



# GEETANJALI



## INSTITUTE OF TECHNICAL STUDIES

COMPUTER SCIENCE AND ENGINEERING DEPARTMENT



Bits  
and  
Bytes

Volume VI Issue I  
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*"If a cluttered desk is a sign of a cluttered mind, of what, then, is an empty desk a sign?"*

*- Albert Einstein*



Dr. Vikas Misra  
Director, Geetanjali  
Institute Of Technical  
Studies, Udaipur

“Life isn’t about  
finding yourself  
but about  
creating  
yourself.”

-Dr. Vikas Mishra

## DIRECTOR’S DESK

Geetanjali Institute of Technical Studies, Udaipur, is pledged to its mission of administering an engineering and technology education affordable for every student and at par with the finest. Contemporary infrastructure, dedicated faculty, and best academic practices make this green campus ideal for academic pursuit. What sets us apart is not only our strong thrust on fundamental knowledge, innovative student projects, faculty research, smart classrooms, internships, focus on communication skills, and campus and off-campus placements but also our emphasis on sensitivity to societal and national growth and ability to solve ethically complex problems and future-readiness. These combined factors make our graduates successful and respected when they begin their careers.

I feel immensely proud and gracious that the Computer Science and Engineering department is releasing the 10th edition of ‘BITS & BYTES’ as a forerunner of department activities.

The Institute is well-positioned to create a conducive atmosphere for developing the young brains into bright professionals of the future. We believe not only in education but in personality development also so that our students are globally employable. Throughout the year, the institution vibrates with activities----competitions, group discussions, quizzes, brainstorming academic sessions, cultural and literary activities, guest lectures, sports activities, Seminars/ Conferences/ Workshops, and social activities. In addition, our alumni in India and abroad, who graduated from our Institute, have brought laurels to the Institute. At GITS, we are highly committed to providing high-quality education that applies to the needs and aspirations of all students and is responsive to community expectations. Again, I invite you to join the GITS fraternity and let your hidden potential unleash in the premier Institute of learning.



Dr. Sudhakar Jindal  
Director (IQAC),  
Geetanjali Institute Of  
Technical Studies,  
Udaipur

I wish every  
success to the  
students in the  
accomplishment  
of their goals.

-Dr. Sudhakar Jindal

## DIRECTOR'S DESK (IQAC)

The very motto of our institution is to develop and enhance the performance and administration of the institution that excites and motivates the students for effective learning. Learning is not an effortless process though undergoing this would help them set their goal despite any difficulties encountered while achieving that goal. It deals with what you learn, how you master it, and where you get it, and willingness is the dominant factor for its accomplishment.

It is our pleasure to be a part of this process by stimulating curiosity within young minds and cultivating the values alongside academics to be sound and heard in the social and professional world. The excellent infrastructure and teaching faculty of the best kind ensure quality education like interaction among students, parents, and staff, along with a Training and Placement Cell ensures a bright future for our students.

It is indeed a matter of pride that the Computer Science and Engineering Department is bringing out the "BITS & BYTES" 10th edition, showcasing the academic excellence and artistic talent of our students.

In this pursuit of excellence, I wholeheartedly admire the parents and guardians for their constant support, which is indeed helping students to excel. Thus we are confident that our Engineers will emerge as assets not only to this institution and to the professional organization to which they belong but also to the country at large.



# HOD'S Desk



Dr. Mayank Patel  
HOD, Department of  
Computer Science  
Engineering

Today is the  
opportunity  
to build the  
tomorrow you  
want.

-Dr. Mayank Patel

I am immensely pleased with the department's E-Newsletter "Bits And Bytes" Volume-6 Issue-1 Edition flaunting the amenity of the department and students' excellence. The department aims to disseminate the best curriculum to the students counting the technical and soft skills to boot. The department is accoutering with the best and most experienced faculties and practical labs. Various seminars, webinars, training, alumni interaction, and workshops are also scheme in addition to the curriculum. These additional sessions in view to enable students to explore various latest technologies and to have a better understandability of the corporate world. We encourage our students to participate in Hackathons organized at certain levels that will help them evolve leadership skills and teamwork, generate innovative ideas to resolve societal issues, and succeed in being responsible citizens of the nation. The department assures us to become a part of the worthwhile learning journey of the young minds, help them be employable, and also in goal accomplishment. The department wishes the students the best in the attainment of their careers.

# About CSE Department

The Department of Computer Science and Engineering aims at educating and conducting research covering various areas of information science, from fundamental technologies such as software design, object-oriented programming, computer architecture, database system, discrete mathematics, and Internet technologies. The internet technologies are the backbone of infrastructures of the highly information-oriented society, to applied and advanced technologies including multimedia, robotics, computer vision, data mining, human-machine interface design, bioinformatics, computational science, life science, distributed computing, and theoretical computer science.

To achieve our mission, we provide attractive educational programs for students to learn from the basics to advanced technologies related to computer science and engineering.

Through our educational programs, students are supposed to become leading engineers and researchers who are highly motivated and have practical, creative, and management skills to drive an advanced next-generation information society in all industrial fields.



## Vision of CSE Department

To nurture the students to become employable graduates who can provide solutions to the societal issues through ICT.

## Mission of CSE Department

To focus on practical approach towards learning and exposing the students on the latest ICT technologies.  
To foster logical thinking among the students to solve real-time problems using innovative approaches.  
To provide state-of-the-art resources that contributes to inculcate ethical & life-long learning environment.

## PSOs of CSE Department

PSO1: Professional Skills: The ability to understand, analyse and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity.

PSO2: Problem-Solving Skills: The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.

PSO3: Successful Career and Entrepreneurship: The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and a zest for higher studies.

## PEOs of CSE Department

PEO1: To enable the students to think out-of-the-box solutions for addressing societal issues through ICT.

PEO2: To impart skills in students to analyze, design and implement Software/Hardware solutions to solve interdisciplinary and complex problems.

PEO3: To expose the students towards effective dissemination of research findings in order to become successful entrepreneurs or to pursue higher education.



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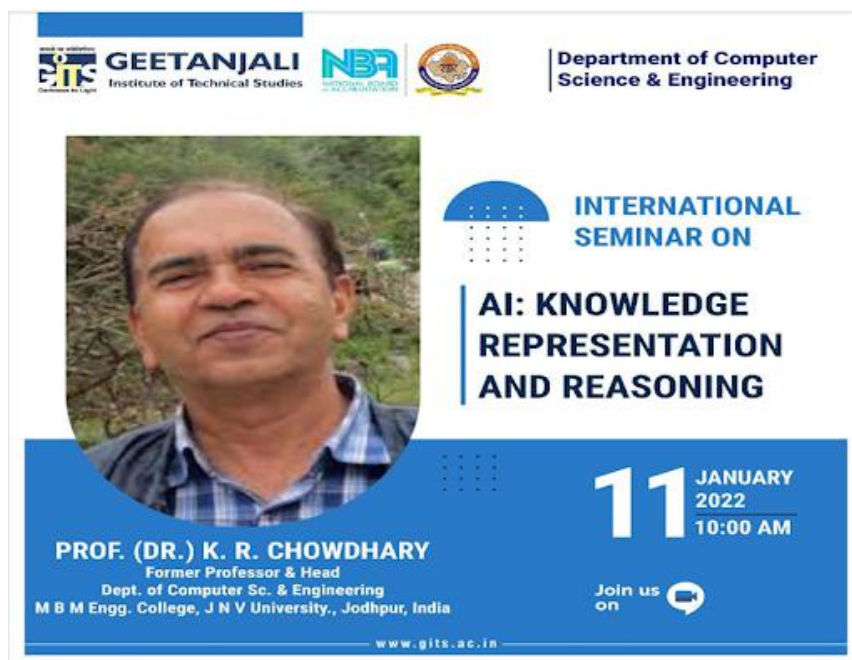
# Seminars/ Webinars





# International Seminar on AI: Knowledge Representation and Reasoning

An International Seminar on "AI: Knowledge Representation and Reasoning" was held on 11th January 2022, from 10.00 am-12.00 pm at the Computer Science Engineering Department. The mode of the event was hybrid (both online and offline). The resource person for this knowledgeable seminar was Prof. (Dr.) K. R. Chowdhary, Former Professor & Head, Dept. Of CSE, M.B.M.Engg. College, JNV University, Jodhpur, India. And this event was coordinated by Ms. Ruchi Vyas, Assistant Professor, and Mr. Bhupendra Kumar Teli, Assistant Professor (Faculty Coordinators for the event).



The main presenters in this program were Dr. Mayank Patel, HOD CSE, GITS, and Prof. (Dr.) K.R. Chowdhary, Guest. Ms. Ruchi Vyas inaugurated the event by welcoming all the cherished dignitaries and participants. Dr. Mayank Patel commented on the necessity of attending such sessions to enhance their technical skills.

Prof. K. R. Chowdhary briefly explained Artificial Intelligence and its applications in extensive areas. Nowadays, AI applications can be in almost all areas like Agriculture, Medical, Defense, Industries, etc. In the future, also all the technical fields will be AI-dependent.

The best outcome of this event was that students learned about the use and importance of the Prolog language. Participants appreciated the department for organizing such types of seminars. The program ended with a vote of thanks by Dr. Mayank Patel.



## आने वाले समय में बढ़ेगा आर्टिफिशियल इंटेलिजेंस का रोल : डॉ. मिश्र

### ■ गिट्स में अंतरराष्ट्रीय सेमिनार

ब्यूरो/नवज्योति, उदयपुर। डबोक स्थित गीतांजलि इंस्टिट्यूट ऑफ टेक्निकल स्टडीज में कम्प्यूटर साइंस इंजीनियरिंग ब्रांच की ओर से आर्टिफिशियल इंटेलिजेंस- नॉलेज रिप्रजेंटेशन एंड रिजनिंग पर ऑनलाइन अंतरराष्ट्रीय सेमिनार हुआ। संस्थान के निदेशक डॉ. विकास मिश्र ने बताया कि आज दुनिया चौथी औद्योगिक क्रांति में प्रवेश कर रही है। ऐसे में आर्टिफिशियल इंटेलिजेंस जैसे स्मार्ट तकनीक का रोल आने वाली दिनों में बढ़ेगा। आर्टिफिशियल इंटेलिजेंस



का विकास आने वाले दौर को नया रूप देगा। आने वाली पीढ़ी को अभी से आर्टिफिशियल इंटेलिजेंस के प्रति जागरूक करने के लिए इस सेमिनार का आयोजन एमबीएम इंजीनियरिंग कॉलेज जोधपुर के पूर्व प्रोफेसर डॉ. के.आर. चौधरी के सानिध्य में किया गया। प्रमुख वक्ता चौधरी ने कहा

कि दुनिया का हर प्रमुख क्षेत्र जैसे कृषि, सुरक्षा, इंडस्ट्री व मेडिकल आदि स्मार्ट होने के तकनीक के पथ पर अग्रसर हैं। खासकर हम यदि मेडिकल के क्षेत्र की बात करें तो इस क्षेत्र के नए आविष्कार व मशीन आर्टिफिशियल इंटेलिजेंस आधारित बनाई जा रही हैं, जिससे न केवल इंजीनियर्स अपितु

सभी के लिए आर्टिफिशियल इंटेलिजेंस संबंधित तकनीक सीखना तकरीबन अनिवार्य हो गया है। कम्प्यूटर साइंस विभागाध्यक्ष डॉ. मयंक पटेल ने कहा कि भविष्य में तकनीक का हर क्षेत्र आर्टिफिशियल इंटेलिजेंस पर निर्भर करेगा। कार्यक्रम में ऑनलाइन ऑफलाइन के माध्यम से 200 से ज्यादा छात्र व छात्राई हिस्सा लेकर आर्टिफिशियल इंटेलिजेंस के ज्ञान से रूबरू हुए। इस अवसर पर वित्त नियंत्रक बीएल जांगिड़ एवं आई.क्यू.ए.सी. निदेशक डॉ. सुधाकर जिंदल ने आर्टिफिशियल इंटेलिजेंस के भविष्य की संभावनाओं पर अपने विचार छात्रों के साथ साझा किए।

# Webinar on Data analytics in the Global Scenario

CSE student club and Department of Computer Science and Engineering organized a webinar on the relevance of Data analytics in the Global Scenario in virtual mode on 17th January 2022 from 11:00 to 12:00 am. There were around 53 participants who attended this webinar. The event was coordinated by Dr. Mayank Patel, HOD CSE under two resource persons named Dr. Vinod Kumar Murti (National Head) with 10 yrs work experience, and Mr. Vikas Khoisla (zonal Head).



