



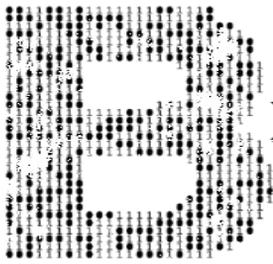
Vidya Vikas Education Trust's

Universal College of Engineering

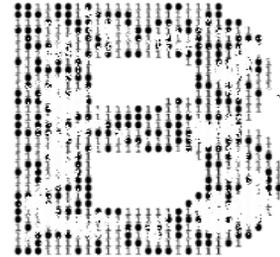
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ITS



YTES

An Initiative By



Department of Information Technology

#SATYAVACHAN

Take a deep breath
and remember,
you are so much
Stronger
than you know.
You **CAN** do this!

Staff Coordinators:

- Mrs. Sanketi Raut
- Mr. Akshay Agrawal

TABLE OF CONTENTS

- **TECHNICAL ARTICLES**
- **NON TECHNICAL ARTICLES**
- **DEPARTMENTAL EVENTS**
- **JUNIOR -VYRO 2021**
- **INDEPENDENCE DAY**
- **TOKYO 2020 OLYMPIC WINNERS**

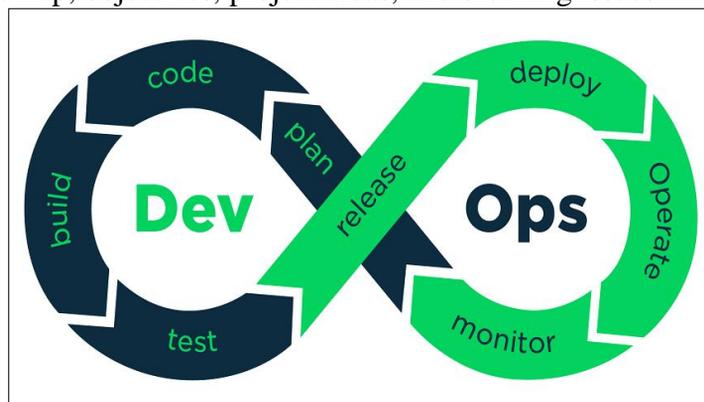
Career in DevOps: Skills to watch out for

DevOps has come out as the major concept that is catching the attention of engineers. It comes out as the combination of practices, cultural philosophies, and tools that helps in enhancing the application abilities and services. For companies using traditional infrastructure management processes and software development, DevOps has come out as the major aspect that can pace up the product improvement and evolvment cycle.

However, establishing a career in DevOps is not as easy as one might like to believe. Here are some of the skills that one must have that can help to establish a career in DevOps.

1. Programming skills: Understanding the programming languages is the core of any software development. It is essential to know the unique set of coding responsibilities and be familiar with the languages like Python, Java, PHP, JavaScript, Bash, etc. The engineers must be comfortable with debugging and writing issues in OS environments or languages.

2. Communication and Collaboration skills: DevOps is the collaborative approach for the testing, development, and deployment of the software. It is a concept where the small teams work together towards a common goal to successfully execute the plan. The engineers need to be familiar with the roadmap, objectives, project areas, and blocking issues



3. Sync with testing teams: The DevOps engineers must be able to understand what the QA teams have to work on and how they can take it forward. The QA teams must be in sync with the engineers such as manual and automated testing formats.

4. Understanding of DevOps tools chain: DevOps engineers are assorted with complex tools that can support software delivery objectives. These tools are used for continuous integration ,servers,

version control, configuration management, containers, deployment automation, testing and cloud quality tools, monitoring analytics, and network protocols.

5. Maintenance skills: DevOps engineers must be able to work on maintaining a seamless process such as IT operations. The engineers must be able to operate with the fundamental environments and tools such as customer-facing capabilities.

Source:<https://content.techgig.com/career-in-devops-skills-to-watch-out-for/articleshow/85273367.cms>

**- MR. AKSHAY AGRAWAL
(Assistant Professor)**

Become a Data Engineer: One of the most sought after jobs of the 21st century

It was not long back when we heard that Data Scientist was the sexiest job in the industry. But now, it is clearly visible that it is losing its sheen. And who are there to take its place: Data Engineers! Just like any other kind of engineering, data engineers are better enablers in any business to get a fine understanding of data. They are better equipped to create critical data pipelines, deliver quality infrastructure, and focus on data modeling, integration, optimization, and quality. Thanks to their vast skillset, they support the data science team in a better manner in any organization.

