TECHSCAPE

NORTH INDIA'S FASTEST GROWING INSTITUTE

A COMPREHENSIVE EDUCATIONAL PLATFORM, UNIQUELY DESIGNED TO MEET THE ACADEMIC REQUIREMENTS OF EACH STUDENT WHILE OFFERING PRACTICAL SOLUTIONS TO REAL-WORLD CHALLENGES.

CHANDIGARH ENGINEERING COLLEGE
Building Careers. Transforming Lives.
Jhanjeri, Mohali

From Chairman's Desk

Mr. Rashpal Singh Dhaliwal

Dear Students, Faculty and Esteemed Readers,

I extend my warmest greetings as we proudly unveil the latest edition of our departmental magazine. The process of crafting our strategic vision has reaffirmed the vital role that effective internal communication plays in fostering a connected, motivated, and forward-thinking academic environment. This magazine serves as a reflection of that vision—offering a platform to showcase the exceptional achievements of our students, the enthusiasm of our faculty, and the dynamic array of events and activities that enrich campus life.

We take immense pride in being a catalyst for shaping bright futures, empowering our students with knowledge and skills that not only elevate their careers but also strengthen families and communities. The stories and highlights featured in this edition are a testament to the unwavering dedication, innovation, and collaborative spirit of the CSE department.

From Managing Director's Desk
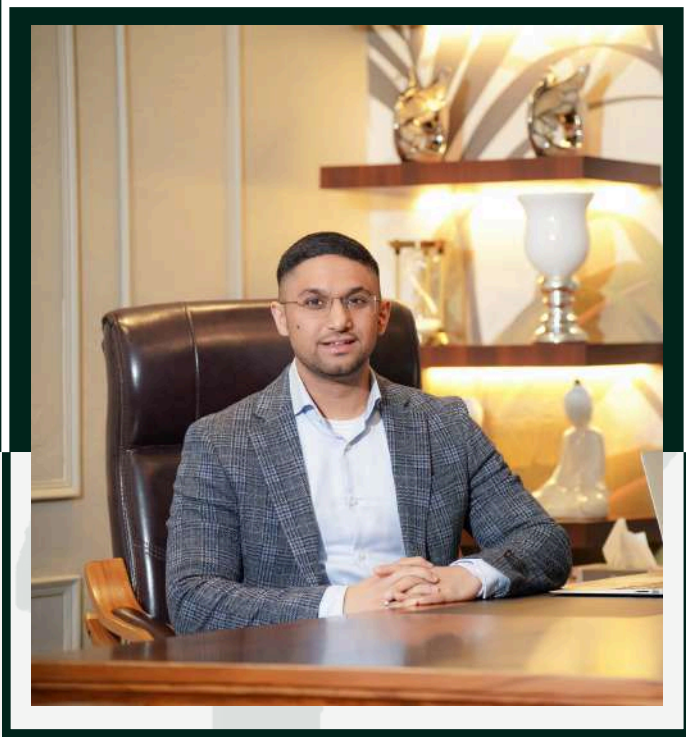
Mr. Arshdeep Dhaliwal

Dear Students, Faculty and Esteemed Readers,

As we unveil this edition of our departmental magazine, I am filled with immense pride and enthusiasm. This publication represents the culmination of dedicated efforts to foster stronger internal communication and celebrate the vibrant spirit of our academic community. Within these pages, you will find inspiring narratives of collaboration, inclusivity, and meaningful contributions to the Indian education system—testaments to our shared vision and unwavering commitment.Our faculty and students are the driving force behind our continued success, and this magazine stands as a tribute to their passion, innovation, and perseverance. It is a platform to highlight achievements, share knowledge, and ignite new ideas.

I am confident that this edition will not only inform and engage but also inspire each one of us to strive for greater heights. Here's to a year ahead filled with continued growth, creative breakthroughs, and a relentless pursuit of excellence in all that we do.

From Executive Director's Desk

Dr. Vinay Goyal

Dear Students, Faculty and Esteemed Readers,

I am excited to welcome you to the pages of our latest magazine, which offers a vibrant glimpse into the dynamic spirit, creativity, and dedication that define our college community. Within these pages, you will discover the remarkable efforts of our students, faculty, and staff, all working together to foster an enriching academic environment grounded in innovation, collaboration, and excellence.

The CSE department takes great pride in cultivating not just technical proficiency, but also the values of teamwork, leadership, and social responsibility. We believe in nurturing minds that are not only academically strong but also deeply connected to the foundations of life and society. Our collective efforts contribute meaningfully to the growth of our students and the well-being of Indian families and communities at large.Let this magazine stand as a celebration of our shared accomplishments and an inspiration for continued progress on our collaborative journey in the CSE department.

From Director Engineering's Desk

Dr. Anish Gupta

Dear Students, Faculty and Esteemed Readers,

As another academic year begins, I cannot help but wonder how all our lives have changed drastically due to Covid19 pandemic. The campus wears a dejected look with its deafening silence. However, we will not let this dampen our spirit. We intend to bring the best possible learning experience to the students via online teaching platforms & Our management has provided all the necessary infrastructure to realize this. Even in the current unprecedented challenging scenario, it is very important for everyone to keep a positive attitude. The institute is 100% committed providing the best possible learning experience to all the students despite the challenges due to physical distancing norms.

Let us keep our spirits soaring high.

From HOD CSE's Desk

Dr. Rini Saxena

Dear Students, Faculty and Esteemed Readers,

My vision is to develop constructive thinking and analytical capabilities in every student of the CSE Department. Our department is committed to providing students with a strong, broad-based fundamental engineering education and preparing students for a career in the industry, teaching, and national laboratories. Computing is changing how we think and work, and it plays a significant role in solving different kinds of engineering and technological problems and satisfying societal needs, such as health care. The Department of Computer Science and Engineering endeavours to contribute to these advances through teaching and research in this field.

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CGC TECHNICAL CAMPUS

Department of Computer Science & Engineering

Vision

To provide imperative skills to students for meeting industry needs, and to become responsible engineers, entrepreneurs and citizens.

Mission

- To educate the students in the field of Computer-Science with ever-changing technologies and skills.
- To enable the students in solving real-time problems and make use of new technologies.
- To have industry collaboration and interaction with professional societies for continuous development.
- To help students in becoming successful entrepreneurs.

Program Outcomes(PO)

PO1 Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems

PO2 Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public
health and safety, and the cultural, societal, and environmental considerations.

Program Outcomes(PO)

PO4 Conduct investigations of complex problems: Use research-based knowledge and research methods, including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities with an understanding of the limitations.

PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to professional engineering practice.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for, sustainable development.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Program Outcomes(PO)

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings..

PO10 Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11 Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Educational Objectives(PEO)

- **PEO1**: Become competent Computer Professionals.

- **PEO2**: Have abilities to analyze the requirements of software and provide solutions through efficient product designs.

- **PEO3**: Have successful career and meet the requirements of Indian and other Multi-National Companies.

- **PEO4**: Have exposure to advanced technologies, technical skills and opportunities to work as team members on multidisciplinary projects.

Program Specific Outcomes(PSO)

Students of Computer Science & Engineering will be able to do:

PSO1: To use principles of Computer Science & Engineering (such as software engineering, computer networks, data structures & computer programming high-level languages) for developing software solutions.

PSO2: To clearly understand the concept of programming languages, computer architecture and their applications in different field of technologies to develop cost-effective solutions in the area of computer science by the use of various methodological algorithms and different tools.