Presenters in this inaugural session were Dr. Mayank Patel, HOD CSE, GITS, Ms. Monika Bhatt, Assistant Professor(CSE), and Mr. Bhupendra Kr. Teli, Assistant Professor( CSE), Mr. Gaurav Agarwal. The HOD CSE welcomed the eminent speakers and guided the students in recognizing and understanding the worth of Data Analytics in the future.

This webinar was conducted to teach students the concept of big data piled up for years, and most organizations understand that if they capture all the data that streams into their theory, they can apply analytics and gain significant value from it.

He discussed the basic concept of Data Analytics to read and study in the order defined in such a way to succeed had to be kept in mind while preparing for jobs. Some of the important modules were:

1. R.Programming
2. Python Programming
3. SQL
4. Big Data analytics.
5. Natural Language Processing
6. Machine Learning & AI
7. Deep Learning
8. Computer Vision

With the advancement of the session, Mr. Vikas Khosla started with his expert talk. He started his talk by discussing his own career path and various responsibilities that one could get after being a part of such programs as ISDC.

Receiving an overwhelming response from participants, the webinar came to an end with a valedictory session. The attendees would be able to interpret corporate life in a better way and requirements to prepare for a good career in the corporate world with respect to the Advances in Data Analytics.



# International Webinar on Into the Metaverse

An International Online Session On Introduction to Metaverse was held on 25th March 2022 from 6.00 pm to 7.00 pm and around 100 participants attended the online. In the Computer Science and Engineering Department and the mode of the organization was online, our resource person for the knowledgeable session is Mr. Alexander Mitrovich, CEO of Unique Network.

This event was coordinated by Dr. Mayank Patel/ Ms. Masooma (Student 3rd Year). The objective of this event was to get students' ideas about Metaverse. The program was inaugurated by Ms. Masooma and Sir welcomed the eminent speaker and briefed them about the importance of Metaverse and the career opportunities in it.



Mr. Alexander Mitrovich briefly explained Metaverse and its applications in various areas. Sir told that metaverse is a network of 3D virtual worlds focused on social connection and it can be defined as a simulated digital environment that uses augmented reality (AR), virtual reality (VR), and blockchain, along with concepts from social media, to create spaces for rich user interaction mimicking the real world.

All participants appreciated the department for organizing such types of seminars. The program ended with a vote of thanks by Dr. Mayank Patel.

**Inaugural Session:**

In the inaugural session following were present:-

1. Dr. Mayank Patel, HOD CSE, GITS
2. Ms. Monika Bhatt, Assistant Professor, CSE
3. Mr. Bhupendra Kr. Teli , Assistant Professor, CSE
4. Mr. Gaurav Agarwal.
5. Guests

The program was inaugurated by Dr. Mayank Patel by welcoming all the distinguished dignitaries and participants. In the welcome speech, Dr. Mayank Patel, HOD, GITS, welcomed our eminent speakers, Dr. Vinod Kumar Murti and Mr. Vikas Khosla, and briefed the students on knowing how important it is to understand the basics of Data Analytics in the future

**Webinar Brief:**

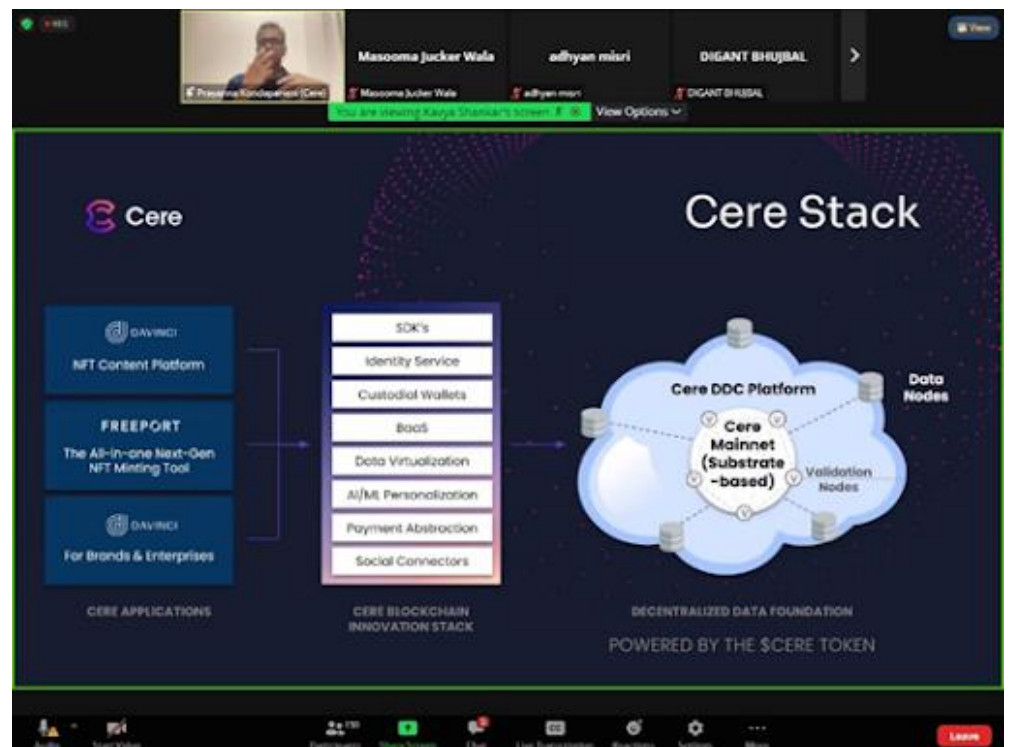
The webinar was started by Dr. Vinod Kumar Murti. He started his seminar by telling the importance of Data analytics. After receiving a few responses from guests, the speaker expressed his views on Data Analytics. He discussed necessary points to keep in mind while preparing for corporate life. The modules he discussed to study

1. R. Programming
2. Python Programming
3. SQL
4. Big Data analytics.
5. Natural Language Processing
6. Machine Learning & AI
7. Deep Learning
8. Computer Vision

He also discussed the basic concept of Data Analytics with the above things to read and study so that the way to succeed was to be kept in mind while preparing for jobs. He also discussed the importance of Data analytics in job culture and answered commonly asked questions like "where to start studying Data ". Ending his talk, he took the discussion mainly focused on programming and wished to come to visit GITS as well.

Taking the session forward, Mr. Vikas Khosla started with his expert talk. He started his talk, by discussing his career paths and various responsibilities that one could get after being a part of such programs. ISDC.

He quoted that the way to get started was to quit talking and begin doing. With this thought, he motivated our guests and wished them great success ahead.



# Seminar on Robotic Process Automation Development Camp

The Department of Computer Science and Engineering and Student Club, CSE, organized a seminar on Report of the International Seminar on 14 April 2022 from 6:00 pm - 7:00 pm. It was organized in Online mode, and there were around 50 participants. The seminar was conducted by one resource person Mr. Muddukrishna Lalapet, Senior Software Engineer at InnoWise, UiPath. The event coordinator of the session was Dr. Mayank Patel, HOD CSE, Ms. Masooma, Student 3rd Year, and Mr. Siddharth Singh, student 3rd year (Student Coordinators for the event).

The seminar was considered with the motive to disseminate knowledge about Robotic Process Automation.

The session commenced with Ms. Masooma, a Student welcoming all the cherished dignitaries and participants. Further, a welcome speech was given by Dr. Mayank Patel, HOD CSE, GITs, who addressed the distinguished guests of the session and the other attendees. He commented on the importance of attending such sessions. Sir briefed about the importance of RPA and the career opportunities in it. The eminent speaker briefly explained RPA and the crucial areas in which it was applicable. Sir said that Robotic Process Automation (RPA) is a software technology that makes it easier to build, deploy, and manage robots that emulate human actions interacting with digital systems and software.

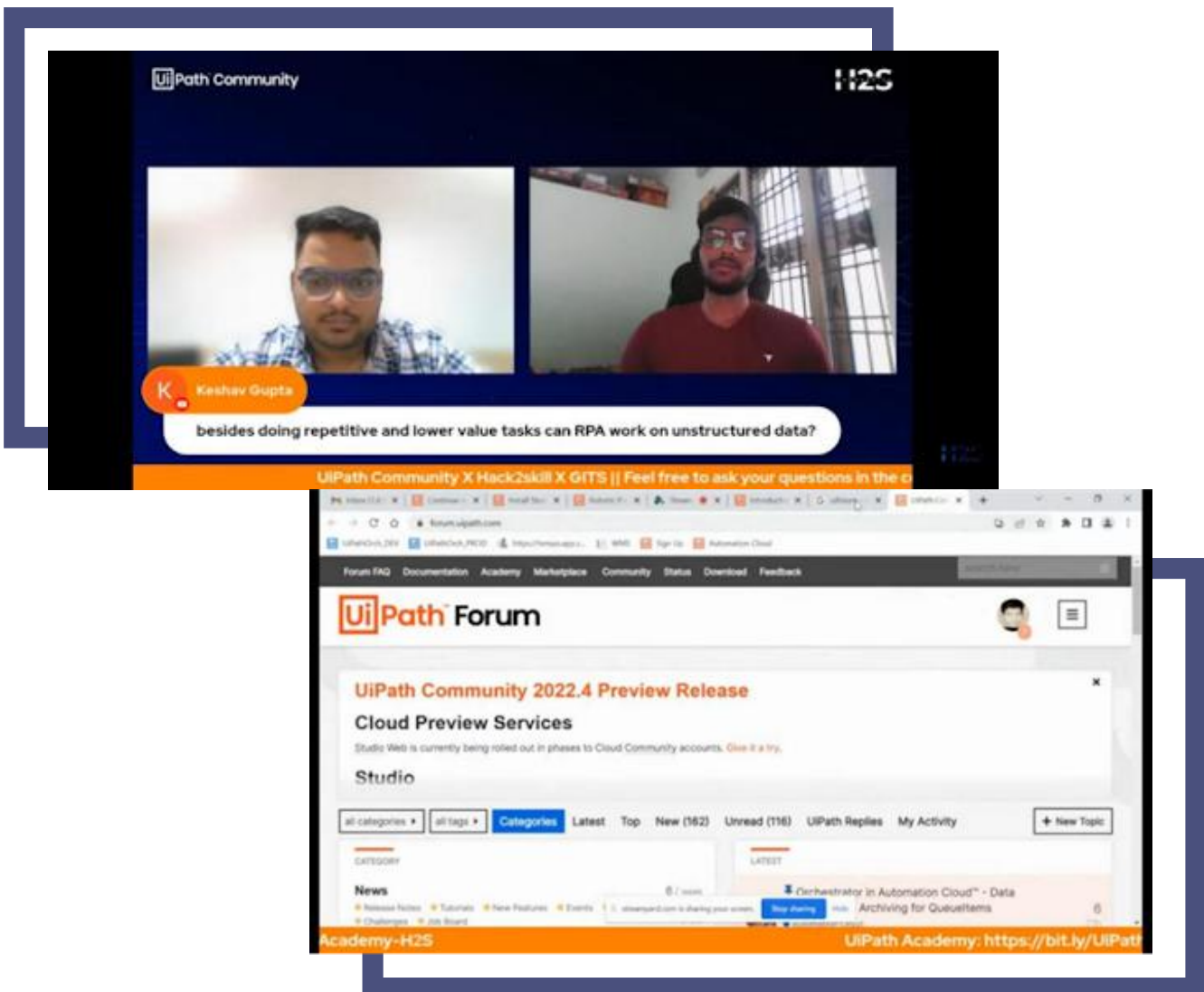
1. R.Programming
2. Python Programming
3. SQL
4. Big Data analytics.
5. Natural Language Processing
6. Machine Learning & AI
7. Deep Learning
8. Computer Vision





Taking the session forward, Mr. Vikas Khosla started with his expert talk. He initially discussed his career paths and various responsibilities that one could get after being a part of such programs as ISDC.