What is Data Engineering?

Data engineering is the process of designing and building systems that collect, store, and analyze data at a giant scale. This field has an application in almost every industry. Thanks to the influx of data in this era of digitalization, companies are loaded with massive amounts of data and are on a constant lookout to hire data engineer professionals.

What is the growth rate in this field?

The position of a Data Engineer plays a vital role in utilizing the full potential of data in any organization. According to a report, it is one of the fastest-growing professions globally,

witnessing over 88.3% growth in job postings in 2019 and over 50% year-over-growth in several open positions. They are poised to give tough competition to data scientists. The demand for data engineers has outpaced data scientists by 2:1 with a 20 to 30% increased payout than the latter. The salaries continue to grow rapidly year after year.

On LinkedIn, as of now, there are 20K data engineer jobs in India. One of the biggest advantages of choosing this profession is that it pays well. According to Glassdoor, the average Data Engineer salary in India is INR 8.5 LPA. Big players like Amazon, Deloitte, Netflix, IBM offer high compensation to Data Engineers. And as it goes with every field, the more your work experience, the higher perks you are given in the market.

How can you become a Data Engineer?

This is where Great Learning steps in.

To empower today's technology professionals to build practical skills in this in-demand domain, IIIT-Hyderabad and Great Learning have collaborated to offer an exclusive program for data engineering in the country which will mark the route for the next-age data engineering jobs for working professionals. Called the Post Graduate Certificate in Software Systems for Data Science, this is an online learning format of live classes that enables learners to upskill without quitting their jobs and learn from one of India's top technology institutes and leading faculty.

This is a uniquely crafted learning experience that blends the best of academic excellence and industry applications. The program enables participants to gain an in-depth understanding of data science and software systems that are widely used by companies. It takes a very practical approach to impart industry-relevant skills and enables participants to become job-ready.

IIITH is one of India's top-ranked technology institutes. Established in 1998 as an ICT Research University, it holds the #11 rank in Outlook's Annual Ranking of India's Top Technical Universities in 2020. After the completion of this program, you will be the ideal candidate for the role of a Data Engineer. Learners will also get a certificate from IIIT-H along with alumni status.

So, if are looking forward to enhancing your skills and taking your career to the next level, take up the Post Graduate Certificate in Software Systems for Data Science by IIITH and Great Learning.

Source: <https://content.techgig.com/become-a-data-engineer-one-of-the-most-sought-after-jobs-of-the-21st-century/articleshow/84678299.cms>

**- MR. AKSHAY AGRAWAL
(Assistant Professor)**

WHY REACT JS IS BETTER THAN ANGULAR OR VUE JS?

It's common knowledge that web pages are primarily built with HTML, CSS, and JavaScript programming languages (the three fundamental building blocks of the web). Specifically, HTML creates elements on web pages, such as menus, texts, and boxes. While CSS is utilised to style, design, and place those elements on web pages. And lastly, JavaScript, which facilitates the interaction with, and manipulation of these elements. The theme of our discussion will revolve around JavaScript; in particular React.Js and its superiority over Angular and Vue.Js.

Why React is the Dominant Alternative!

In hindsight, React was developed as a JavaScript port of XHP (a PHP library created by Facebook). Generally, XHP was a modification of PHP that allowed for custom component creation, and aimed to prevent malicious user attacks. Later out of this JavaScript porting project grew JSX (JavaScript XML), which became a common standard language for React. All things considered, React has a narrower scope than its peers, only rendering the application user interface. However, it maintains the benefit of a lightweight structure, and hence is less costly to learn and use. That being said, it can still be considered a framework, as it is used for the same purpose as Vue and Angular.

Superior Virtual DOM Capabilities.

React was the first framework to optimize its functionality according to the DOM. This was a contributing factor to its success since [DOM manipulation is quite costly](#) in terms of computing resources used. Specifically, React was designed to perform as little DOM manipulation as possible by employing intuitive state management and the virtual DOM to control this manipulation.