About the Course, Career and the Department

The Department of CSE, approved by the All India Council for Technical Education(AICTE), was established in 2012 to offer outstanding computer education to students. It has excelled tremendously in this aspect so far. The program, which emphasizes the basics of computer programming and networking, comprises a plethora of topics. The Department has dedicated and qualified faculty and good computing infrastructure. Research at this Department is nurtured through various sponsored programs funded by national organizations such as AICTE.

The department's endeavours are aimed at producing confident professionals tuned to the real-time working environment. The department offers an excellent academic environment with a team of highly qualified faculty members to inspire the students to develop their technical skills and inculcate the spirit of teamwork in them. The strength of the department is highly motivated students who understand the dynamics of the industry and hone their skills accordingly. The students of the department get placed in premier Indian and multinational IT companies and strive to attain prestigious positions.

The CSE department is rich enough to organize and encourage Students, teaching and non-teaching staff by conducting various events like workshops, Technical seminars, expert lectures, FDPs, industry visits, etc.

A degree in Computer Science provides a strong foundation in core areas such as data network protocols, cybersecurity, software development, artificial intelligence, and more. Students gain hands-on experience in designing and developing systems using state-of-the-art technologies and methodologies. The curriculum is designed to expose learners to emerging trends that are shaping the future of the computing world.

By the end of the program, graduates will not only have mastered the technical skills required in the industry but will also be equipped with the ability to learn independently, adapt to new challenges, and continuously upgrade their knowledge throughout their careers.

he latest technologies and techniques, as well as exposure to the latest trends that will shape the future of computer science. By the end of the course, students will be equipped to study independently and to develop and adapt your skills throughout your career.

Salient features

- The campus is fully Wi-Fi and provides 24-hour Uninterrupted Wi-Fi Internet access to its students. Each block is supported by Computer Labs with centralized servers for better connectivity.
- Multi-purpose Hall (200 capacity).
- Medical Centre, Nescafe, Canteen, Transport, laundry, and ATM facility.
- Best Placement and strong corporate tie-ups.
- Sports and Gym Facilities for Boys and Girls.
- Well-qualified and experienced faculty.
- Internal Quality Assurance Cell for monitoring all aspects related to academic input, process, and delivery, and suggests measures to improve academic and governance quality. It also facilitates activities like academic audits and FDPs to improve the quality of the teaching-learning process.
- Value based education to students for infusing social and cultural values in them to become responsible citizens of the country.
- Regular Faculty development programs
- Best exposures to seminars, workshops, and conferences
- Fee Concessions Scholarships
- Education Loan facility from Banks.
- Summer Classes are for students who need additional academic support.
- Extra Classes for slow learners.
- Mentor-Mentee system for the holistic development and stress-free learning of students.
- Feedback system, oral as well as written
- Indoor and outdoor games facilities
- A healthy and pollution-free environment for mental and physical development

Career Prospects

Computer engineering is one of the fastest-growing professions and will see extreme change over the next decade. Strong employment growth and a limited supply of qualified professionals offer remarkable employment prospects in the industry.

Computer engineers have excellent career prospects in a multitude of areas, including Research and development, Computer Hardware Engineer, Information Security Analyst, Computer Science Blogger, Nanotechnologist, Content Developer, Database Administrator, system and network administration, Multimedia Programmer, Games Developer, Cyber security Consultant, to name a few.

The increasing scope of computer science means you have plenty of choice in a wide variety of highly specialized areas. Computer technologies are integral to modern life, so you're likely to find your computer science skills in high demand across many different industries. These include financial organizations, management consultancy firms, software houses, communications companies, data warehouses, multinational companies, governmental agencies, universities, and hospitals. Computer professionals might find themselves in a variety of environments in academia, research, industry, government, private, and business organizations — analyzing problems for solutions, formulating and testing, using advanced communications or multimedia equipment, or working in teams for product development.

Our Top Recruiters

AUTODESK

accenture

Adobe

aws

NUTANIX

Capgemini

BYJU'S
The Learning App

IBM

PlaySimple
Company Profile - Overview

ARTECH
INTELLIGENCE IS HUMAN

Infosys

Tracxn

BANK OF AMERICA

Introduction

Welcome to the latest edition of CECJ ANNUAL MAGAZINE! As we stand at the cusp of an unprecedented technological revolution, this magazine aspires to be your trusted companion, illuminating the path through the intricate and ever-evolving labyrinth of advancements, innovations, and groundbreaking discoveries in the dynamic realm of Computer Science and Technology.

With each passing year, the world of technology continues to push boundaries, redefining the way we live, work, & interact with the digital landscape. From artificial intelligence and machine learning to cybersecurity, blockchain, and quantum computing, this edition delves deep into the latest trends, research, & developments that are shaping the future.

The technological space is undergoing a profound transformation, reshaping our world and redefining the boundaries of what's possible. Here's a snapshot of the key transitions:

Decentralization Dynamics:

Emerging technologies like blockchain are shifting from centralized control to decentralized networks, empowering individuals and fostering transparency.

Quantum Computing Revolution:

The rise of quantum computing promises unparalleled computational power, paving the way for breakthroughs in fields from cryptography to drug discovery.

The IoT Ecosystem:

The Internet of Things (IoT) is creating a hyper-connected environment where devices and systems communicate seamlessly, enabling smarter cities and personalized experiences.

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AI's Ubiquitous Influence:

Artificial Intelligence (AI) is permeating diverse sectors, augmenting human capabilities and driving innovation, while also raising ethical considerations around privacy and bias.

Sustainable and Ethical Imperatives:

There's a growing emphasis on aligning technological advancements with sustainability goals and ethical principles, fostering a more inclusive and responsible tech ecosystem. In essence, the technological landscape is characterized by rapid advancements and transformative shifts, presenting both opportunities and challenges as we navigate this dynamic era.

Seminar on Cloud Computing
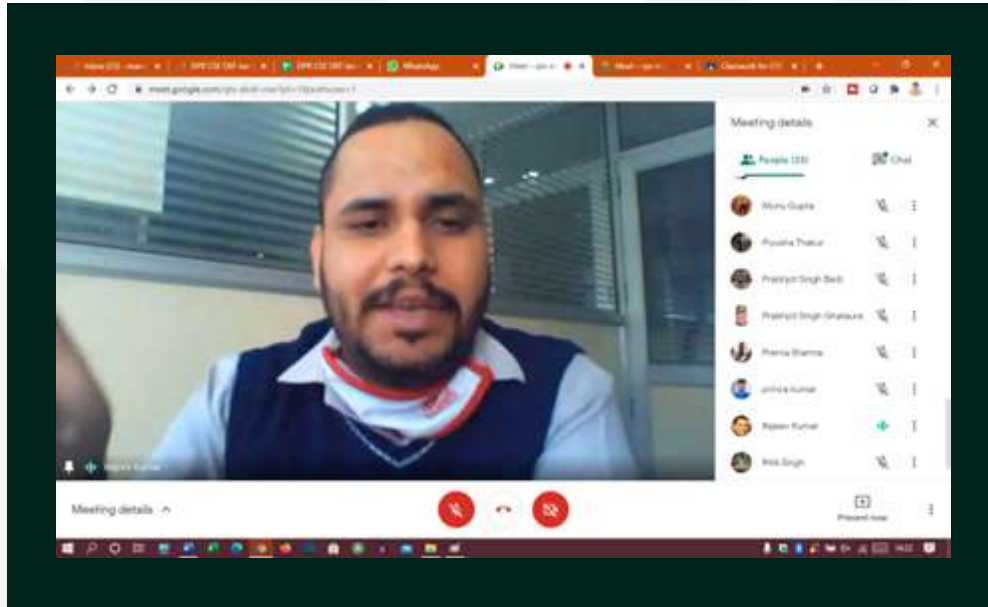
Department of Computer Science and Engineering of CEC janjheri organized a Workshop on "Cloud Computing" under the i-Technocrat club of the Computer Science & Engineering department.