With the overwhelming response from participants, the webinar concluded with a valedictory session. He also discussed the requirements to prepare for a successful career in the corporate world concerning the Advances in Data Analytics.



As the session's end nearing, Ms. Masooma, the event coordinator, summarized the key notes of the session and also gained positive feedback from the students. The program ended with a vote of thanks by Dr. Mayank Patel and a positive point to organize more such events.



## EXPERT TALK



# Expert Talk on Role of IT in Demand Planning/Supply Chain Management

The Department of Computer Science and Engineering and Student Club CSE organized the Expert Talk on 24th Feb 2022 between 10:00 pm to 11:00 pm. It was conducted in a hybrid form, and there were around 80 attendees. The expert talk was given by Ms. Akanksha Jain, Demand Manager, Aditya Birla Group.

The session was initiated by Ms. Ruchi Vyas, Assistant Professor, by welcoming all the cherished dignitaries and attendees. Furthermore, a welcome address by Dr. Mayank Patel, HOD CSE, GITS, welcomed the eminent speaker and briefed students about the importance of the Role of IT in Demand planning.

The distinguished speaker briefly explained Demand Planning and its application in various areas. She also explained how Aditya Birla's group is utilizing supply chain management to maintain and complete the requirements of each plant. She concluded by explaining the method to balance demand and supply. She also explained the availability of courses for choosing a career path as a demand manager.

Overall, the session briefed the students on how software engineering is a dominant subject in engineering and how its knowledge is applicable in the project in various industry setups. The session received a good response, and the students thanked the department for organizing such a session. In the end, HOD CSE delivered the vote of thanks and thanked the resource person and all other attendees.





CERTIFICATE OF APPRECIATION:-



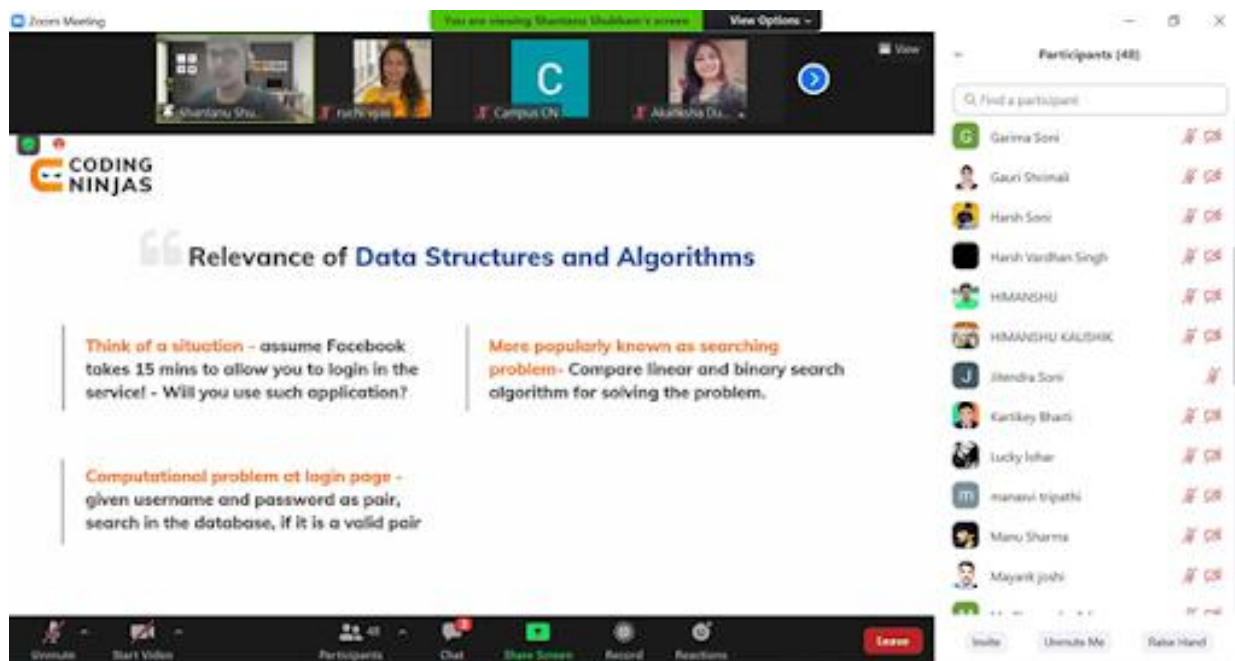


# Expert Talk on Relevance of Data Structures and Algorithms

The Department of Computer Science and Engineering organized the Expert Talk on 5 March 2022 at 10:30 am. It was conducted in the form of an online webinar and there were around 64 participants. This event was coordinated by Mr. Bhupendra Kumar Teli and the Expert talk was given by one resource person Mr. Dhruv Govil, Sr. Data Scientist, Appwars Technologies Pvt. Ltd.

This seminar was organized to aware the students of the importance of Data Analytics and to make students familiar with industrial environments.

HOD of the CSE department, Prof Dr. Mayank Patel, welcomed our eminent speaker, Mr. Prakhar Srivastava, to share his views with the participants that if they want to develop themselves attending such webinars would enhance their technical skills.



In this webinar, students acknowledged a complete knowledge of Data Structure; A Data Structure is a specialized format for organizing and storing data. General Data Structure types include the array, the file, the record, the table, the tree, and so on. Any Data Structure was designed to organize data to suit a specific purpose so that it can be accessed and worked within appropriate ways. In computer programming, a Data Structure may be selected or designed to store data to work on it with various algorithms.

Three basic concepts were introduced in this webinar :

- Relevance of Data Structure & Algorithms.
- Time Complexity.
- Optimal searching problems.

Receiving an overwhelming response from participants, the webinar concluded with a valedictory session, graced by Mr. Anupam Punj, Operation Manager, Coding Ninjas. All participants appreciated the department for organizing such types of webinars. The program ended with a vote of thanks by Dr.Mayank Patel.



After this webinar, students will be able to understand the relevance of Data Structure and Algorithms in Software Development and what is the best language for learning Data Structure and Algorithms.



## WORKSHOPS





# One Day Hands-On Workshop On React Js.

The Department of Computer Science and Engineering and the Student CSE club organized a day of the hands-on workshop on React JS on 28th March 2022. The session was under one resource person, Mr. Gautam Anand (CSE), and there were about 40 participants. The session was organized in offline mode.

The objectives of this workshop were to disseminate basic knowledge of React JS technology among students and to develop a structure for an application in React JS.



The session ended with the accomplishment of the motive to enable participants to make applications using React JS and understand the industrial requirements of this technology and its applications in various areas.





# Workshop on Crypto Gaming Guild

The Department of Computer Science and Engineering and Reskill organized a 1-day online workshop on AR. The workshop was held on 22 April 2022 (6:00 AM-8:00 PM) under the guidance of our resource person Dr. Mayank Patel, Event Coordinator. There were around 53 attendees.



The objective of this workshop was to share the basic knowledge of Crypto Guild among students. The workshop explained how Crypto Gaming Guild act as facilitating intermediaries by purchasing in-game assets in the form of NFTs, then lending them out to thousands of players to play and earn yields and what are it's future scope.

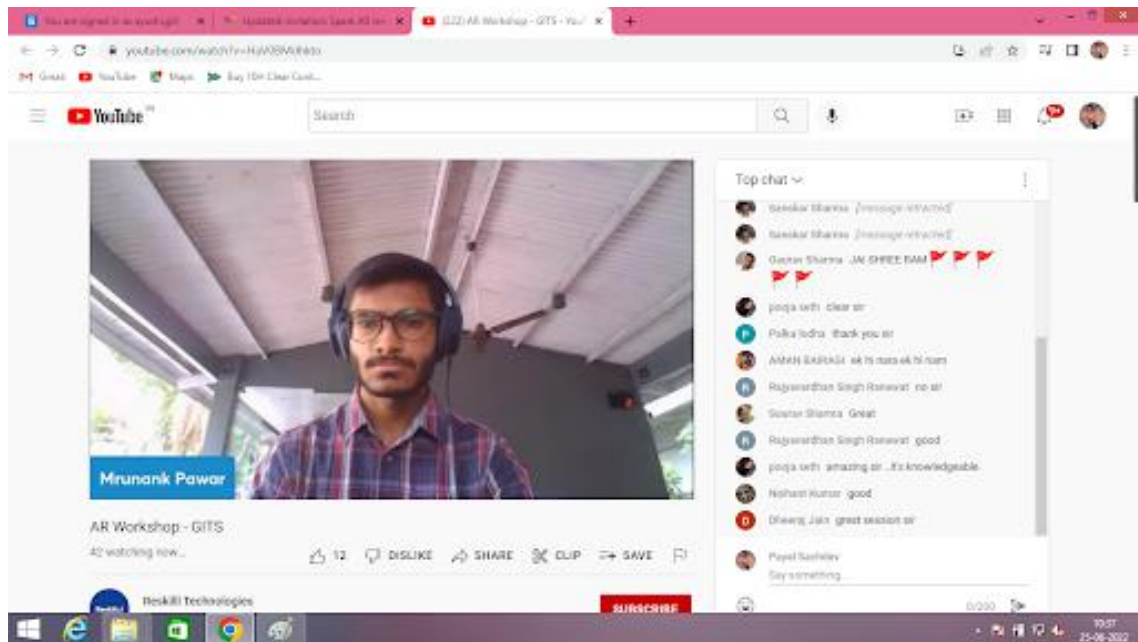
The session was ended with a knowledgeable note for the attendees to be get indulge in such kind of guilds.

# Two days Online Workshop on AR

The Department of Computer Science and Engineering and Reskill organized a 2-days online workshop on AR. The workshop was held from 25th June 2022 to 26th June 2022 (10:00 AM-12:00 PM) and organized in the virtual mode under one resource person, Mr. Lakshit Pant, AR creator, and guidance of Dr. Mayank Patel, Event Coordinator. There were around 53 attendees.



The session was initiated by welcoming all the cherished dignitaries and participants by Dr. Mayank Patel and the students. A welcome speech was presented by Dr. Mayank Patel, HOD CSE, GITS, who shared his views with the participants that to skill up one needs to attend such sessions and gave an overview on the importance of AR technology in today's era.



Further, the eminent guest briefly explained AR and its applications. He started by briefing about X Spark and its utilization to create a virtual world in reality. He initiated by making students aware of filters. He gave hands-on training to create different kinds of filters. He explained all the icons of the Spark tool and their usage in the AR world. Dr. Mayank Patel, Event Coordinator, summarized the outcomes of the workshop on day two. All participants appreciated the department for organizing such types of events. The program concluded with a vote of thanks by Dr. Mayank Patel. The session ended on a positive note with a commitment of further conducting such informative workshops.







# MOU



A Memorandum of Understanding (MOU) is a formal, written agreement between two or more parties that establishes a partnership. Geetanjali Institute of Technical Studies has signed MOU with some of the below-mentioned companies:



## GitHub

GitHub, Inc. is a provider of Internet hosting for Software Development and version control using Git. It offers the distributed version control and source code management functionality of Git, plus its own features. MOU with GitHub was done on 8 Feb, 2022.



## Mentorkart

MentorKart is an online mentoring platform. They are providing mentorship program that brings the best mentors from India and abroad from different walks of life to help the customers along with their journey. Their Mission is to provide a unique platform to individuals to chase their goals with the help of active mentoring from leading mentors. MOU with Mentorkart was done on 6 April, 2022.