This exploitation of the virtual DOM makes React update faster, at the expense of being more memory intensive. And in order to execute fast updates to the browser DOM, react maintains a copy of the virtual DOM tree in memory, which consumes additional memory. Consequently, React's popularity gave birth to numerous spinoff libraries such as React Native for mobile development.

One-Way Data Flow

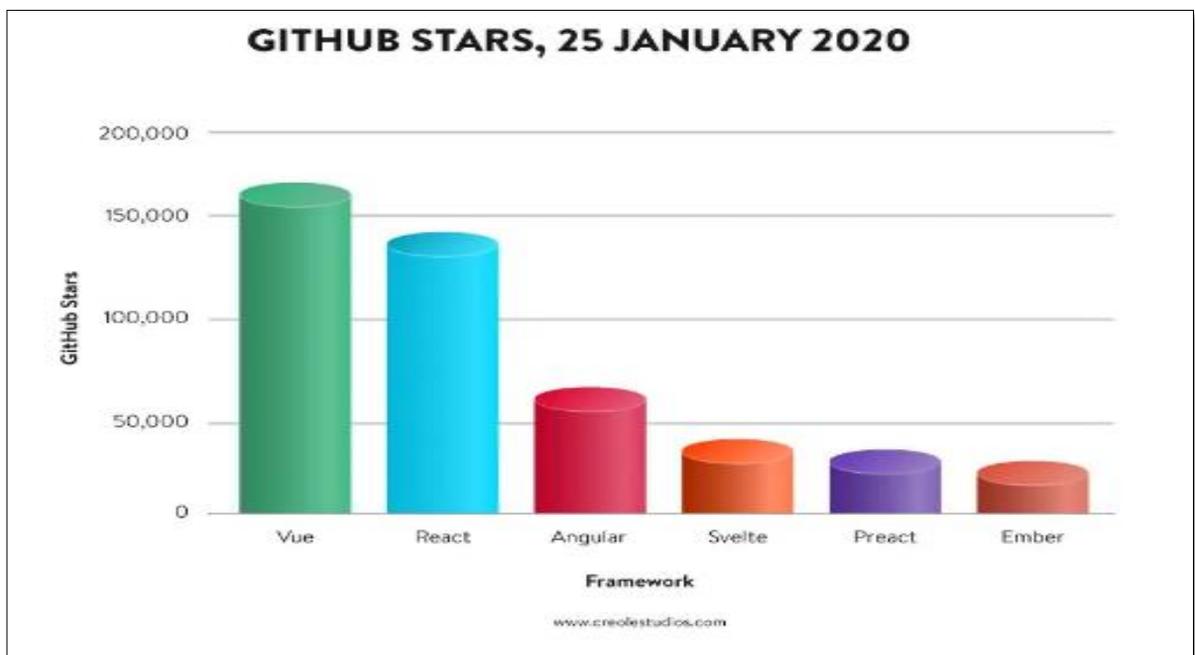
In React, the data is meant to flow downwards, and is referred to as one-way data flow. While Angular and Vue's two-way data binding makes the code prettier and simpler, React compensates in superior manageability and performance. A notable advantage in our argument.

Why React Is Better Than Angular

Let's do a case by case comparison for more context, shall we? Intended for larger application development, Angular is a more full-featured JavaScript framework, in terms of programming features and file size. However, in comparison to React, Angular has negative bloatedness, complexity and heavy style of development traits. It is recommended for smaller development projects and cited as having a steep learning curve. To exacerbate things, AngularJS is no longer under active development. Angular is built entirely in TypeScript and requires lots of code which makes it a bit complicated. On the contrary, React is quite "simple" and its original orientation is focused on controlling and manipulating the view. Essentially, it allows the developer to select exactly what they need, but also it avails the ability to use a large number of third-party packages. So, consequently, React doesn't include a [lot of overhead in comparison to Angular](#).

Why React is Better than Vue

Vue.js was created by Google employee Evan You. Evan was inspired by AngularJS, but wanted to create a more streamlined, improved version of it. Despite its lightweight attributes, great performance and nice programming style, Vue's negative aspect is its clumsiness. This where React's superiority shows off. For instance, there is no clear best practice in Vue.js in contrast to React, which may make it difficult for major applications to be maintained. However, the best



Source: <https://www.creolestudios.com/why-react-js-is-better-than-angular-or-vue-js/>

- MR. ALLAN LOPES
(Assistant Professor)

Can AI speed up the disposal of cases?