Cloud computing is a type of Internet-based computing that provides shared computer processing resources , data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources (e.g., computer networks, servers, storage, applications and services), which can be rapidly provisioned and released with minimal management effort.
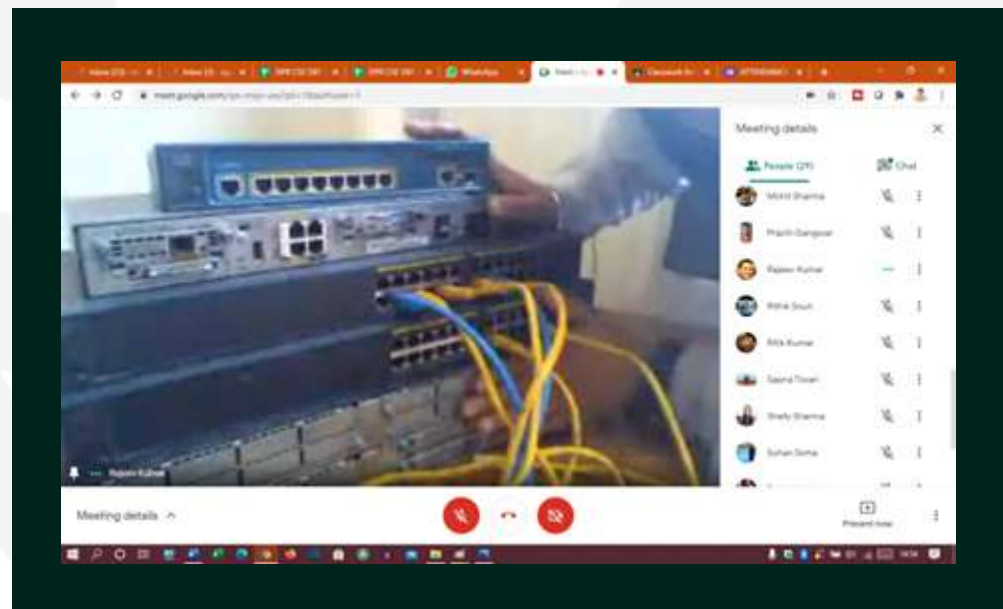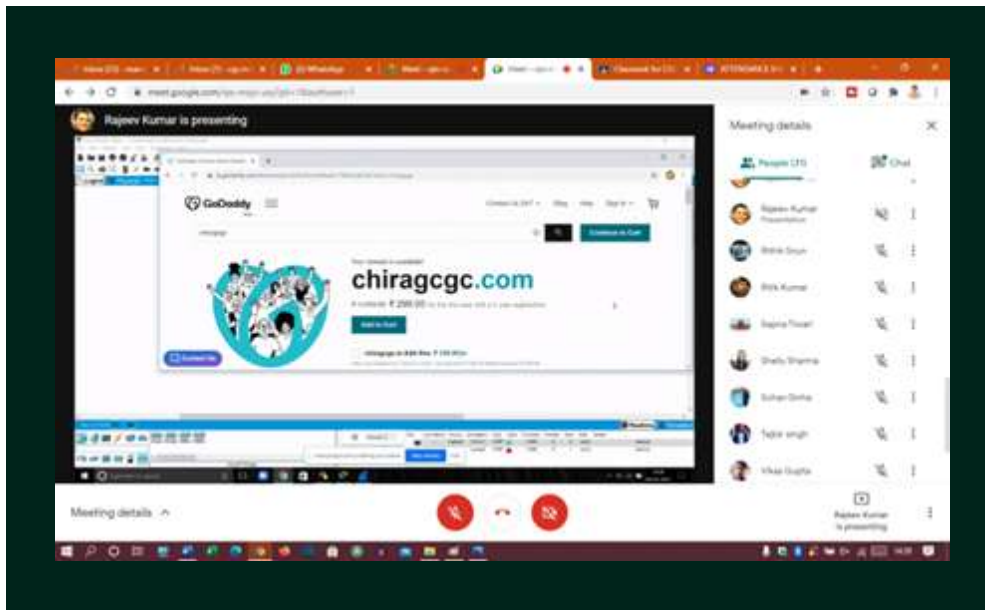
Expert Talks

A) i-Technocrat Club of CSE Department organized an Expert Lecture on "Nature Inspired Optimization Algorithms"
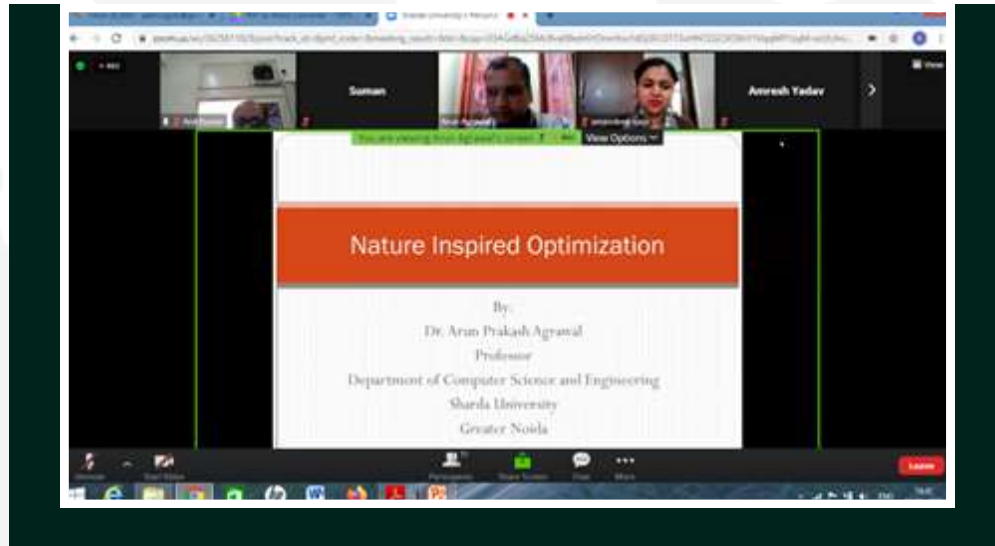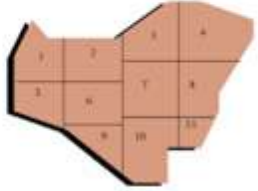

Dr. Arun Prakash Aggarwal interacted with the students to give an introduction to Algorithms. Then he started the session on Optimization techniques with many relevant examples.