## Linnovate

Linnovate provides enterprises with a full suite of open-source software solutions to improve their business relationships, productivity, and integration, software, the backbone of every organization. Our mission at Linnovate is to leverage the substantial value of the rapidly growing Open-Source software ecosystem in order to disrupt the usage of closed proprietary solutions, throughout organizations. MOU with Linnovate was done on 13 May, 2022.



## CONFERENCE



# International Conference on Multi-Disciplinary Application & Research Technologies (ICMART-2022)

An International Conference on Multi-Disciplinary Application & Research Technologies (ICMART-2022) was held at the Department of Computer Science and Engineering, GITS, Udaipur, from 27<sup>th</sup> – 28<sup>th</sup> May 2022 (2 days). It was sponsored by the IEI Udaipur Chapter. They had also provided Eleven Thousand rupees as sponsorship of this conference. This conference held in Online mode.

There were two guests: Dr. C.P. Jain, Honorary Secretary, IEI Udaipur Chapter, and Dr. Manju Mandot, CSI Chairman Udaipur Chapter, Director, Dept. of Computer Science & IT, Rajasthan Vidyapeeth, and two keynote speakers Dr. Goonjan Jain, Assistant Professor, DTU, Delhi and Mr. Deepak Verma, Technical Specialist, Ericsson India Global.

The session chairs consisted of Dr. Bharat Singh Deora, Professor, Dept. of Computer Science, Rajasthan Vidyapeeth, Dr. Mahipal Singh Deora, Professor, BNU, Udaipur, Dr. Kanika Garg, Associate Professor, Dept. of Computer Science, GITS, Udaipur, Dr. Ruby Rani, Research Associate, University of Warwick, Coventry and Dr. Mahender Kumar, Research Associate, University of Warwick, Coventry.

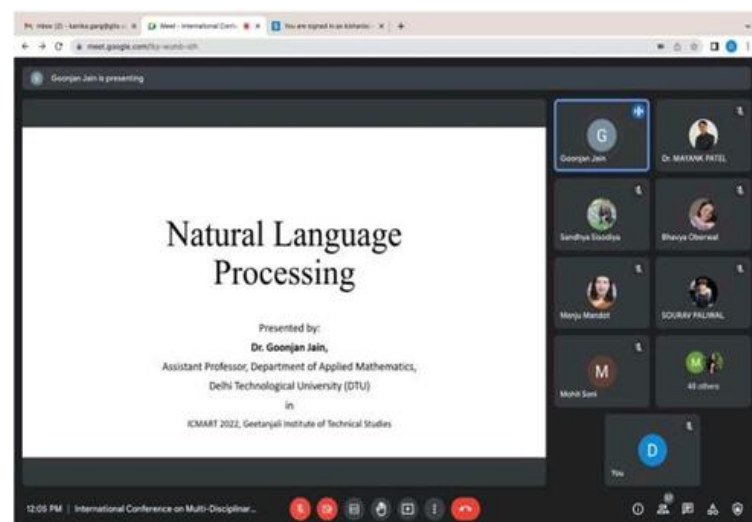




The objective of this conference revolved around bringing Engineering, Technology, and Management Research areas synchronically on an indivisible platform. This conference drew collective research fellowships from diverse fields in unitedness to share their research findings and latest ideas. The main intention of this conference was to integrate interdisciplinary inquiry to deliver the best applications.

The conference was scheduled in offline mode as per following:

Dates	Session1	Session2
27 May 2022	Inaugural Session with Invited Speakers and Keynote Speaker Technical Session chaired by Dr. Bharat Singh Deora and Dr. Kanika Garg	Technical Session chaired by Dr. Mahipal Singh Deora and Dr. Kanika Garg
28 May 2022	Session by Keynote Speaker Technical Session chaired by Dr. Ruby and Dr. Kanika Garg	Technical Session chaired by Dr. Mahender Kumar and Dr. Kanika Garg





## SIH 2022



## SIH 2022

GITS organized the Internal Hackathon as an opening wedge to participate in the world's biggest hackathon, Smart India Hackathon – 2022, on the 7th and 8th February 2022 at the Department of Computer Science and Engineering, GITS, Udaipur. There were around 24 teams with a total of 124 participants rigorously competing against each other for 24 hrs. The teams applied themselves to propose the best solution for the given problem statements by different Government Ministries and Industries.

The attendees of the event included the distinguished dignitaries: Dr. Vikas Misra, Director, GITS, Dr. Sudhakar Jindal, Director-IQAC, GITS, Mr. B.L. Jangir, Finance Controller, GITS, and department heads Dr. Mayank Patel, SPOC-SIH22, HOD CSE, Dr. Manish Verma, HOD Civil, Dr. Deepak Palwal, HOD ME, Dr. Rajeev Mathur, HOD ECE, Prof. Prakash Sundaram, HOD EE, and all the faculties and participants.

The event commenced with an inaugural session by Dr. Mayank Patel, SPOC-SIH22 welcoming all the cherished dignitaries and participants. Ms. Ruchi Ameta, Assistant Professor, GITS, welcomed our eminent guests and participants. She briefed on the eminence of the Smart India Hackathon and how the event will change the world about technology and work ethics.

Furthermore, the welcome speech by Prof. (Dr.) Vikas Misra, Director (GITS), shared his views with contestants and how they can contribute to the nation through the Smart India Hackathon. Sir also gave a success mantra to the students for effectively representing their ideas to win the contest.

Dr. Sudhakar Jindal, Director-IQAC, addressed the students and motivated them to participate. In addition, Sir conveyed to students that it was a golden opportunity to showcase their talent and serve the nation through their technical skills.

Just after the inaugural session, Shri R.A. Gupta, Honorable Vice-Chancellor, Rajasthan Technical University, Kota (Raj.), addressed the participants. Sir understood the solution proposed by the participants. Sir also encouraged participants and wished them to illuminate university and institute names at the national level.

The Day 2 Of the event began with the allotment to the respective teams. Then teams began working on their problem statements. The initial round of evaluation began with judges understanding the solution proposed. PPT was evaluated, and changes to be amended were advised to the teams.

After rigorous evaluation, the top 10 teams were selected by the college to participate in Smart India Hackathon-2022, and with this first round of assessment completed.

Proceeding with the event, a valedictory session, graced by guests and all judges. Dr. Vikas Mishra, Dr. Sudhakar Jindal, and Mr. B.L. Jangir gave mementos to judges as a token of appreciation. Dr. Mayank Patel presented the event report and declared the winning teams. He also congratulated all winners and encouraged participants never to give up and continue working hard to achieve more who cannot proceed for further participation in SIH. All the teams were praised for their efforts by giving them the certificate of participation by esteemed judges and directors. Director, GITS, motivated winners to perform much better in the future and to keep implementing their skills for societal betterment. The program ended with a vote of thanks by Dr. Mayank Patel, HOD, CSE Department.

S NO.	PROBLEM STATEMENT ATTEMPT BY TEAM	TOTAL NUMBER OF TEAMS PARTICIPATED AGAINST EACH PS
1	(DA1062) Temperature Sensitive/programmable Stickers for Medicines and Other Temperature-sensitive Products	1
2	(GM751) 3D Planetarium Software	1
3	(DB875) Development of a One-Stop Platform for budding entrepreneurs for Overall Support	1
4	(MG1100) Development of Dynamic Website for NECBDC	1



4	(MG1100) Development of Dynamic Website for NECBDC	1
5	(NC737) AR/ VR Training for Emergency Operation In Coal Mine	1
6	(RK761) Development & Implementation of An Integrated Web-Based Office Document Management System	1
7	(OS870) Fake Enrollment In Colleges	1
8	(GM750) Ticketless Entry System to Monuments/Museums	1
9	(DR705) Graphical Password Authentication	1
10	(GM754) E-Commerce for Artisans	1
11	(AU1061) To develop Mobile software for guiding the tourists (Char Dham Yatra & other places) in Uttarakhand state.	1
12	(DR702) AI based Chatbot to answer FAQs	1
13	(NC739) A solar Powered IOT Device with the ability to connect a smart network to be used in Geo Tagging of Physical Assets Created under CSR	1
14	(GS908) Borewell Rescue Operations	1
15	(AU1060) To develop a Waste water management system in villages.	1

16	(BV814) Suggest an effective way for mitigating the problem of conserving and reusing the rain water demand at source	1
17	(AU1058) To develop automatic irrigation system by use of wastewater for small irrigation field	1
18	(RK1116) Use of digital technology or making physical prototype for micro irrigation system to improve water use efficiency of Irrigation Sector	1
19	(NC738) Work clothing that has sensors embedded in it to securely transmit data to managers about hazardous conditions and the worker's physical conditions, improving safety overall	2
20	(RK760) Tongue Based Wheelchair	1
21	(MA1216) IOT Enabled risk monitoring system in Cold Supply Chain	1
22	(ML1189) Use of technologies with least O&M in various terrains for - Solid Waste Management (SWM), Liquid Waste Management (LWM), Fecal Sludge Management (FSM) and Scientific collection and transportation of waste in rural areas	1
23	(RK1127) Water logging in almost all Cities Despite Having Drainage System in Place	1

**Nominated Team:**

**Shortlisted Teams (10)**

S.No.	Category	Problem Statement Number	Organization Name	Name of Team	Team Leader Name
1	Software	DA1062	Department of Science & Technology (DoST), Ministry of Science and Technology.	Thunder Squad	Bhavya Chawda
2	Software	GM751	Ministry of Culture	Derrors	Vinay Kumar
3	Software	NC737	Coal India Limited	Nextel	Akshali Jain
4	Hardware	NC739	Coal India Limited	Phantom Troupe	Karan Singh Asoliya
5	Software	DR705	All India Council for Technical Education (AICTE).	Psykicks	Bhanu Pratap Singh Chundawat
6	Software	DR702	All India Council for Technical Education (AICTE).	Abstract Bytes	Sarthak Tak
7	Hardware	RK1116	Central Water Commission (CWC), Ministry of Jal Shakti	Aimers	Parag Sharma
8	Hardware	NC738	Coal India Limited	Team Ravensclaws	Rudransh Maheshwari

9	Hardware	RK760	Department of Empowerment of Persons with Disabilities(Divyangjan) , Ministry of Social Justice and Empowerment	Team single strikers	Shashwat Sharma
10	Hardware	MA1216	NIFTEM Thanjavur ,Ministry of Food Processing Industries (MoFPI)	Team Acute LogisticX	Harsh Soni

### Waitlisted Teams (5)

S.No.	Category	Problem Statement Number	Organization Name	Name of Team	Team Leader Name
1	Software	GM750	Ministry of Culture	Tech Titans	Nitesh Kumawat
2	Software	GM754	Ministry of Culture	Kudos Design	Jaivardhan Singh Shaktawat
3	Software	OS870	Government of Maharashtra.	RESILIENT	Farhan Khan
4	Hardware	GS908	National Disaster Response Force (NDRF).	ALPHA CREW	Ritesh Paliwal
5	Hardware	RK1127	Ministry of Micro, Small & Medium Enterprises (MSME).	GreenTech07	Anirudh Trivedi



**Jury Details: Below are the Judge Details**

S.No.	Name	Designation	Organization	Mobile No.	Mail Id
1	Ashish Panery	Senior Software Engineering Manager	Microsoft, India	9024024250	ashishkp220@gmail.com
2	Devanshu Paliwal	Product Manager	E-Connect Solutions Pvt. Ltd. Udaipur	9950336803	devanshu.paliwal@e-connectsolutions.com
3	Lokesh Puri Goswami	Head Product Development	Angirus Ind Private Limited	9694151808	lpgoswami@angirusind.com
4	Arbaz Hussain	Application Lead	HCL Technologies	7737787738	arbazhussain1111@gmail.com
5	Dr. Sudhakar Jindal	Director-IQAC	Geetanjali Institute of Technical Studies, Udaipur	9414164420	directoriqac@gits.ac.in



## Student Achievements



# Contactless Temple Bell

Keeping a close eye on covid situation Students of Computer Science and Engineering Department, purposed a contactless temple bell for temples in mentorship of Mr. Latif Khan and Dr. Mayank Patel.