Swati.Deshpande
@timesgroup.com

Mumbai: The Supreme Court recently unveiled a tool named SUPACE (Supreme Court Portal for Assistance in Court Efficiency), an Artificial Intelligence-based portal to assist judges with research. Make no mistake, it is not designed to take a decision, only to process facts and provide inputs to enable decision-making by judges. But it has opened up a debate of sorts on how much AI can be used to dispense justice.

"The core job of a judge is judging. That cannot be outsourced," said former Supreme Court judge B N Srikrishna. Nuances of judging a person's state of mind are beyond a bot, said jurists. Senior counsel Amit Desai added that

Judicial work can't be handed to a machine, even one programmed to understand law. But pre-judicial work like case management, indexing, can be, says Justice B Srikrishna

AI could be used in cases of a repetitive nature that fit a strict pattern such as bouncing of cheques, civil violations or drunk driving.

"Judicial work cannot be handed over to a machine, even one with AI or programmed to read and understand law," said Justice Srikrishna. But pre-judicial work, such as case management, random allocation of matters to benches, case-law indexing and analysis, administrative work linked to a court can lean on AI to streamline and reduce pendency, he added. Other legal experts concur.

"Judging involves human emotions too. No scientific tool has any moral issue attached to it," said Justice Srikrishna who helmed the study for India's data protection policy. "AI

has not been programmed to delve into human emotions." And in criminal law, it makes all the difference. A young disadvantaged man who steals a loaf of bread may commit an IPC offence of theft, but a judge may punish him merely by holding him in court till its rising while an educated man who perpetrates a multi-crore fraud against the public exchequer may get a vastly different punishment, though both may have taken what is not theirs, elaborated Justice Srikrishna.

Justice Madan Lokur, who headed the apex court's e-committee for six years, said, "the big question is, what is it that is sought to be achieved via AI? It cannot be used to dispense with judges and judging. Especially not in criminal cases...this has not happened even in US judiciary."

AI as a tool to judge matters is "debatable" agreed, senior counsel Amit Desai. But he said it could be used in "summary trials, strict liability cases and cases of a repetitive nature like negotiable instrument (cheque bouncing) prosecutions, since AI has abilities to identify fact patterns easily and compare them with precedents." Even "traffic violations and drunken driving cases or some civic violations can be dealt with by AI."

"However matters involving judging the state of mind (mens rea) and cases of complex fact patterns are matters best left to human judging since justice also includes the human element of discretion. But in such cases, to collate and analyse case law it will be very useful. It will have enormous use at the administrative level and significantly reduce time lines in justice delivery."

The former Chief Justice of India, S A Bobde, too in his opening remarks after becoming CJI, had spoken of bringing AI into the judicial system.

- MR. JIGAR CHAUHAN
(Assistant Professor)