The objective of this Session was to focus on improving the knowledge of students and faculty members in the domain of Design and Analysis of Algorithms by providing a session on Algorithm Design Methodologies. In this session, the Speaker gave detailed knowledge about various designing techniques like Single Source Shortest path problem, Travelling salesperson problem, Knapsack problem, and backtracking problem, and their usage in daily life. In this session, the keynote speaker covers a few tools and topics that will help them to be successful in their career as a data scientist and programmer.
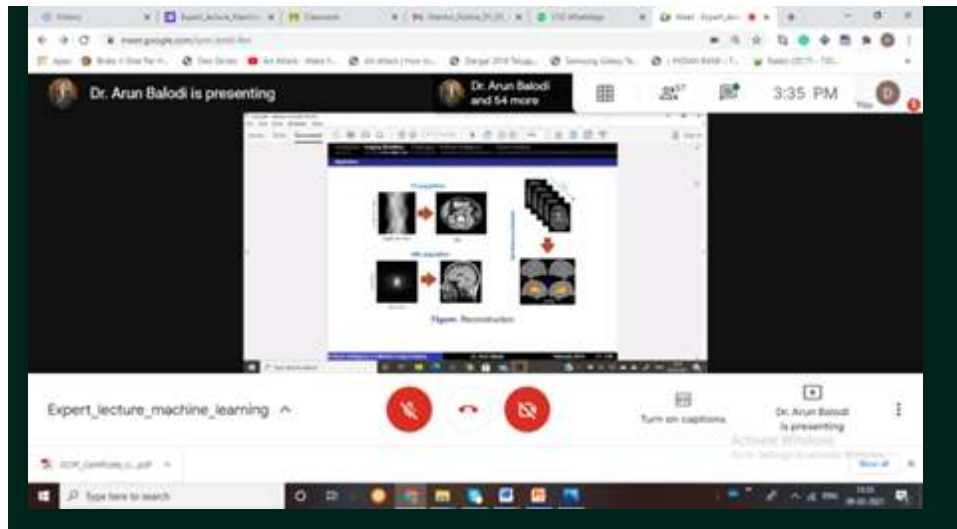
B) i-Technocrat Club of CSE Department organized an Expert Lecture on "Machine Learning Framework for Computer Aided Diagnosis System"
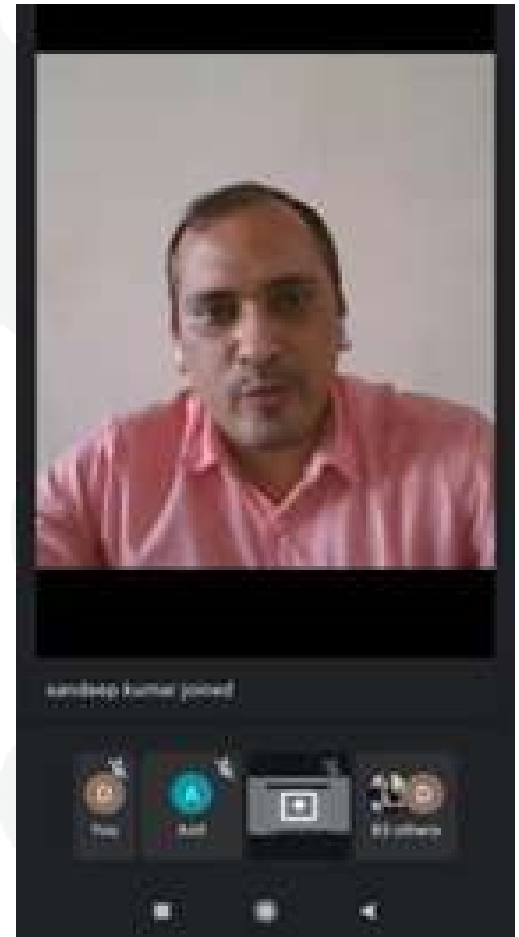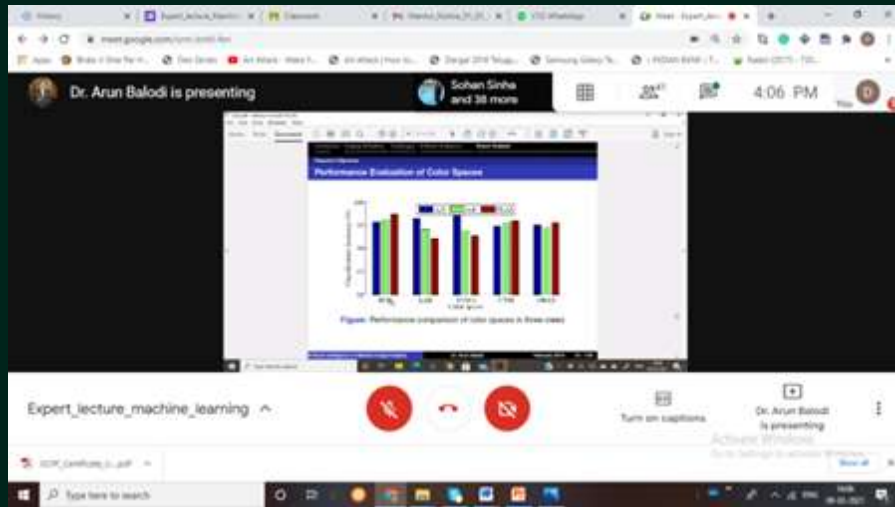

Dr. Arun Balodi interacted with the students to give an introduction to Machine Learning Algorithms. Then he started sessions on the Computer-Aided Diagnosis System using Machine Learning.

The expert discussed how medical image processing is advancing day by day and is very helpful in understanding the functionality of internal organs. He explained the difference among AI, Neural network, Machine learning, and Deep Learning. He continued the session with supervised and unsupervised learning. Then he explained about artefact corrections and tools required for image processing, such as Matlab, ImageJ, 3DSlice, etc. Moreover, he discussed the challenges in the medical image processing domain. The objective of this session was to focus on improving the knowledge of students and faculty members in the domain of Application of Machine Learning in the computer-aided diagnosis system.
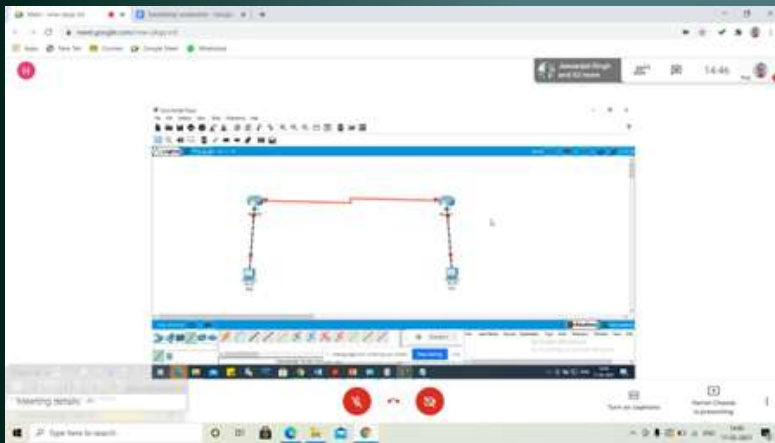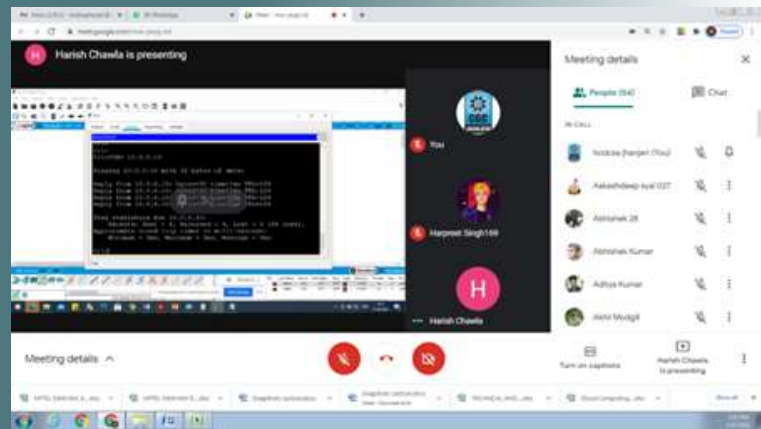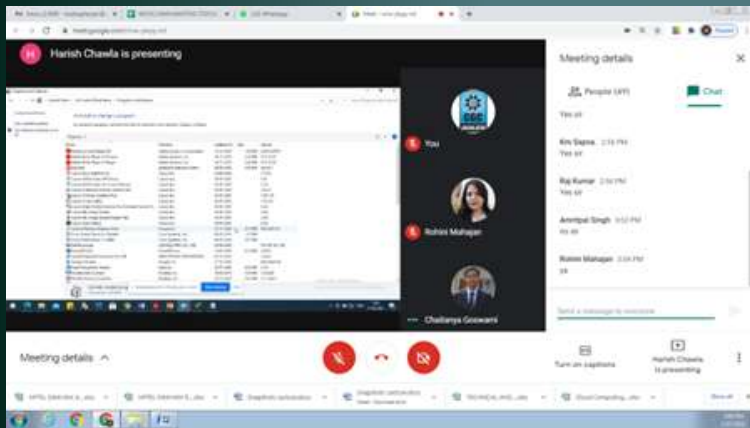
Workshops