This project is developed by team NEXTEL to avoid covid which rings without touching the bell .As all the religious places (temples)are opened again and as we see in the temples people used to ring the bell which is not safe and can affect their hygiene by touching the bell in the temple.)



This project focus on public safety. When there is long queue in temple this project can help without infecting anyone. When the person brings their hand near to sensor, the sensor sends signal to Arduino, and it starts to ring the bell.



This has been created as a system in which people do not need to touch the bell in the temples. They just have to show or take their hands in front of the bell and the bell will ring automatically without touching with the help of sensor which will sense the distance and will take action according to that.

# Smart Pet Feeder

Students of Computer Science and Engineering have created a solar based smart pet feeder system in the mentor-ship of Mr. Latif Khan (assistant professor and incharge of innovation cell) and Dr. Mayank Patel (Hod of computer science department)

This project has been created by TEAM PHANTOM TROUPE and they have inaugurated their project at Gulab-Bagh, Udaipur on Worlds Environment day [05-jun-2022], there are almost 150 citizens of Udaipur with our guest Mr. Ajeet Ucchoi sir(forest department officer, Udaipur).



**Team phantom troupe**

The system has created by measuring all the possible aspects and the problems that a pet owner faced in this busy lifestyle therefore the system is designed to feed and take care of their pet animals in their absence.



The system is alterable so it can be designed on the basis of need of the person as for the bird century of Gulab-Bagh bird feeding is done on their demand.

## स्मार्ट बर्ड फीड स्टेशन का अनावरण

पर्यावरण एवं पशु पक्षियों में समन्वय बैठाने के लिए गिट्स के विद्यार्थी करण सिंह असोलिया, वरुण मेहरा, सूरज जोशी, भाविन भटनागर, धर्मेन्द्र वैष्णव, कुशल शर्मा तथा जान्हवी कुमावत द्वारा डॉ मयंक पटेल एवं असिस्टेंट प्रोफेसर लतीफ खान के निर्देशन में बनाया हुआ स्मार्ट बर्ड फीडर का गुलाब बाग के बर्ड पार्क में अनावरण किया गया। सोलर पावर से संचालित इस बर्ड फीडर की खास बात यह है कि दुनिया के किसी कोने में बैठ कर अपने पालतू को आवश्यकता अनुसार उसका खाना पीना निर्धारित कर सकते हैं। इसके लिए किसी भी आदमी की जरूरत नहीं पड़ती है। साथ ही अपने घर पर लगे पेड़ पौधों को भी दूर



बैठकर उसकी सिंचाई कर सकते हैं। यह सब आईओटी एवं सेंसर के माध्यम से संभव हो पाया है। चीफ कंजरक्टर ऑफ फॉरेस्ट राज करन खेरवा ने कहा कि हमें पर्यावरण की सुरक्षा दैनिक जीवन में अपनाना चाहिए। उन्होंने कहा कि यदि यह फीडर पर्यावरण तथा अन्य माप दण्डों पर खरा उतरता है तो यह स्थाई तौर पर गुलाब बाग में स्थापित की

जाएगा। संस्थान के वित्त नियंत्रक बी एल जांगिड, डिप्टी कंजरक्टर ऑफ फॉरेस्ट अजीत उचोई, मोहनलाल सुखाड़िया विश्वविद्यालय के फैकल्टी आफ मैनेजमेंट स्टडीज की कोर्स डायरेक्टर डॉ मीरा माथुर, गिट्स निदेशक डॉ विकास मिश्र तथा निदेशक आई क्यू ए सी डॉ सुधाकर जिन्दल ने भी विचार व्यक्त किए।



## NPTEL ACHIEVERS



# NPTEL ACHIEVERS

The Department of Computer Science and Engineering aims at providing the best resources for its students to become the best professionals in the corporate world. NPTEL courses are one of the resources that would help the students to gain knowledge regarding their respective fields of interest.

NPTEL CSE (JANUARY-JUNE 2022)					
S.No.	Course ID	Course Name	Name	Certificate Type	Topper
1	noc22-cs26	Programming, Data Structures and Algorithms Using Python	Farhan Khan	Elite	
2	noc22-cs51	Database Management System	Himani Mehta	Successfully Completed	
3	noc22-hs13	Speaking Effectively	Nidhi Mantri	Elite	
4	noc22-cs32	Python for Data Science	Krishanu Mishra	Elite	
5	noc22-hs07	Soft Skill Development	Kartik Agarwal	Elite	
6	noc22-hs13	Speaking Effectively	Nitesh Kumawat	Elite	
7	noc22-cs26	Programming, Data Structures and Algorithms Using Python	Pratik Kanthaliya	Elite+Silver	
8	noc22-hs13	Speaking Effectively	Kartik Agarwal	Elite	
9	noc22-hs07	Soft Skill Development	Khushi Lodha	Successfully Completed	
10	noc22-cs51	Database Management System	Pranjul Nainawatee	Elite	Topper of 5% in this course
11	noc22-cs51	Database Management System	Pooja Seth	Elite	

12	noc22-cs28	Data Science for Engineers	Devanshi Minda	Elite	
13	noc22-hs13	Speaking Effectively	Sheetal Sharma	Elite+Silver	Topper of 1%in this course
14	noc22-hs07	Soft Skill Development	Manya Kashyap	Successfully Completed	
15	noc22-hs34	Technical English for Engineers	Anisha Shaktawat	Elite	
16	noc22-cs45	Problem Solving Through Programming In C	Chhavi Bhatia	Elite	
17	noc22-cs19	Computer Networks and Internet Protocol	Bhowmick Vyas	Elite	
18	noc22-cs08	Data Analytics with Python	Disha Purohit	Successfully Completed	
19	noc22-cs45	Problem Solving Through Programming In C	Tisha jain	Elite	
20	noc22-cs45	Problem Solving Through Programming In C	Kinjal Jain	Elite	
21	noc22-cs08	Data Analytics with Python	Kuldeep Bairwa	Successfully Completed	
22	noc22-cs08	Data Analytics with Python	Kuldeep Khatik	Elite	
23	noc22-cs45	Problem Solving Through Programming In C	Manya Kashyap	Elite	
24	noc22-cs45	Problem Solving Through Programming In C	Narendra Patel	Elite+gold	Topper of 2%in this course
25	noc22-cs31	The Joy of Computing using Python	Pranjul Nainawatee	Elite+Silver	
26	noc22-hs34	Technical English for Engineers	Kartik Agarwal	Elite	

27	noc22-cs45	Problem Solving Through Programming In C	Pranjul Jain	Elite	
28	noc22-cs08	Data Analytics with Python	Rajesh KumarMenaria	Elite	
29	noc22-cs45	Problem Solving Through Programming In C	Rinku Kunwar Rao	Elite	
30	noc22-cs08	Data Analytics with Python	Rizwan Khan	Elite	
31	noc22-cs45	Problem Solving Through Programming In C	Ritika Sharma	Elite	
32	noc22-cs08	Data Analytics with Python	Roshni Jain	Elite	
33	noc22-cs45	Problem Solving Through Programming In C	Sarthak Tak	Elite	
34	noc22-cs40	Introduction To ProgrammingIn C	Harshit Dubey	Elite	
35	noc22-hs08	Enhancing Soft Skills and Personality	Bhowmick Vyas	Elite+Silver	
36	noc22-ge13	Outcome Based Pedagogic Principles forEffective Teaching	Deepika Khinchi	Successfully Completed	
37	noc22-ge13	Outcome Based Pedagogic Principles for Effective Teaching	Disha Purohit	Successfully Completed	
38	noc22-cs20	Cloud computing	Harshal Jain	Elite	
39	noc22-hs19	Introduction to Cognitive Psychology	Himani Mehta	Elite+Silver	
40	noc22-cs42	An Introduction to Programming Through C++	Prashant Gehlot	Elite	
41	noc22-ge13	Outcome Based Pedagogic Principles for Effective Teaching	Kuldeep Bairwa	Successfully Completed	
42	noc22-ge13	Outcome Based Pedagogic Principles for Effective Teaching	Kuldeep Khatik	Elite	



43	noc22-cs20	Cloud Computing	Lakshyaraj SinghDalawat	Elite+Silver	
44	noc22-cs42	An Introduction to Programming Through C++	Riya Sahu	Elite	
45	noc22-hs08	Enhancing Soft Skills and Personality	Lakshyaraj Singh Dalawat	Elite+Silver	
46	noc22-cs42	An Introduction to Programming Through C++	Krishanu Mishra	Elite+Silver	
47	noc22-ge13	Outcome Based Pedagogic Principles for Effective Teaching	Rajesh KumarMenaria	Elite+Silver	
48	noc22-hs08	Enhancing Soft Skills and Personality	Riya Sahu	Successfully Completed	
49	noc22-ge13	Outcome Based Pedagogic Principles for Effective Teaching	Rizwan Khan	Elite	
50	noc22-ge13	Outcome Based Pedagogic Principles for Effective Teaching	Roshni Jain	Elite	
51	noc22-hs19	Introduction to Cognitive Psychology	Sheetal Sharma	Elite+gold	
52	noc22-cs20	Cloud Computing	Yogita Sharma	Elite+Silver	Topper of 5% in this course



# PLACEMENTS



# PLACEMENTS

GITS is a well-renowned name in the field of Technical Education and Management studies and directly contributes to the comprehensive education scenario of the country. We GITS strongly believe in creating future Technocrats and worthy citizens. The training and Placement cell works 24\*7 for ensuring employment for all the students across various industries and helping them in getting the most suitable job.

The training and placement cell of the Department of Computer Science and Engineering centrally handles campus placement of the students. And the students of Geetanjali Institute of Technical Studies have continued to make us proud by placement in many renowned companies.

Details of CSE students placed are as follows -

S.NO.	RTU ROLL NO.	STUDENT NAME	DATE	COMPANY NAME	PROFILE	PACKAGE
1	18EGICS094	TANMAY MATHUR	08-01-2022	KANSOFT	ASSOCIATE SOFTWARE ENGINEER	3.25 LPA
2	18EGICS001	AAKANKSHA SAMOTA	25-01-2022	HARMAN	ASSOCIATE ENGINEER	5.00 LPA
3	18EGICS046	KRISHNAPAL SINGH DEORA	25-01-2022	HARMAN	ASSOCIATE ENGINEER	5.00 LPA
4	18EGICS073	PURVA DINESH VIJAYVARGIYA	25-01-2022	HARMAN	ASSOCIATE ENGINEER	5.00 LPA
5	19EGICS204	RATAN SINGH	25-01-2022	HARMAN	ASSOCIATE ENGINEER	5.00 LPA
6	18EGICS080	RITIK NANAWATI	25-01-2022	HARMAN	ASSOCIATE ENGINEER	5.00 LPA
7	18EGICS095	TANMAY PALIWAL	25-01-2022	HARMAN	ASSOCIATE ENGINEER	5.00 LPA
8	18EGICS007	AMISHA SONI	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
9	18EGICS018	BHAVIKA RAJORA	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
10	18EGICS044	KASHISH JOSHI	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
11	18EGICS061	PRAFULL RAJ SONI	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
12	18EGICS067	PRIYA JAWARIYA	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
13	18EGICS068	PRIYAL SONI	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
14	18EGICS078	RAUNAK BHANAWAT	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
15	18EGICS086	SANDHYA KUNWAR SISODIYA	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
16	18EGICS100	VARSHA PALIWAL	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
17	18EGICS102	VIDHYANSHI KHETPALIYA	30-01-2022	SQUARE YARDS	MANAGEMENT TRAINEE	4.50 LPA
18	18EGICS014	ARYAN DADHEECH	23-02-2022	AG TECHNOLOGIES	TRAINEE ENGINEER	3.00 - 4.50 LPA
19	18EGICS051	LOKESH BHATT	23-02-2022	AG TECHNOLOGIES	TRAINEE ENGINEER	3.00 - 4.50 LPA
20	18EGICS060	PAYAL MANGHNANI	23-02-2022	AG TECHNOLOGIES	TRAINEE ENGINEER	3.00 - 4.50 LPA
21	18EGICS062	PRAJAPATI DIPAK SHANTILAL	23-02-2022	AG TECHNOLOGIES	TRAINEE ENGINEER	3.00 - 4.50 LPA
22	18EGICS068	PRIYAL SONI	23-02-2022	AG TECHNOLOGIES	TRAINEE ENGINEER	3.00 - 4.50 LPA
23	18EGICS078	RAUNAK BHANAWAT	23-02-2022	AG TECHNOLOGIES	TRAINEE ENGINEER	3.00 - 4.50 LPA
24	18EGICS043	KARTIK AGARWAL	10-03-2022	WOODEN STREET	BUSINEES DEVELOPMENT	3.00 - 5.00 LPA
25	18EGICS043	KARTIK AGARWAL	31-03-2022	GREEDGE	GRADUATE SALES TRAINEE	4.20 LPA
26	18EGICS009	AMRITESH SAINI	25-02-2022	WONDER CEMENT	GRADUATE TRAINEE ENGINEER	4.25 LPA
27	18EGICS097	TWINKLE JANWA	25-02-2022	WONDER CEMENT	GRADUATE TRAINEE ENGINEER	4.25 LPA
28	18EGICS043	KARTIK AGARWAL	26-03-2022	COLLABERA	TALENT SPECIALIST	3.24 LPA