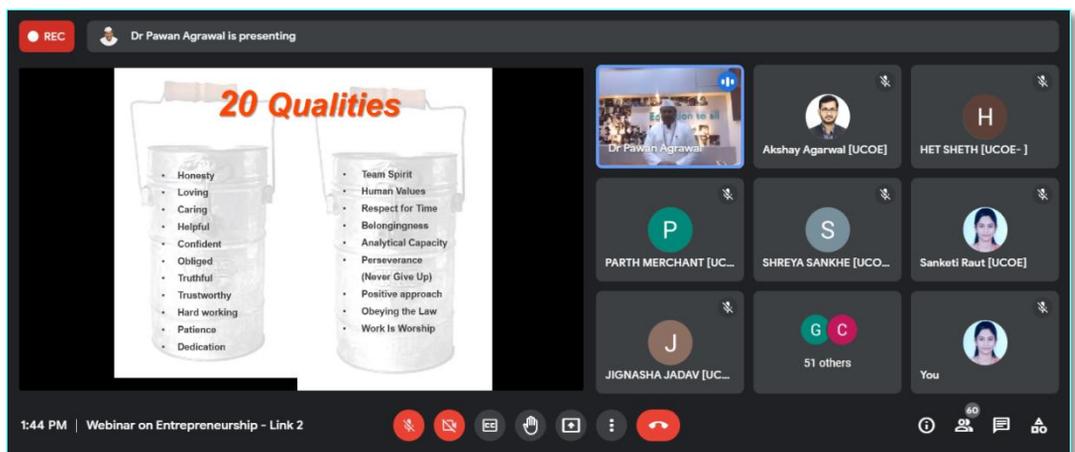
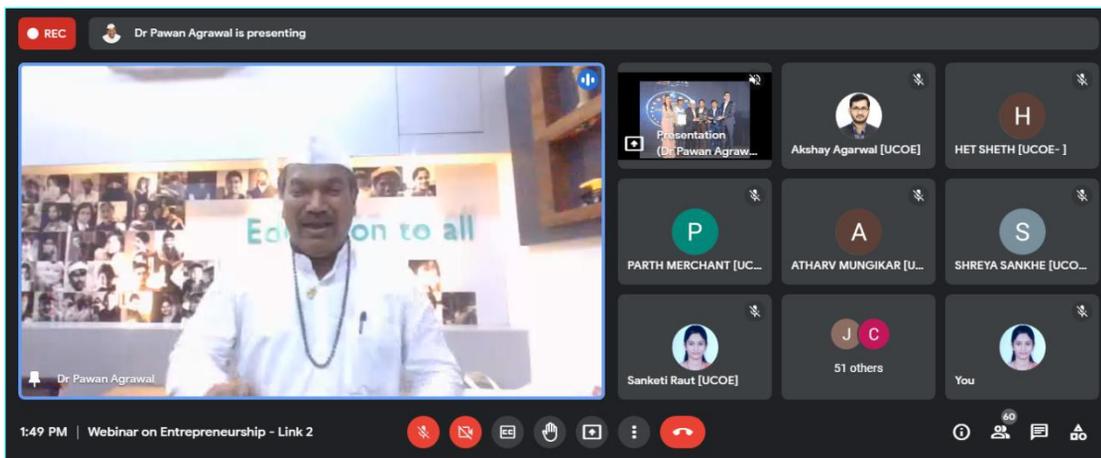
Departmental Event

Webinar on Entrepreneurship

1 Day Online Webinar on Entrepreneurship was organized by Department of IT on 26th August 2021. It was conducted through G-meet and speaker was Dr. Pawan Agrawal he is International motivational speaker, Author, educationist, TEDx speaker, President- KECT and Co- chairman - Indian Academy of entrepreneurship. There were total 70 number of participants.

The learning outcome through this webinar was students should Identify the problem statements, Qualities that an Entrepreneur should possess, Motivation and Counselling for students to become an entrepreneur

Some of the Glimpses:



REC Dr Pawan Agrawal is presenting

11:15 a.m. – 12:15 p.m.
(Church Gate Station)
 At this stage, the unloading takes place at the destination station
 Re-arrangement of tiffins takes place as per the destination area and destination building



- 70% deliveries at CST & Churchgate
- High volume areas like Nariman Point, Fort, CST have dedicated crates
- Each cart 150 dabbas,
- Pushed by 3-4 elderly dabbawallas



1:35 PM | Webinar on Entrepreneurship - Link 2

REC Dr Pawan Agrawal is presenting



1:42 PM | Webinar on Entrepreneurship - Link 2

REC Dr Pawan Agrawal is presenting

HISTORY

History : Started in 1890

Employee Strength : 5000

Total Area Coverage : 60 Kms to 70 Kms

Number of Boxes : 200,000 Boxes
 800,000 transactions every day
 i.e. $800,000 \times 25 \text{ days} \times 12 \text{ months} = 240,000,000$
 (240 million or 24 crore transactions per year)

Time Taken : 8 to 9 Hours
 Morning 3 Hours Wartime

1:20 PM | Webinar on Entrepreneurship - Link 2

Departmental Event

Orientation Program for S.E. IT students

The Orientation program for second year students IT Engineering for academic year 2021-22 was organized on Monday August 23rd, 2021 virtually.