A) i-Technocrat Club of Computer Science & Engineering Department of Chandigarh Engineering College, Jhanjeri, organized a 2-days workshop on "VIRTUALIZATION IN OPERATING SYSTEM"
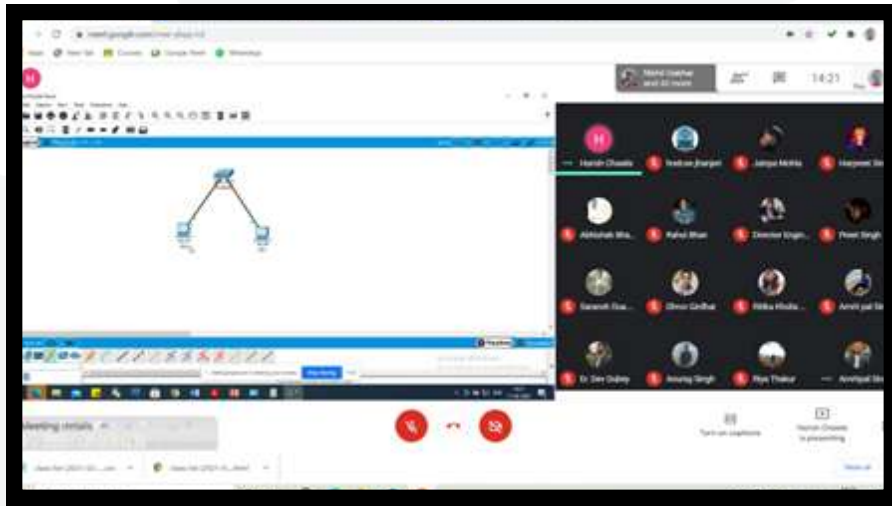
The objective of the workshop was to focus on improving the knowledge of students and faculty members on how an application, guest operating system or data storage is abstracted away from the true underlying hardware or software using virtualization.

The workshop also explored, how virtualization offers greater flexibility, control and isolation by removing the dependency on a given hardware platform. Also, what was initially meant for server virtualization has now spread to applications, networks, data and desktops? In the workshop, students also learned about the security risks involved with virtualization. The keynote speaker gave a hands-on experience on how the chances of experiencing a data breach significantly increase while using virtualization.

B) i-Technocrat Club of CSE Department organized a workshop on "Mean stack"
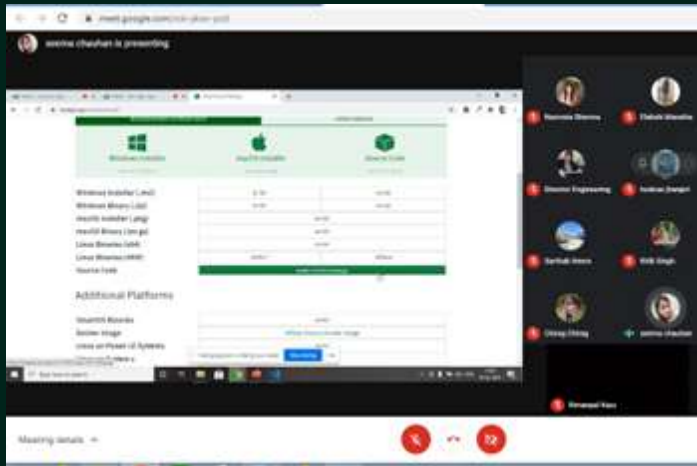
Ms. Seema Chauhan (keynote speaker) explained to the students about the current scenario of Mean stack. She also threw light on the carrier of students in the field. Further, the Keynote speaker, Ms. Seema Chauhan, interacted with the students to get to know the knowledge of students about Mean stack. Then she started the practical session on the Mean stack through the installation of Visual Studio Code.

She practically showed to students the work on Visual Studio. The objective of the workshop was to focus on improving the knowledge of students and faculty members in the domain of Mean stack by creating awareness on its Methodologies. In the workshop, students learned the practical side of Mean Stack. They learnt how to manage Visual Studio Code. Students also learned to work on a live console and use the storage services visual platform. Ms. Seema Chauhan performed practical work on the Mean stack models and explained the concepts of data binding and event binding.

Faculty Research Publications

Dr. Rini Saxena

- Dr. Rini Saxena Published a paper   "A COMPREHENSIVE STUDY OF DECENTRALIZED CLOUD STORAGE PLATFORMS-A REVIEW", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.9, Issue 3, pp.401-406, March 2021, Available at :http://www.ijcrt.org/papers/IJCRT2103051.pdf
- Successfully completed 6 weeks online training on R Programming under Internshala Trainings Faculty Development Program

Ms. Parminder Kaur

- Ms. Parminder Kaur Published a paper "A COMPREHENSIVE STUDY OF DECENTRALIZED CLOUD STORAGE PLATFORMS-A REVIEW", International Journal of Creative Research Thoughts (IJCRT), ISSN: 2320-2882, Volume.9, Issue 3, pp.401-406, March 2021, Available at :http://www.ijcrt.org/papers/IJCRT2103051.pdf
- Published paper in " International conference of advance research and innovation 2021 ICARI FEB 2021" on topic "Key aspects of autonomous driving software", ISSN No: 4327-3558.

Ms. Rohini Mahajan

- Ms. Rohini Mahajan Published a paper "A COMPREHENSIVE STUDY OF DECENTRALIZED CLOUD STORAGE PLATFORMS-A REVIEW", International Journal of Creative Research Thoughts (IJCRT), ISSN: 2320-2882, Volume.9, Issue 3, pp.401-406, March 2021, Available at :http://www.ijcrt.org/papers/IJCRT2103051.pdf
- Successfully completed 6 weeks online training on R Programming under Internshala Trainings Faculty Development Program

- ## Myntra to change its logo after complaint calls it 'offensive' towards women

E-commerce firm Myntra has decided to change its logo after a complaint was lodged with the Mumbai Police alleging it to be insulting and offensive towards women. The complaint was lodged by Naaz Patel of NGO Avesta Foundation in December last year, demanding the removal of the logo by Myntra and appropriate action against the firm. Patel had also taken up the matter on social media. "We found that the logo was offensive in nature for women. Following the complaint, we sent an email to Myntra, and their officials came and met us. The officials said they will change the logo in a month," said DCP Rashmi Karandikar.

Five top IT Skills in demands in 2021

1. Artificial Intelligence (AI)

"Solutions implemented using Machine Learning models, Robotics Process Automation, and Chatbots have already gained cognisance and will only become more pervasive in the times to come. To use such a solution, one needs to evolve Business Technologist roles with people who can leverage such tools and technologies to solve operational business challenges. Experts with a good understanding of Natural Language Processing, Fuzzy Logic, etc., will be vital for various industries," said Jayanta Banerjee, Group CIO, Tata Steel.