# Alumni Interaction



# Skill-Enhancing for a better Job Opportunity

The Department of Computer Science and Engineering commemorated an online alumni interaction session on 12th February 2022 (11:00 am-12:30 pm) for B Tech (CSE) II yr students, On Google-Meet. There was a total of 66 students who attended this session. The resource person for this event was Mr. Bharat Kumar (2016-2020 Batch), Software Developer, Microsoft.

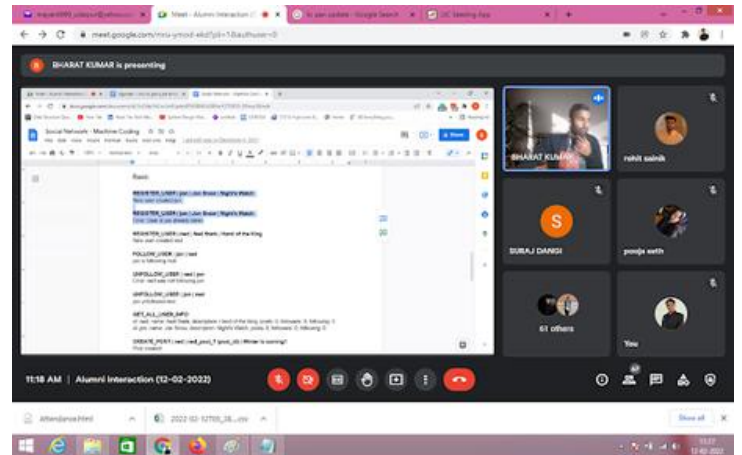
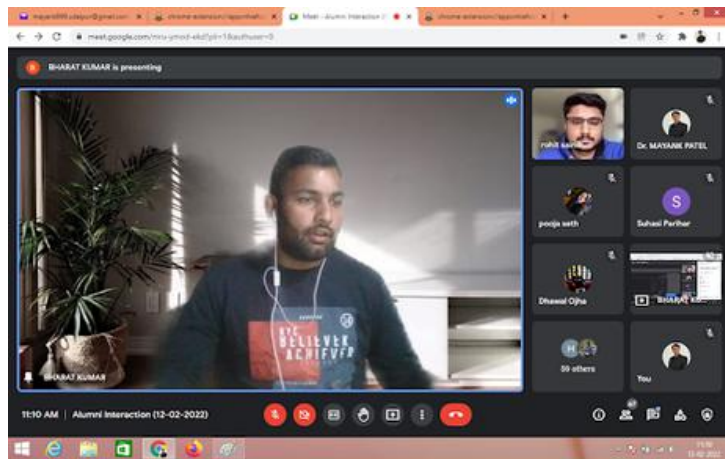
This online interaction was organized to give career guidance to our students for better career opportunities.



In the inaugural session, Dr. Mayank Patel, HOD CSE, GITS, Mr. Bharat Kumar, our Alumni Guest and Software Developer of Microsoft, Faculties of the CSE Department, and the students were present here. Dr. Mayank Patel shared his views with the students that if they want to get career guidance then attending such webinars would help them a lot and welcomed our eminent alumni, Mr. Bharat Kumar. Sir also brief the importance of a strong alumni network.

Mr. Bharat Kumar had guided his juniors about various interview techniques and how to improve communication skills. Along with this, he had explained the importance of final-year projects. He summarized the role of an IT person in various fields and several domains of expertise one can pursue one's professional growth.





Dr. Mayank Patel, Professor, and Head, CSE event coordinator, summarized the outcomes of the online alumni interaction program and gave a vote of thanks to our keynote alumni. All participants appreciated the department for organizing such types of webinars.

After this program, juniors gained knowledge about various interview techniques and how to improve communication skills. Along with this, he had explained the importance of final-year projects.

# How to launch StartUp

The Department of Computer Science and Engineering Organized an online alumni interaction session on 12th February 2022 (11:30 am-12:15 pm) for BTech (CSE), Ilyr students, On Google-Meet. There were a total of 50 students attended this session under one resource person, Mr. Rohit Sainik (2016-2020), Founder-FoGraph, Udaipur.

This online interaction was organized for giving guidance on “How to Launch a Startup”. Mr. Rohit Sainik guided his juniors on “How to Launch a Startup”. He also summarized the role of Digital marketing in various fields and several domains of expertise one can pursue own professional growth.

He also discussed the personal characteristics of successful entrepreneurs and discussed various skills required like identifying profitable startup ideas, focusing on a growing category (or categories), and how to make something better (or cheaper) than what is out there. Validating your startup idea with buyer persona research and using that to create a business plan and to continue to iterate our plan and product based on feedback. For this Communication, Human and Math skills were important to better interact with customers to become a good entrepreneur.

तमसो मा ज्योतिर्गमय  
Darkness to Light

**GEETANJALI**  
INSTITUTE OF TECHNICAL STUDIES

NBA  
NATIONAL BOARD  
OF ACCREDITATION

**Alumni  
Interaction**

**Mr. Rohit Sainik**  
(2016-2020 Batch)  
Founder FoGraph, Udaipur

**How to Launch  
StartUp**

12th Feb, 22  
11:30 AM

Department of Computer Science and Engineering

Dr. Mayank Patel summarized the outcomes of the online alumni interaction program and gave a vote of thanks to our keynote alumni. All participants appreciated the department for organizing such types of webinars.



After this program, juniors got knowledge about various interview techniques and how to improve communication skills. Along with this, he had explained the importance of final-year projects.

# Career Guidance for better Career Opportunities

Department of Computer Science and Engineering Organized an alumni interaction session on 20th June 2022 (10:00 am-12:00 pm) for BTech (CSE), Illyr students in the CSE seminar hall. 115 students attended this session. The resource person for this session was Ms. Preksha Samar (2004-2008 Batch), Consultant, Lexis solution.

This offline interaction was organized to give career guidance to our students for better career opportunities.

The program was inaugurated by Dr. Mayank Patel, Professor, and Head by welcoming the cherished alumni and participants. Sir also briefed on the importance of a strong alumni network.

Ms. Preksha Samar discussed that IT companies were not just for coding but also for other technical backgrounds in an IT firm. She also explained the different types of designations that were offered by IT firms. She also differentiated between core IT jobs and non-core IT jobs. She discussed the Huge demand for Digital Marketing.

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**Department of Computer Science & Engineering**

**Alumni Interaction**



 **10 AM**  
 **20 June 2022**  
 **CSE Seminar Hall**

**Ms. Preksha Samar**  
**Consultant, Lexcis Solution**

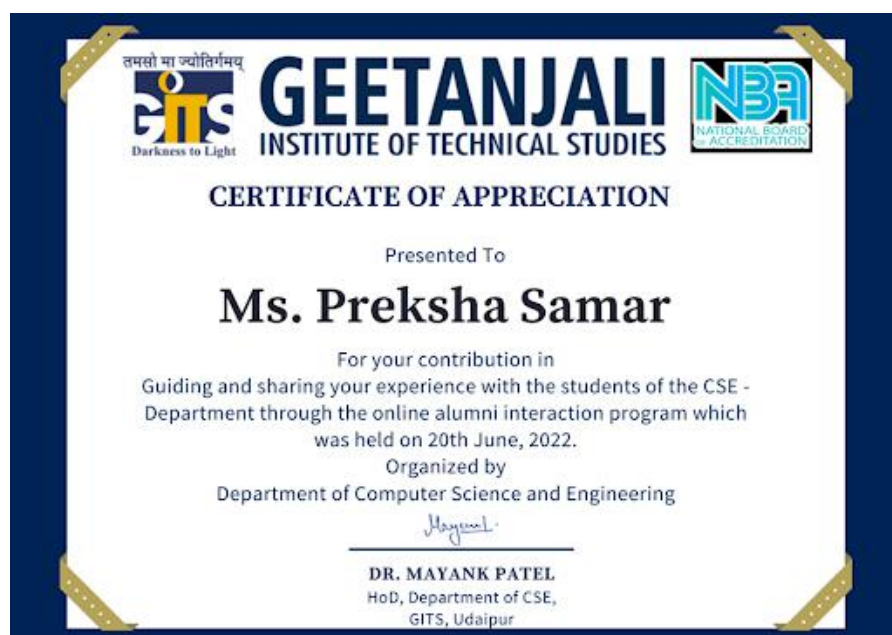
**Our Alumni  
Our Proud**





Dr. Mayank Patel, Professor and Head, CSE event coordinator summarized the outcomes of the alumni interaction program and gave vote of thanks to our keynote alumni. All participants appreciated the department for organizing such type of Alumni Talk.

After this program, students got knowledge about various fields on which IT company is working.





# Career Guidance to CSE Students

The Department of Computer and Science Engineering and CSE Alumni club organized an alumni interaction session on the 22nd of June 2022 at about 10.00 am for B Tech (CSE) III yr students in the CSE seminar hall. 98 students attended this session. The resource person for this session was Mr. Vaibhav Jain (2009-2013 Batch), Founder of Icubes.

This offline interaction was organized to give career guidance to our students for better career opportunities.

The program was coordinated by Dr. Mayank Patel, Professor, and HOD CSE, and it was inaugurated by welcoming the cherished alumni and participants.

Mr. Vaibhav Jain guided his juniors about various interview techniques working in industries. Along with this, he explained the importance of communication skills. He discussed various latest technologies on which industry was working. He also discussed the importance of coding in the corporate world. He also discussed the non-coding world and its advantages.



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**Department of Computer Science & Engineering**

**Alumni Interaction**



**Mr. Vaibhav Jain**  
**Founder, Icubes**



**10 AM**



**22 June 2022**



**CSE Seminar Hall**

**Our Alumni**  
**Our Proud**



Students have got a clear idea about the areas on which they should embrace the interviews in a better way. Mr.Vaibhav also suggested various areas in which students can ensure best career opportunities.

Dr.Mayank Patel, Professor, and Head, CSE event coordinator, summarized the outcomes of the alumni interaction program and gave a vote of thanks to our keynote alumni. All participants appreciated the department for organizing such a type of Alumni Talk.

After this program, students got knowledge about various fields on which IT company was working.



# Career Guidance to CSE Students

Department of Computer Science and Engineering and CSE Alumni club Organized an alumni interaction session on 23rd June 2022 around 10.00 am for B Tech (CSE) III yr students in the CSE seminar hall. 102 students attended this session. The resource person for this session was Mr. Himank Seth (2009-2013 Batch), Chief executive Officer of Affinity Step.