The following important points was explained and discussed with the students:

Introduction to Department of Information Technology;

Introduction to Examination;

Rules regarding desired behavior;

Enrichment Activities;

Achievement of the previous academic year;

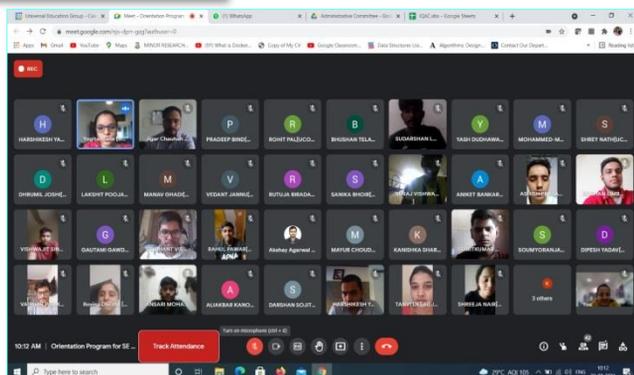
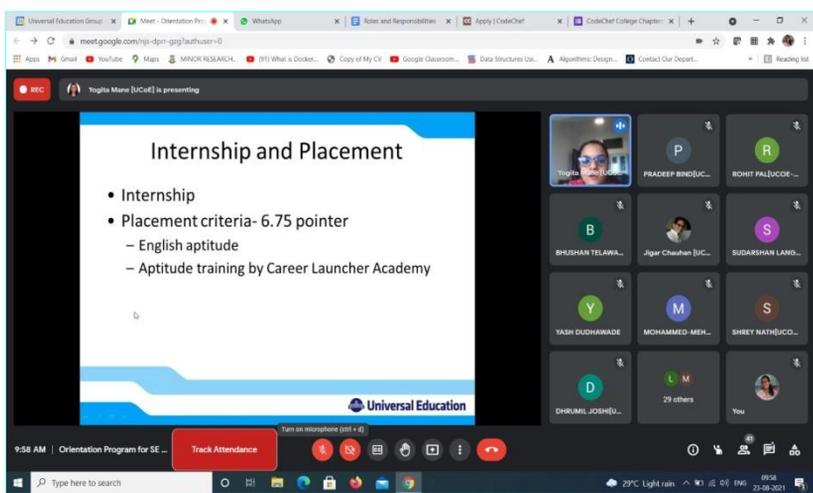
Internship and placement of the previous academic year;

Outcome of the Orientation Program:

Students get acquainted with the course and culture of the department

Students got information about various career options available ahead of the course enrolled by them.

Some of the Glimpses:



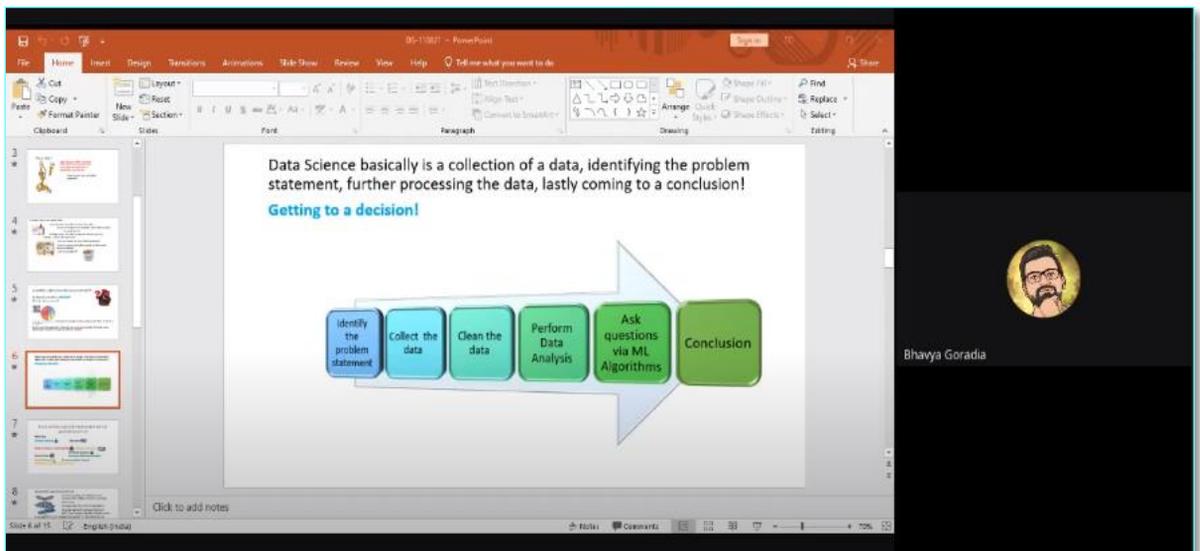
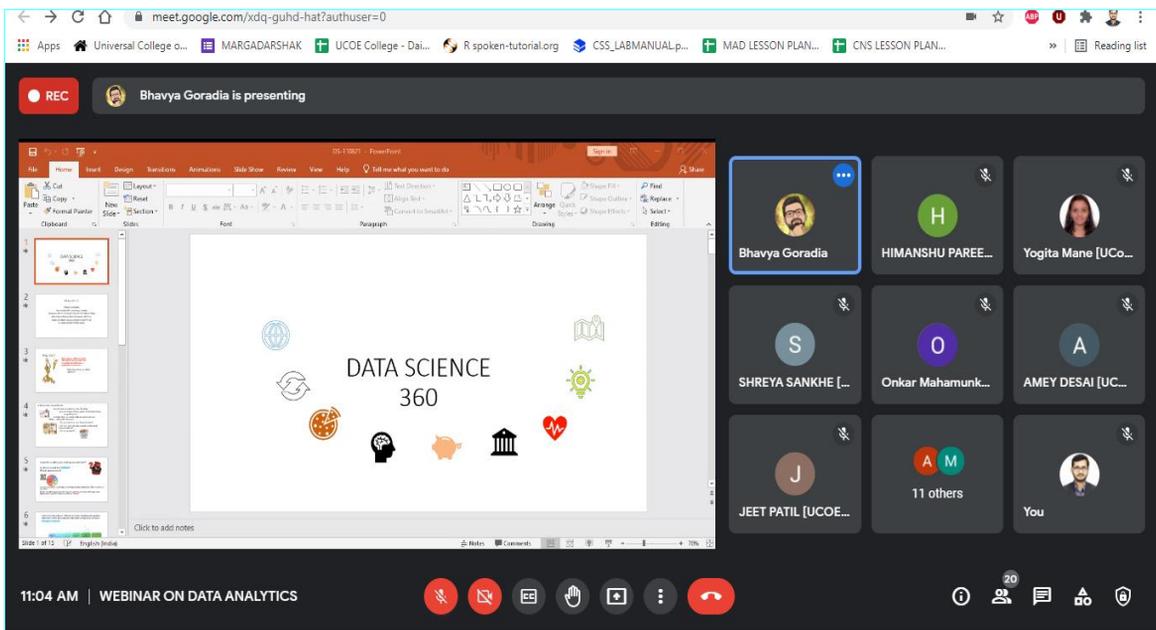
Departmental Event

Webinar on Data Science 360

1 Day Webinar on Data Science 360 was organized by Department of IT on 14th August 2021. It was conducted through G-meet and speaker was Mr. Bhavya Goradia, Data Scientist, G-Décor. He is skilled in Data Science and Visualisation. There were total 30 number of participants.

The learning outcome through this webinar was students will be able to identify the problem statements, collect and clean the data, perform analytics.

Some of the Glimpses:

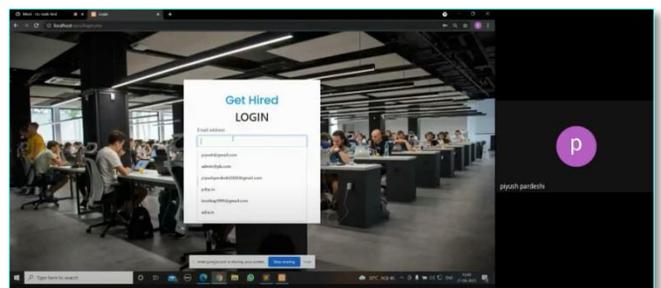
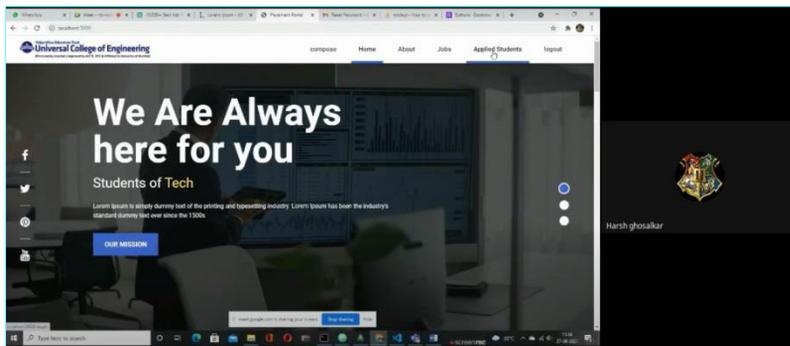


