar Iyer
2. Mr. Chinmay Raut
3. Ms. Kanchan Dabre
4. Mr. Pranit Gaikwad
5. Ms. Sharvari Patil

Departmental Coordinators:

1. Mr. Aniket Patil (ASH)
2. Ms. Payal Khambati (ETRX)
3. Ms. Neelam Bhoi (EXTC)
4. Ms. Yogini Bazaz (I.T)
5. Ms. Chandana Kori (Civil)

The moodle site can be accessed at the following **URL : 192.168.9.1** from the UCOE campus.

Life of Mr. Shiv Khera

Mr. Shiv Khera is an Indian author of self-help books and an activist. He launched a movement against caste-based reservation in India, founded an organization called Country First Foundation, and started the Bhartiya Rashtravadi Samanta Party. In 2004, he lost in a bid as an independent candidate for the South Delhi constituency in India's general election. He also filed several public interest lawsuits in the Indian Supreme Court and unsuccessfully contested the country's 2009 general election.

Khera was born in a business family that operated coal mines, which were eventually nationalized by the Indian government. In his early years, he worked as a car washer, a life insurance agent, and a franchise operator before becoming a motivational speaker. While working in the United States, he was inspired by a lecture delivered by Norman Vincent Peale and claims to follow Peale's motivational teachings.

Khera published his first book *You Can Win* (Jeet Aapki in Hindi) in 1998. Subsequent books that Khera authored include: *Living With Honor*, *Freedom Is Not Free*, and *You can Sell* (2010).

When *Freedom Is Not Free* was published, Amrit Lal, a retired Indian civil servant, accused Khera of plagiarism, alleging that content from that book directly came from his own book *India Enough Is Enough*, published 8 years earlier. Additionally, he found that numerous anecdotes, jokes and quotes in Khera's other books were also used without acknowledging proper sources. Khera countered that he took notes and inspirations from numerous sources, and that he was unable to keep track of all of them. Lal finally accepted an out-of-court settlement for an undisclosed sum of money (reputed to be 25 lakh according to Khera), which he said he would donate to the Missionaries of Charity.

While Shiv Khera was dragged to court, he did not give up and continued his writings. He even defended his writings saying he read a lot of books and researched before writing. Some of that research stayed with him. A pretty lame excuse but despite the court case and the out-of-court settlement, he bounced back and his books continue being motivational best-sellers.

Khera founded Country First Foundation, a social activism organisation whose mission is "to ensure freedom through education and justice". In 2004, he stood as an independent candidate from the South Delhi constituency in Indian general elections and "lost badly". In 2008, he started the Bharatiya Rashtravadi Samanata Party. During 2014 polls in India, he supported the Bhartiya Janata Party and campaigned for Lal Krishna Advani, a senior member of the party. Khera has also filed several public interest lawsuits in the Indian Supreme Court, and he unsuccessfully contested the 2009 general election in India on an anti-corruption platform.