This interaction was organized to give career guidance to our students for better career opportunities. And also introduce them with interview techniques and Latest technologies.

The whole event was coordinated by Dr. Mayank Patel, HOD CSE, GITS. Dr. Mayank Patel shared his views with the students that if they wanted to get career guidance, then attending such an alumni meeting would help them a lot, and welcomed our eminent alumni, Mr. Himank Seth.



**GEETANJALI**  
INSTITUTE OF TECHNICAL STUDIES



**Department of Computer Science & Engineering**

**Alumni Interaction**



**Mr. Himank Seth**  
Chief Executive Officer , Affinity Steps



**10 AM**



**23 June 2022**



**CSE Seminar Hall**

**Our Alumni  
Our Proud**



Mr. Himank Seth had guided his juniors about various interview techniques and the latest technologies in which Industries were working. Along with this, he explained the importance of communication skills. He also discussed Digital marketing and its importance.

Dr. Mayank Patel summarized the outcomes of the alumni interaction program and gave a vote of thanks to our keynote alumni. All participants appreciated the department for organizing such a type of Alumni Talk.

After this program, students got knowledge about various fields on which IT company was working.







# Internship Drive





# Campus Interview and Placements Drive of Company iCubes

The Department of Computer Science and Engineering organized an Internship and Placement drive on 22 June, 2022 nearly about 12:30 pm for B Tech 3rd year CSE students. There were 102 students present in this drive. There was 5 resource persons: Mr. Vaibhav Jain, Founder of Icubes.

An Internship drive was organized by the department of computer science and engineering for providing internship and job opportunities to 3rd year going to final year students.

Welcome Session:

In the welcome session following were present.

1. Dr. Mayank Patel, HOD CSE, GITS
2. Mr. Vaibhav Jain, Founder of Icubes
3. Faculties, CSE Department



**GEETANJALI**  
INSTITUTE OF TECHNICAL STUDIES



Department of Computer Science & Engineering

**WELCOMES**



iCubes

**CAMPUS  
INTERNSHIP  
&  
PLACEMENT  
DRIVE**



10 AM - 4 PM



22 June 2022



CSE Seminar Hall

The program was started by Dr. Mayank Patel, Professor and Head, CSE department by welcoming the guests. In a welcome speech Dr. Mayank Patel shared his views with the students about the internship with Icubes. Dr. Mayank Patel discussed the fields in which the company was working and how students can benefit from it.

### **Company Presentation:**

The company presentation was given by Mr. Vaibhav Jain, He had discussed on the fields in which the company is presently working. He had mainly focused on digital marketing and SEO. He had discussed the benefits of digital marketing and SEO in today's world. His presentation included many points like web development, app development, E-commerce and IT and non-IT jobs. He had discussed the company's working environment and benefits students can get from the company.



## Selection Process

It was conducted in 2 rounds

### 1) Written exam (Technical ability):

In this round total no. of the students present were 70. Out of 70 students 37 students were selected on the basis of technical exam. Technical exam included general programming concepts, questions, mental ability and mathematics.

### 2) Interview Process:

In this process one on one interview was done in college premises. Out of 37 students, 8 students were selected for internship in fields of Digital Marketing and web development.

## Selected students

Final selected students

### For Digital Marketing workstream

1. Akshat Garg
2. Divisha Lodha
3. Ishita Mogra



### For Web development

1. Himanshu Kaushik
2. Farhan khan
3. Vaibhav Kashyap
4. Mohit Babel
5. Meet Shrimal



# Internship And Placement Drive of Company Lexcis

The Department of Computer Science and Engineering organized an Internship and Placement drive on 20 June, 2022 nearly about 12:30 PM for B.tech 3rd year CSE students. There were 100 students present in this drive. This Internship and Placement Drive was conducted in an online mode. There were 3 resource persons: Ms. Preksha Samar, Consultant, Lexcis solution.

An Internship drive was organized by the department of computer science and engineering for providing internship and job opportunities to 3rd year going to final year students.

## Welcome Session:

In the welcome session following were present.

1. Dr. Mayank Patel, HoD CSE, GITS
2. Ms. Preksha Samar, Consultant, Lexcis solution
3. Faculties, CSE Department





The programme was started by Dr. Mayank Patel, Professor and Head, CSE department by welcoming the guests. In a welcome speech Dr. Mayank Patel shared his views with the students about the internship with Lexcis Solutions. Dr. Mayank Patel discussed the fields in which the company is working and how students can benefit from it.

### **Company Presentation:**

The company presentation was given by Ms. Preksha samar, she had discussed on the role of an IT person in various field, several domain of expertise one can pursue for one's professional growth. Ms. Preksha discussed what roles an IT person can have in a company. She also discussed that IT companies are not just for coding, their are different kinds of people work in an IT firm. She also explained different types of designations that are offered by IT firm. She also differentiated on core IT jobs and non-core IT jobs. She discussed about the Huge demand of Digital Marketing.





**Selection Process**

It was conducted in 2 rounds

**1) Written exam (Technical ability):**

In this round total no. Of students present were 100(CSE+EC+MCA).

Out of 100 Students, 60 students were selected on the basis of technical exam. Technical exam included general programming concepts questions, mental ability and mathematics.

**2) Interview Process:**

In this process one on one interview was done in college premises. Out of 60 students, 10 students were selected for internship in fields of Digital Marketing, UI/UX and development.

**Selected students**

Final selected students

**For UI/UX**

1. Anisha shaktawat
2. For development workstream
3. Jatin suthar
4. Kartikey Bharti
5. Krishna Ahari
6. Rajat kumar Prajapati

**For Digital Marketing Workstream**

1. Bhavya Sukhwal
2. Charvi Mathur
3. Himani Mehta
4. Shruti Jain
5. Sourav Sharma

# Internship And Placement Drive of Company Affinity Steps

The Department of Computer Science and Engineering organized an Internship and Placement drive on 22 June, 2022 nearly about 12:30 PM for B.tech 3rd year CSE students. There were 63 students present in this drive. This Internship and Placement Drive was conducted in an online mode. There were 4 resource persons: Mr. Himank Seth, Chief executive officer, Affinity Steps.

This Internship drive was organized for providing internship and job opportunities to 3rd year students which are likely to move into the final year.


**GEETANJALI**  
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Department of Computer Science & Engineering

**WELCOMES**


**AFFINITY STEPS**

 10 AM - 4 PM  
 23 June 2022  
 CSE Seminar Hall

**CAMPUS  
INTERNSHIP & PLACEMENT  
DRIVE**

**Welcome Session:**

In the welcome session following were present:

1. Dr. Mayank Patel, HoD CSE, GITS
2. Mr. Himank Seth, Chief executive officer, Affinity Steps
3. Faculties, CSE Department

The programme was started by Dr. Mayank Patel, Professor and Head, CSE department by welcoming the guests. In a welcome speech Dr. Mayank Patel shared his views with the students about the internship with Affinity Steps. Dr. Mayank Patel discussed the fields in which the company is working and how students can benefit from it.



## Selection Process

It was conducted in 2 rounds

### 1) Written exam (Technical ability):

In this round total no. of students present were 63.

Out of 63 students, 27 students were selected on the basis of a technical exam.

Technical exam included general programming concepts, questions, mental ability and mathematics.

### 2) Interview Process:

in this process one on one interview was done at companyr pemises.

out of 27 students, 15 students were shortlisted.

### Final shortlisted students

1. Bhavi Mehta
2. Sheetal Sharma
3. Harshal Jain
4. Nandani dalsaniya
5. Nidhi Mantri
6. Nitesh Kumawat
7. Jay Soni
8. Devanshi Minda
9. Pratik Kanthaliya
10. Himanshu Singh
11. Vishal Paliwal
12. Dhiraj Lohar
13. Aadarsh vaishnav
14. Jatin Suthar
15. Manan Mathur





# Academic Toppers









# Academic Toppers

The Department of Computer Science and Engineering aims at providing the best resources for its students to become the best professionals in the corporate world. NPTEL courses are one of the resources that would help the students to gain knowledge regarding their respective fields of interest.

## ACADEMIC TOPPERS VII SEM

S.NO	RTU ROLL No.	NAME OF STUDENT	CGPA	PHOTOGRAPH
1	18EGICS031	HARSHITA JAIN	10.00	
2	18EGICS027	DIVYA SONI	9.80	
3	18EGICS046	KRISHNAPAL SINGH DEORA	9.60	
4	18EGICS001	AAKANSHA SAMOTA	9.50	

5	18EGICS051	LOKESH BHATT	9.50	
6	18EGICS096	TUSHAR KUMAR PRAJAPATI	9.50	
7	18EGICS104	VIPLAV JIWNANI	9.50	
8	18EGICS059	NISHITA RAWAT	9.47	

**ACADEMIC TOPPERS V SEM**

S NO.	RTU ROLL NO	NAME OF STUDENT	CGPA	PHOTOGRAPH
1	19EGICS082	POOJA SETH	9.67	
2	19EGICS063	MANYA KASHYAP	9.37	
3	19EGICS102	SHEETAL SHARMA	9.35	
4	19EGICS010	ANISHA SHAKTAWAT	9.33	
5	19EGICS021	DEVANSHI MINDA	9.28	



# Faculty Achievements



## Details of FDP, STTP and Webinars attended and courses done by CSE Faculties

S. No.	Name of Faculty	Title of Event	Type of Event	Date of Event	Organized by
1	Dr. Mayank Patel	Outcome Based Pedagogic Principles for Effective Teaching (Silver)	FDP	Jan-April 22	NPTEL
2	Ms. Ruchi Vyas	Sentiment Analysis Using Python	Course	Jan 2022	Great Learning
		Cloud Computing	FDP	Jan-April 22	NPTEL
		Computer Vision and image processing	FDP	31/1/22-4/2/22	SKIT, Jaipur
		Python for Machine Learning	Course	March 2022	Great Learning
		Quantum Machine Learning for Defence and Security Applications	FDP	7/3/22-11/3/22	DRDO
		Supervised Machine Learning with Logistic Regression and Naive Bayes	Course	April 2022	Great Learning
		Machine learning and its applications in Big Data	STTP	9/5/22-14/5/22	JIET, Jodhpur



3	Mr. Ritesh Kumar Jain	Python for Machine Learning	Course	Jan 2022	Great Learning
		Computer Vision and Image Processing	FDP	31/1/22 -4/2/22	SKIT, Jaipur
		Quantum Machine Learning for Defence and Security Applications	FDP	7/3/22-11/3/22	DRDO
		Problem Solving through Programming in C (Gold)	FDP	Jan-April 22	NPTEL
4	Mr. Jitendra Sharma	Front End Development-HTML	Course	Jan 2022	Great Learning
		Computer Vision and Image Processing	FDP	31/1/22 -4/2/22	SKIT, Jaipur
		Quantum Machine Learning for Defence and Security Applications	FDP	7/3/22-11/3/22	DRDO
5	Ms. Charu Kavadia	Education Soft Skills	FDP	21/2/22-25/2/22	SSET,Karukutty
		New Paradigms in Teaching Methodology Pedagogy	FDP	7/3/22-12/3/22	GITS, Udaipur
		Research Methodology Tools & Techniques	FDP	25/4/22-29/4/22	GITS, Udaipur