2. Augmented Reality, Virtual Reality

Born out of necessity with physical experience being impossible during lockdown-like conditions, the new norm is a digital personalized experience. During this time, the growing reliance on digital interactions has left many wanting more personalised human experiences. "As opposed to mass customisation, in which consumers can choose from a limited number of options, a truly personalized experience is tailored specifically to an individual's behaviours, preferences, values, and beliefs. The focus is to design for an audience of one but serve many - there is a huge demand for a new breed of human experience creatives: designers who build omnichannel experiences, next-gen identity management, spatial web for AR/VR, etc," said Prashanth Kaddi, Partner, Deloitte India.

3. Cloud migration and transformation

Ironically, the pandemic catalyzed digital transformation. Technology helped enterprises across verticals to ensure business continuity. Realizing its importance, going forward, business-technology leaders will accelerate their journey to digital. "The rate at which organizations across industries adopted digital increased multifold during the lockdown. While adoption moved ahead at a phenomenal speed, it brought its own set of challenges around connectivity, collaboration, remote working, security, etc. IT skill sets in these areas were in high demand during the lockdown, and the demand will roll over to 2021 as well. In my view, security, networking, and cloud should be in high demand in 2021 as organizations would need specialists in these domains to maintain, manage, and sustain business models," said Sachin Jain, CIO, Evalueserve.

4. Data Engineering and Visualisation

Data is one of the biggest assets for businesses today. More and more companies want to derive insights from it for making swift and informed decisions. "Data capture, its storage, and judicial usage in carrying out data analysis for gaining accurate business insights are paramount for succeeding in the new normal. The role of data engineers and visualisation experts with knowledge on various programming languages, ETL tools, data warehousing solutions, data visualisation tools, etc., is envisaged as becoming extremely important going forward," said Jayanta Banerjee, Global CIO, Tata Steel.

5. Cyber Security

In the new normal, most employees are working from home. Businesses have, therefore, become more susceptible to cyberattacks. It is believed that both ethical hackers and traditional cybersecurity specialists with expertise in Security Information and Event Management, Security Orchestration, Automation and Response, Cloud Access Security Broker etc, will be critical to protect the organization from unforeseen cyber-attacks.

ETtech Done Deals

Starfish Growth Partners and Investpad have jointly launched an innovation fund that will raise $100 million to invest in early-stage startups over the next three years, both firms said on Monday. The Starfish Investpad Innovation Fund will provide capital and fundraising advisory, business incubation, and growth acceleration services, senior executives at both firms said.

Clubhouse, one of Silicon Valley's buzziest social media products, has raised fresh funds in a Series B funding round led by Andreessen Horowitz, a US venture capital firm, at a reported valuation of $1 billion. If true, that's a ten-fold jump since its last funding round in May. The audio-only platform, which is still in invite-only mode, plans to use the funds for a global rollout later this year. The company, which currently has only an iOS app, will soon begin work.

Revfin, an advanced digital consumer lending platform, today announced that it has received funding from Shell Foundation in partnership with electric vehicle operator SmartE. The funds will be utilized for extending new loans for electric 3-wheelers operating on SmartE's platform.

Junio, a pocket money app for children, has raised $1 million from a clutch of angel investors, including Cred founder Kunal Shah, BharatPe CEO Ashneer Grover, and Policy bazaar's Yashish Dahiya. Junio plans to utilise the funds to develop the product, bolster its team and customer acquisition initiatives, and expand its business footprint across cities.

Mpower Financing, an education-loan provider to international students, has raised $25 million from US-based investment management firm Tilden Park Capital Management. The company plans to use the funds to invest in technology and automate its digital loan platform further, as well as for marketing and expanding its team in Bengaluru and Washington, DC. E-commerce spots a new fashion trend.

Fashion is driving the next phase of e-commerce growth in India, especially in smaller towns, where an up-and-coming tech-savvy generation is slowly catching up with their urban counterparts, e-commerce company executives said. Driving the news: Flipkart, Amazon, and Myntra, among others, are enticing new customers, especially in smaller towns, with TikTok-style social commerce. This allows consumers to click on photos and videos and buy items that celebrities and influencers wear or endorse.

According to a Flipkart/Bain report, people from almost 97% of India's pincode areas ordered at least one fashion product in the past year. That compares with 46% who purchased household appliances.

Chinese fintech apps find no takers Chinese smartphone companies trying to carve a niche in India's fintech space have had a tough time, possibly on account of poor consumer sentiment following India-China border tensions.

Xiaomi, Oppo, and Realme launched their fintech apps Mi Pay and Mi Credit, Oppo Kash and Realme PaySa, respectively, at the start of 2020 have so far seen fewer than 1 million downloads each on the Google Play Store against their user base.

Student's Technical corner

Project Title:- Social Media and Its Impact on Mental Health in Teens

This project explores the growing influence of social media on the mental health of teenagers. With platforms like Instagram, Snapchat, and TikTok becoming integral parts of teen life, there is rising concern over their psychological effects. The study investigates both the positive and negative impacts of social media use, focusing on issues such as anxiety, depression, self-esteem, and sleep disruption. Through surveys and interviews with teenagers aged 13–19, data was collected to understand their emotional responses, screen time habits, and social media behaviors. Results indicate that excessive use, cyberbullying, and comparison culture contribute significantly to stress and lowered self-worth. However, social media also provides avenues for connection and self-expression when used mindfully. The project concludes with suggestions.

Mayank Chauhan

(1816567)

Project Title:- Student Attendance System with Face Recognition

This project presents a "Student Attendance System with Face Recognition" designed to automate and streamline the traditional method of attendance marking in educational institutions. The system leverages computer vision and artificial intelligence techniques, specifically facial recognition using OpenCV and machine learning algorithms, to identify and verify students in real-time. By capturing facial features through a camera, the system accurately records attendance without manual intervention, minimizing the chances of proxy attendance and saving valuable classroom time. The collected data is securely stored in a centralized database, allowing administrators and teachers to track attendance reports efficiently.

Somdeb Mitra

(1816874)

Student's Technical corner

Project Title:-Smart Library Management System

The Smart Library Management System (SLMS) is a modern solution designed to automate and streamline library operations using digital technology. This system replaces traditional manual processes with an efficient, user-friendly platform for managing book inventories, tracking issued/returned books, and handling user registrations. It incorporates features such as barcode or RFID-based book scanning, real-time availability checks, automated due date reminders, and user activity logs. The SLMS enhances accessibility by allowing students and staff to search, reserve, and renew books online through a web or mobile interface. It reduces human error, saves time, and ensures better organization of resources. Additionally, analytics tools help librarians make data-driven decisions about popular books and borrowing trends. The system promotes a paperless environment and supports a more engaging library experience. Overall, the Smart Library Management System is an innovative step towards creating a digital, intelligent, and efficient library ecosystem in educational institutions.