JUNIOR. VYRO 2021

Universal College of Engineering hosted the intercollegiate technical fest Junior Vyro this year on Friday August 27th, 2021 virtually. The fest was meant specifically for students of Junior colleges all across the city with an intention to give them a peek into the engineering college campus, inspire them to aspire a career in engineering, in a fun and engaging way.

The inauguration ceremony was marked by motivational words of the Campus Director Dr. J. B. Patil sir followed by seminars conducted by the faculty members of various departments who gave brief presentation describing their fields and its highlights. The fest comprised of 4 technical events which were based on the recent trend in technology. All events witnessed an active participation by the students.

The fest had the students learning about the various engineering fields, competing in events and taking home fun filled memories of the day. The careful planning and diligent efforts of all the committee members, volunteers, overlooking faculties in organization and management of the fest was very well reciprocated by the participants with their enthusiasm.



WINNERS

Sr. No.	Name of the Winners	Rank	Name of the event
1.	Ghosalkar Harsh	I	Web / App Development
2.	Pardeshi Piyush	II	

Independence Day 2021

Independence Day was celebrated with a spirit of patriotism to mark the innumerable sacrifices of our freedom fighters! Sunday, 15th August, 2021 marked the *75th Independence Day of India*. Every year we celebrate this day with great enthusiasm and joy,. This year, NSS Unit of Universal College of Engineering brought back the same joy and enthusiasm digitally, as we celebrated the day, in online as well as offline mode while following all the safety guidelines and precautions and pledging to keep ourselves, as well as people around us safe. The diligence the NSS unit put in made this event remarkable.

The celebration was arranged in the college as well as on Google meet for all the students. The celebration started at 10:00 AM after the students had joined the meeting. All were greeted with a powerful speech followed by a poem filled with patriotism by the NSS volunteers. Following the speech and poem, our respected Campus Director Dr J. B. Patil Sir hoisted the National flag in the premises following the National Anthem. The entire celebration was not limited only to everyone present in the premises but was also for the students who were connected through the online platform.

Respected Campus Director Sir delighted everyone with his speech wherein he presented his wishes and joy for the future. Further, an initiative that was taken by the NSS unit of UCoE, a poster making competition was held where students had to make handmade posters. Huge response for the initiative was highly appreciated.

Towards the end of the celebration, the winners of the poster making competition were announced and their work was displayed to everyone. The celebration concluded at 10:50 a.m. with a vote of thanks by the NSS volunteers.





WINNERS OF TOKYO OLYMPIC 2020



India competed at the 2020 Summer Olympics in Tokyo, Japan. Originally scheduled to take place from 24 July to 9 August 2020, the games were postponed to 23 July to 8 August 2021, due to the COVID-19 pandemic. India has appeared in every edition of the Summer Olympics since 1920, although it made its official debut at the 1900 Summer Olympics in Paris. The nation sent its largest-ever contingent of 126 competitors to the 2020 Games. To date, the 2020 Summer Olympics are the most successful Games for India since its first regular Olympics appearance in 1920, with Indian Olympians winning 7 medals (1 gold, 2 silver and 4 bronze)

India's Medal-Winning Athletes in the Tokyo Olympics 2020

All Indian medal winners at Tokyo Olympics 2020

 <p>NEERAJ CHOPRA Gold Medal in Men's Javelin Throw</p>	 <p>MIRABAI CHANU Silver Medal in Weight Lifting</p>	 <p>RAVI KUMAR DAHIYA Silver Medal in Men's 57 kg Wrestling</p>	
 <p>PV SINDHU Bronze Medal in Women's Single Badminton</p>	 <p>LOVLINA BORGHAIN Bronze Medal in Women's Welterweight Boxing</p>	 <p>BAJRANG PUNIA Bronze Medal in Men's freestyle 65kg</p>	 <p>INDIAN HOCKEY TEAM Bronze Medal in Men's Hockey tournament</p>

HEARTFELT CONGRATULATIONS TO ALL

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