6	Mr. Bhupendra Kumar Teli	New Paradigms in Teaching Methodology Pedagogy	FDP	7/3/22-12/3/22	GITS, Udaipur
7	Mr. Vishal Jain	Data Interpretation and Visualization using R	FDP	31/1/22-4/2/22	NITTR
		New Techniques in the Field of Engineering	FDP	8/2/22 - 12/2/22	Anand International College of Engineering, Jaipur
		Introduction to Artificial Neural Network	FDP	8/2/22	Christ The King Engineering College, Coimbatore
		Parakh Student Learning Assessment	STTP	7/3/22-22/3/22	AICTE
8	Mr. Abhishek Gupta	Artificial Intelligence in health care	FDP	21/2/22-25/2/22	Sai Ram Engineering College
		Parakh Student Learning Assessment	STTP	7/3/22-22/3/22	AICTE
9	Mr. Ajay Kumar Sharma	Data Interpretation and Visualization using R	FDP	31/1/22 - 04/2/22	NITTR
		Robotics & Artificial Intelligence	FDP	7/2/22-11/2/22	ATAL
		Introduction to Artificial Neural Network	FDP	8/2/22	Christ The King Engineering College, Coimbatore
		Getting Started with NLP for Enterprise Applications	Webinar	19/2/22	Government Engineering College, Rajkot
		Augmented Reality (AR)/ Virtual Reality (VR)	FDP	21/2/22-25/2/22	ATAL

10	Ms. Monika Bhatt Guruji	Data Interpretation and Visualization using R from	FDP	31/1/22 -4/2/22	NITTR,Chennai
		Robust AI: Building through Data Exploration, Pre-processing and Representation	FDP	4/2/22 -8/2/22	ATAL
		Introduction to Artificial Neural Network	FDP	8/2/22	Engineering College, Coimbatore
		New Techniques in the Field of Engineering	FDP	8/2/22 - 12/2/22	Anand International College of Engineering, Jaipur
		AI and ML for Intelligent Applications Using Python and MATLAB	FDP	21/2/22 - 25/2/22	ATAL
		Inculcating Universal Human Values in Technical Education	FDP	28/2/22 – 4/3/22	AICTE
		Elements Of AI	Course	March 2022	Reaktor
		Introduction to Neural Networks & Deep Learning	Course	March 2022	Great Learning
		A Visual Introduction to Deep Learning	Webinar	12/3/22	Government Engineering College, Rajkot
11	Ms. Jyoti Kaushal	Internet of Things	FDP	24/1/22-30/1/22	IIT, Guwahati
		Internet of Things	FDP	8/2/22-12/2/22	ATAL
		Getting Started with NLP for Enterprise Applications	Webinar	19/02/22	Government Engineering College, Rajkot
		Inculcating Universal Human Values in Technical Education	FDP	7/3/22 - 11/3/22	AICTE
		New Paradigms in teaching methodology/Pedagogy	FDP	7/3/22-12/3/22	GITS, Udaipur
		A Visual Introduction to Deep Learning	Webinar	12/3/22	Government Engineering College, Rajkot
		DBMS	FDP	Jan-March 2022	NPTEL
		IOT	FDP	Jan-March 2022	NPTEL
		Recent Advances in Biometrics Security with Machine Learning	Webinar	24/4/22	Government Engineering College, Rajkot
		A Journey from Linear Algebra to Machine Learning	Webinar	1/5/22	Government Engineering College, Rajkot

12	Mr. Rakshit Kothari	Security in Blockchain and Cyber-Physical Systems Design	FDP	17/ 1/22 -21/1/22	ATAL
		Data Interpretation and Visualization using R	FDP	31/1/22 - 4/2/22	NITTR
		New Techniques in the Field of Engineering	FDP	8/2/22 - 12/2/22	Anand International College of Engineering, Jaipur
		Introduction to Artificial Neural Network	FDP	08/2/22	Christ The King Engineering College
		Getting Started with NLP for Enterprise Applications	Webinar	19/2/2022	Government Engineering College, Rajkot
		New Paradigms in Teaching methodology/Pedagogy	FDP	7/3/22 - 11/3/22	Department of Management Studies, GITS
		Inculcating Universal Human Values in Technical Education	FDP	7/3/22 - 11/3/22	AICTE
13	Ms. Ayushi Ghill	Game Theory & Communication	FDP	10/1/22 - 14/1/22	ATAL
		Inculcating Universal Human Values in Technical Education	FDP	7/3/22 - 11/3/22	AICTE
14	Ms. Payal Sachdev	Recent Trends of Control Systems in Power Electronics Converter	FDP	3/1/22 - 7/1/22	ATAL
		Inculcating Universal Human Values in Technical Education Technical Education (AICTE)	FDP	7/3/22 - 11/3/22	AICTE

## Details of Paper Published by CSE Faculties in Journals

S. No.	Name of the Faculty Member	Title of Paper	Name of International Journal/Conference with ISSN/ISBN No/	Publishing Date
1	Dr. Mayank Patel	Soil Analysis Mechanisms for Smart Agriculture: A Review	Recent Trends In Sensor Research & Technology STM Journal	Feb-22
		Enhancing Non-Fungible Tokens for Evaluation of Blockchain Technology	IEEE International Conference Of Sustainable Computing	April -22
2	Mr. Ajay Sharma	Soil Analysis Mechanisms for Smart Agriculture: A Review	Recent Trends In Sensor Research & Technology STM Journal	Feb-22
3	Ms Ruchi Vyas	Biomedical Image Restoration using Machine Learning GPU Acceleration Approach for Precision Improvement	The International Journal Of Health Sciences (IJHS)	April -22
4	Mr. Vishal Jain	Soil Analysis Mechanisms for Smart Agriculture: A Review	Recent Trends In Sensor Research & Technology STM Journal	Feb-22
5	Ms. Monika Bhatt Guruji	Soil Analysis Mechanisms for Smart Agriculture: A Review	Recent Trends In Sensor Research & Technology STM Journal/	Feb-22
6	Mr Rakshit Kothari	Soil Analysis Mechanisms for Smart Agriculture: A Review	Recent Trends In Sensor Research & Technology STM Journal	Feb-22
		Enhancing Non-Fungible Tokens for Evaluation of Blockchain Technology	IEEE International Conference Of Sustainable Computing	April -22
7	Ms Jyoti Kaushal	Soil Analysis Mechanisms for Smart Agriculture: A Review	Recent Trends In Sensor Research & Technology STM Journal	Feb-22



### Details of Patent Published by CSE Faculties

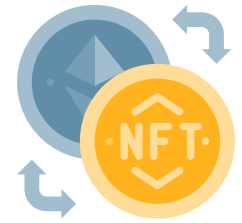
S.No.	Name of Patent Agency	Title of Invention	Name of Applicants	Publication Date
1	Office of the Controller General of Patents, Department of Industrial Policy & Promotions, Ministry of Commerce & Industry, Government of India	IoT and Artificial Intelligence based Controlling of smart movable road driver and clearance ambulance path	Ms. Payal Sachdev	4-2-22
2	Office of the Controller General of Patents, Department of Industrial Policy & Promotions, Ministry of Commerce & Industry, Government of India	System And Method for Health Monitoring Through Wearables Using IOT	Mr. Abhishek Gupta	4-2-22
3	Office of the Controller General of Patents, Department of Industrial Policy & Promotions, Ministry of Commerce & Industry, Government of India	A System to Predict the Occurrence of Cracks on Walls by Analyzing the Concrete Mixture Using Machine Learning Techniques	1.Ms Ruchi Vyas 2.Mr Bhupendra Teli 3.Mr Ritesh Kumar Jain	25-3-22
4	Australian Government IP Australia	Machine Learning based Digital Twin architecture Model and communication interfaces for cloud based cyber physical systems for industry 4.0	Ms. Monika Bhatt	30-3-22



# Student Articles



# NFTs and Blockchain linking towards a digital era



In the ongoing race of technological advancements, we often hear the terms NFTs and blockchain Technologies. Many people who are not from technological background these terms appear to be alien and confusing. This is leading to FOMO(Fear Of Missing Out) for many people, that they will be left behind in the world which is evolving much faster than our even our so very nimble human brains can keep up.

So to clear the mystery about NFTs first of all, we need to know on what platform NFTs are made on what is the technology that stands as a backbone of NFTs. The name of the technology is what merry people call is blockchain. A blockchain is a piece of software that functions as a ledger distributed across nodes of a communications network. What distinguishes it from other online databases or trading platforms is its immutability: we can trade digital assets peer to peer, and no one can alter or undo those transactions without a majority of the network's approval. That's a big plus over the Internet. Blockchain gave birth to Cryptocurrencies such as Bitcoin,Ethereum,Dogecoin, one big thing about these cryptocurrencies is, they ,are fungible: that is, one bitcoin is equal in value and function to every other bitcoin. So if you have a contract involving bitcoin, you could replace one bitcoin with another bitcoin without breaking the terms of your agreement. Unlike NFTs.

What are NFTs? NFT is an abbreviation for the term Non Fungible Token. Each token represents a thing of singular value. In a contract, you couldn't replace an Andrew Wyeth painting with Mike Winkelmann art and expect no one to notice. NFTs span a range of unique assets—not just collectibles but birth and death certificates, deeds to property, and the identities of objects on the Internet of Things.

In the new era of metaverse Digital currencies such as bitcoins are going to be only means of financial transfer, we would be buying selling our goods and objects in digital world and everything that you will buy in the digital world will be an NFT running on blockchain Technology.

- Vinay Kumar  
Btech 2nd Year CSE





# WEB 3.0

Imagine a new type of internet that not only accurately interprets what you input, but actually understands everything you convey, whether through text, voice or other media, one where all content you consume is more tailored to you than ever before. We are at the tipping point of a new phase in the web's evolution. Some early pioneers call it Web 3.0.

Web3.0 is the upcoming third generation of the internet where websites and apps will be able to process information in a smart human like way through technologies like machine learning(ML), Big Data. It was originally called the Semantic Web by World Wide Web inventor Tim Berners-Lee, and was aimed at being a more autonomous, intelligent, and open internet.

Web3 is all about – a decentralised internet that runs on a public blockchain, which is also used for cryptocurrency transactions. Blockchain runs on smart contracts, which are based on a set of protocols that differ from one blockchain to another. For example, Solana has a different protocol from Ethereum. These protocols need to be satisfied before services can be run on them.

This is different from the centralised internet where top companies like Meta (formerly Facebook), Google, Amazon and Apple own the bulk of user data and drive a significant share of their revenue from it. Furthermore, users and machines will be able to interact with data. But for this to happen, programs need to understand information both conceptually and contextually. With this in mind, the two cornerstones of Web 3.0 are semantic web and artificial intelligence (AI).

Why is it important? To understand why Web3 is important, it's necessary to understand the purpose of the previous versions of the internet – Web1 and Web2, which spanned the period from the 1990s till date.

Web1 started with static or personal web pages. In the beginning of the 1990s, people were just getting started on the internet and it was filled with web pages that were static. There was not much scope for interaction.



Then came Web2 in the 2000s and with it Big Tech like Facebook, Google and Amazon. This was the era of usergenerated content. This is the part most people are familiar with. Knowingly or unknowingly, consumers generate huge volumes of content or data when they search, shop or upload videos and pictures. All this data is stored in the servers of the companies that the people interact with. This means that intermediaries become custodians of user data and can profit from it through advertising. The scale of such data collection by such companies can be gauged by their sheer dominance in the market. Google is the market leader with over 90 percent share in the search engine market. Facebook has a 72 percent market share in social media, according to data by Statcounter. For such companies, the key growth metric is the number of users on the platform and the time they spend consuming content. The more time spent creating content, the more data the company can collect, helping it to improve its AI algorithm and its advertising engine, a key revenue model for the company.

This brings with it problems such as privacy, and plagiarism. Web3 can help solve some of these issues. Web 3.0 will fundamentally expand the scale & scope of both human and machine interactions far beyond what we can imagine today. These interactions, ranging from seamless payments to richer information flows, to trusted data transfers, will become possible with a vastly increased range of potential counterparties. Web 3.0 will enable us to interact with any individual or machine in the world, without having to pass through fee-charging middlemen. This shift will enable a whole new wave of previously unimaginable businesses and business models: from global co-operatives to decentralised autonomous organisations and self-sovereign data marketplaces.

- Himakshi Sharma  
Btech 2nd Year CSE





## -----Editorial Board-----

### FACULTY EDITOR:

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