Pavanesh Kumar(1816580)
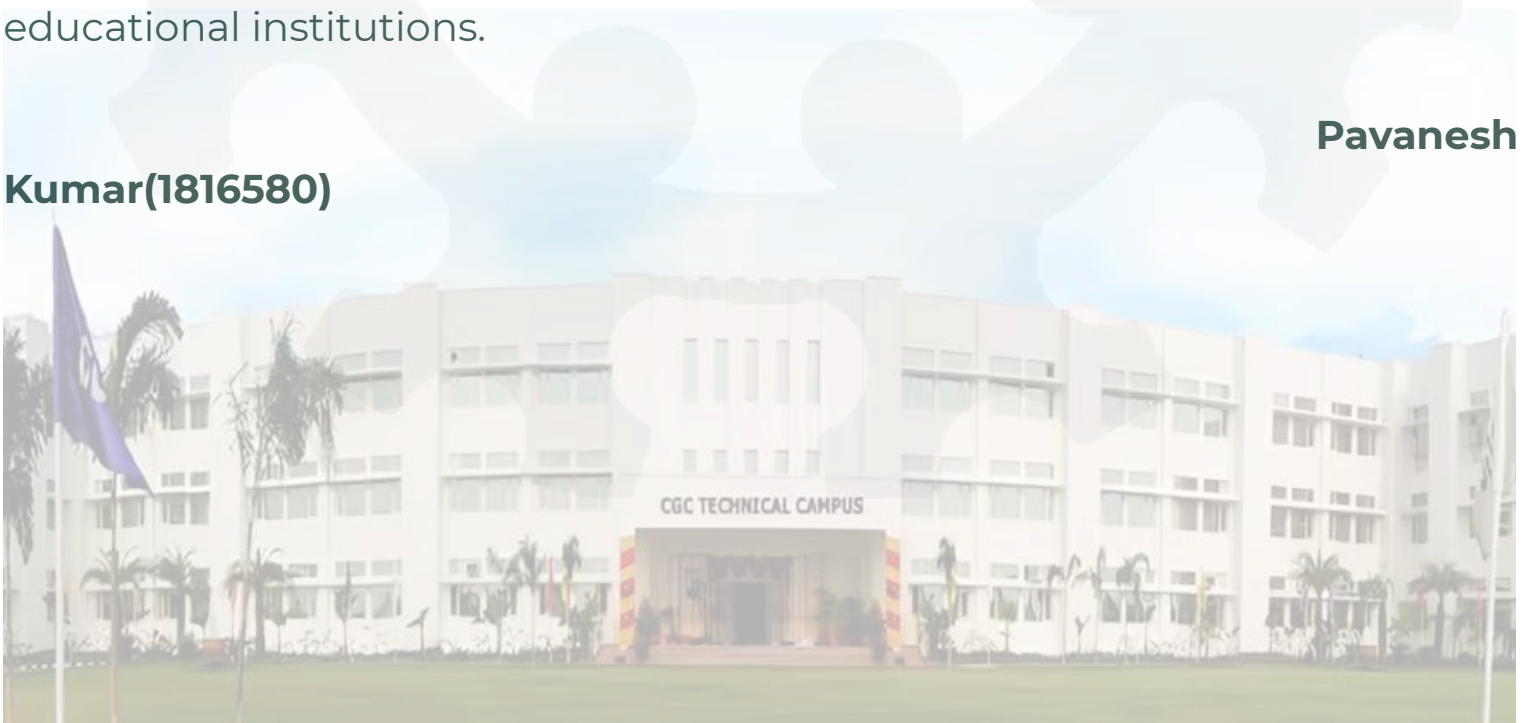
Student's Technical corner

Project Title:- Measuring Air Quality in School Zones

This project focuses on measuring air quality in school zones to assess environmental safety for students. With increasing urbanization and vehicular traffic, air pollution near schools has become a growing concern. The project involves using low-cost air quality sensors to monitor key pollutants such as PM2.5, PM10, carbon monoxide (CO), and nitrogen dioxide (NO_2) over a specific period. Data is collected at different times of the day to observe variations during peak school hours. The findings are analyzed to determine pollution levels and identify potential health risks. The study also compares data with national air quality standards to evaluate compliance. Based on the results, recommendations are made to improve air quality around school environments, such as promoting green zones, reducing vehicle idling, and encouraging walking or cycling. This project aims to raise awareness and advocate for safer, healthier learning spaces for students.

Ravinderpal Singh (1800908)

Project Title:-Cybersecurity Awareness Game

In today's digital world, cybersecurity threats such as phishing, malware, and identity theft have become increasingly common, especially among young internet users who lack proper awareness. This project presents an interactive and educational cybersecurity awareness game designed to teach students the basics of online safety in an engaging and accessible way. The game simulates real-life scenarios, including password protection, spotting suspicious links, and safe social media usage, allowing players to learn through decision-making and instant feedback .It uses gamification techniques such as scoring, levels, and badges to maintain user interest and reinforce learning outcomes.
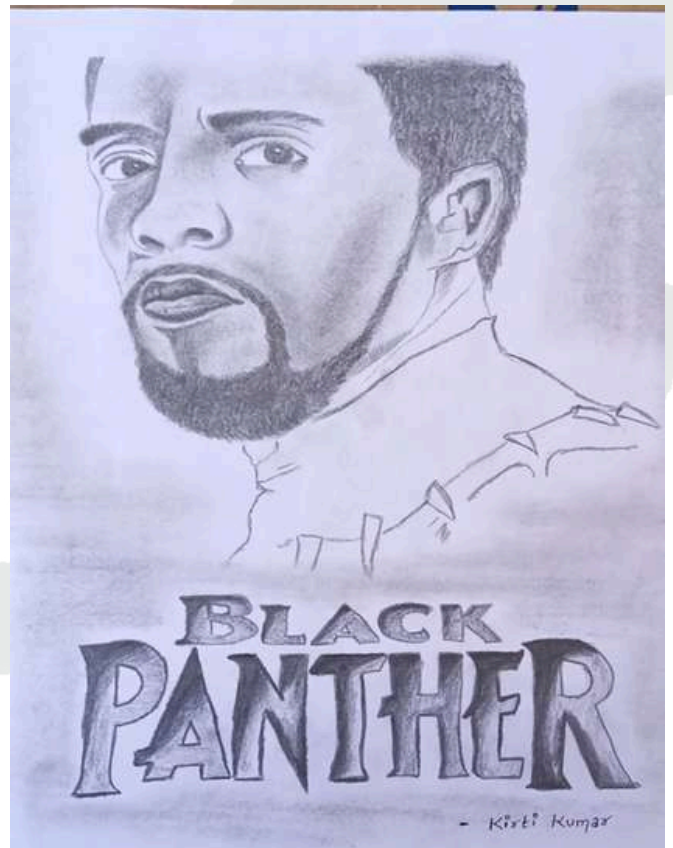
Ritik Raj

(1927762)

Student's Writing

Komal
1816856

Kirti Kumar
1816557

Student's Writing

The Rise of Virtual Reality: Transforming the Gaming Industry

Understanding Virtual Reality: Virtual Reality refers to a simulated environment that can be experienced through specialized headsets, controllers, and sensory devices. The primary objective of VR is to create a sense of presence, where users feel physically present in the virtual environment. This is achieved by tracking the user's head movements and adjusting the visuals accordingly in real-time, providing an unprecedented level of immersion. Current Applications of VR in Gaming: The gaming industry has fully embraced VR technology, unlocking new avenues for innovative and captivating gaming experiences. Popular VR headsets like the Oculus Rift, HTC Vive, and PlayStation VR have gained traction among gamers worldwide. These headsets enable users to explore virtual worlds, embark on thrilling adventures, and interact with virtual objects using intuitive hand controllers. VR has expanded the possibilities of gaming, from first-person shooters and puzzle games to immersive RPGs and simulation experiences.

Diksha

(1816848)

Student's Writing

Jenkins is a free and open source automation

Jenkins is a free and open source automation server. It helps automate the parts of software development related to building, testing, and deploying, facilitating continuous integration and continuous delivery. It is a server-based system that runs in servlet containers such as Apache Tomcat. The leading open source automation server, Jenkins provides hundreds of plugins to support building, deploying and automating any project.

Jenkins is an open-source automation tool written in Java with plugins built for Continuous Integration purposes. Jenkins is used to build and test your software projects continuously making it easier for developers to integrate changes to the project, and making it easier for users to obtain a fresh build. Originally developed by Kohsuke for continuous integration (CI), today Jenkins orchestrates the entire software delivery pipeline – called continuous delivery. … Continuous delivery (CD), coupled with a DevOps culture, dramatically accelerates the delivery of software.

Jenkins is the go-to DevOps automation tool for many software development teams. It's an open source CI/CD server that allows you to automate the different stages of your delivery pipeline. … Currently, it offers more than 1,000 plugins, so it integrates with almost all DevOps tools, from Docker to Puppet.

Jenkins is one of the most popular free open-source CI solutions that is widely used in software engineering. Thousands of users all over the world love working with Jenkins as it allows automating builds and tests quickly.

Ritik Kumar(1816865)

Student's Writing

Apache Airflow - Workflow Management System

Airflow is an Apache platform that programmatically author, schedule, and monitor workflows. It is a Python technology-based software. Airflow is a workflow engine that helps to schedule, monitor, and run jobs. It also ensures that all jobs run in their order based on the dependencies. It has a mechanism that continuously checks about current status of job and also helps with job failure recovery. Companies are using this platform for authoring workflow as directed acyclic graphs (DAGs) of tasks. There is one component of airflow named scheduler, which helps to execute the tasks to different workers while following the specified dependencies. Various components of airflow are: The Scheduler's main task is to trigger the workflow on their scheduled times and also coordinate with the executor by submitting the task for running. The executor handles running tasks. The main job of the executor is to push task execution out to workers. There is user interface provided by Web server which helps to trigger the tasks and also debug the execution of DAGs. There is also one folder which contains the file that is helpful for DAGs and other tasks for execution. Metadata database is used to store data of tasks. Below fig is explaining the connection between components:

Apache Airflow is helpful in managing data in a pipeline. Airflow has user interface for monitoring the status of tasks. if in any case, DAG fails, UI send mail to users. UI of it also help to check the logs of tasks. There is one more feature of it that is named with Lineage that helps to track the task, about origin of the task and movement of tasks. Users mention different type of sensors in it which trigger the tasks based on the mentioned conditions.   Airflow has also option of customization of operators and sensors. Using pythons, these things can be develop and easily integrated. Airflow has built in connections for Amazon Web Services, Google Cloud Platform, Big Data. Airflow is very useful in ML Model. Like in twitter, there is ML model for sentiment analysis then want to run that model for people who twits every day. For this, there is need of pipelined workflow and at this point, airflow is good choice.

Chandani Verma (1816844)

Student's Writing

Execution of IOT Micro services in the Edge

The rise of IOT device-as-a-service, IOT infrastructure-as-a-service and edge infrastructure-as-a-service has created several challenges for software development. There are two main development streams in IOT service offerings: (i) either IOT infrastructures provide data and services that one can consume through the subscription of the data and services or (ii) one can deploy his/her own software components, such as a micro service or a server less function, into IOT infrastructures to perform certain functions for his/her services. Regardless of which models, the contract/agreement between the consumer and the IOT/edge infrastructure provider is crucial. However, while contracts have been reasonably supported for the case in which the consumer accesses data and services through remote (REST/MQTT) APIs, the contract support for the second case to allow the customer to deploy and run his/her services has not been well researched. The first case is popular partially because we can utilize many existing contract and access control models, such as data-as-a-service contracts, web services contracts, data subscription controls and remote access monitoring. In the second case, it is quite tricky because, similar to the cloud infrastructure that one can buy virtual machines/containers and run one's micro services, the consumer can run his/her code in IOT gateways and edge servers in the IOT /edge infrastructures. The consumer might also utilize virtualized components like Docker to run his/her code. The current focus on edge computing and fog computing has introduced various frameworks for deployment and execution of components in edge/ IOT infrastructures on-demand. However, little effort has been spent for examining service contracts along existing phases of the IOT software development in the context of IOT -as-a-service, where IOT and edge infrastructures can be provided under on-demand, pay-per-use principles. There is need to dedicate more effort on improving the service contract in IOT software development.

Vishal

(1915317)

KHWAB

Khwab tootne ka darr nahi,

Khwab dekhne se darr lagta hai....

Kal tak jo sath tha,

Aaj wo ajnabi sa lagta hai....

Waqt-waqt ki baat hai,

Suraj Chhipta hai to Chaand nikalta hai....

Palke nam na kar apni Hoja khush,

Waqt kisi ka nahi wo har pal badalta hai...

Is duniya me sab kch isi tarah chalta hai....

--- ✏ chandan barik

Chandan Barik

1816843

Coding and coding and coding. Mind full of frosting and drowning
Wanna catch a little satisfaction
But remaining with frustration
Chosen CSE for a dream developer life, but suffering from a fearful career vibe
Some say placement, some say startup
But don't know how to stand a dreamy stardom
Kotlin, C++, HTML, PHP, Java, Python, and more. Being confused, getting reviews to explore
Interview, quant, aptitude, personality, and all
The difficulty is how to focus on these, along with coding and chores
Saw the freshers facing a problem in remembering the code
What say if you get a program that can itself write a program you thought of
Don't think of it as a myth or a matter of kidding, because it is already underway
Yeah!! You are curious and want to know how?
To let the thesis fit your mind, do contact the guys undersigned
Being worth your time
Represented the idea through rhyme
Work smart and keep relaxing. Smile and feel comfortable saying
Coding and coding and coding……………

By:- Govind Kumar and Konika Jindal
        1915354   1915347

TCS overtakes Accenture as most-valued IT firm globally

Tata Consultancy Services Ltd. (TCS) on Monday eclipsed Accenture Plc to become the world's largest IT company by market cap. In the process, it also became India's most valuable company, overtaking Reliance Industries Ltd. (RIL) after 11 months.

Training & Placement Statistics

CECJ, with its full-fledged placement team, leaves no stone unturned to make sure that every student is placed as soon as he / or she graduates. Along with executing placement drives, several summer training, orientation Programs, internships, and seminars by industrial experts are also organized by the Corporate Resource Centre (CRC) of the CEC campus. 83% of students of the batch 2017 got placed even before they passed out.

Aarju Tripathi
Package 4 LPA

Arun Kumar
Package 4 LPA

L&T Technology Services

Aman Verma
Package 4 LPA

Balkaran Singh
Package .4.5 LPA

L&T Technology Services

Harsh Ranjan
Package 4 LPA

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Capgemini

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Kiran Chaudhary
Package .8.5 LPA

BANK OF AMERICA

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Package 7.2 LPA

cubastion

Alumnus Talk

Suraj Walia
Cognizant Teachnology Solutions
4.5 LPA
College life is the golden period for every student. He remembers it for his whole life. Talking about our college, CEC Jhanjeri, the campus is beautiful, surrounded by greenery. Teachers of our department and the training and placement department are friendly and try to help students in every possible way. Functions are other aspects of college life. There are many functions organized in college, like welcoming new students with a freshers party, for passing out student there is an alumni meet, and other functions like tech fest. All the functions organized by the college are awesome. I was a hosteler and I made many friends there for a lifetime. In the hostel, we also had DJ nights. The college canteen and parks were our place for both studying and gossiping. Lastly, I want to say that college life is a beautiful blend of joys and memories.

Rishav Raj
NIHILENT LIMITED
4 LPA

I have very good memories of my college days, those days were awesome. CEC JHANJERI helps me to groom my career. Those unforgettable moments were always remembered, which I spent in my college days. CECJ has the best placement team, who always guide you to the best for your placement. I got my first job from CEC JHANJERI. Thanks to all faculty members and the placement team for grooming my career.

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