



**CHANDIGARH
GROUP OF COLLEGES**
Building Careers. **Transforming Lives.**

The Communiqué

News Magazine | Volume-23

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An Institution of Excellence

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Vision of the Chandigarh Engineering College

To become a leading institute of the country for providing quality technical education in a research based environment for developing competent professionals and successful entrepreneurs.

Mission of the Chandigarh Engineering College

- 1.** To provide state of the art infrastructure and engage proficient faculty for enhancing the teaching learning process to deliver quality education.
- 2.** To give a conducive environment for utilizing the research abilities to attain new learning for solving industrial problems and societal issues.
- 3.** To collaborate with prominent industries for establishing advanced labs and using their expertise to give contemporary industry exposure to the students and faculty.
- 4.** To cater opportunities for global exposure through association with foreign universities.
- 5.** To extend choice based career options for students in campus placements, entrepreneurship and higher studies through career development program.





(Prof.) Dr. Rajdeep Singh

Director Principal

Chandigarh Engineering College

Dear Readers,

Over the last two decades, Chandigarh Engineering College has evolved into a strong blend of cutting-edge infrastructure and intricately connected human resources dedicated to providing professional education with a focus on creativity and innovation. CEC has created a niche among the best technical institutes for its inspiring atmosphere for knowledge assimilation, generation, and dissemination with a feeling of social responsibility, human values, and concern for social commitment. Our institution's consistent excellence in academics, co-curricular activities, and extra-curricular activities is a source of great pride for us.

Each quarterly issue of this News magazine reflects the institution's principles and excellence. The magazine provides a lot of proud moments in each issue. The magazine is a reflection of the faculty's hard work as well as the students' creative talents and unique ideas. I extend my best wishes and warm greetings to the faculty and students, and wish them luck in their future ventures.



Dr. Priyanka Kaushal

Professor and R & D Coordinator, Applied Sciences Department

It is a great joy for me to voice my thoughts on the publication of the college magazine. As you scan the pages, you'll become aware of the college's significant achievements. The college magazine is a reflection of the numerous activities held at the college in which students are encouraged to showcase their abilities. Chandigarh Engineering College makes certain that the students demonstrate that they are not only highly trained engineers, but also responsible and ideal citizens of our country. Excellence is viewed and practiced at CEC as a continuous process, and the institute has made significant contributions in the form of world-renowned technocrats, successful entrepreneurs, competent leaders, inventive scientists, and researchers in pursuit of this goal. Our institute stands by its core values, mission of churning out well-rounded individuals and thorough professionals. The college magazine exemplifies the cross-country journey and showcases our faculty and students' abilities. Congratulations to the editorial team for their colossal endeavors in bringing out this magazine.



I'm delighted to introduce the current issue of Communiqué, our quarterly publication. The college magazine is ideal for keeping track of events, reminiscing, and communicating creatively. Creative thinking, art, knowledge, and wisdom are combined in this masterpiece that resonates in the hearts and minds of all involved. Communiqué is also a forum for the students and faculty to express their creative pursuits, which helps them develop originality of thought and expression. This magazine highlights various extracurricular and co-curricular activities that are organized by the Institute and which complement the educational process.

I'm thankful to all members of the editorial team, HODs, all my colleagues, students and the college management for their support in raising this news magazine for our readers.

Inderjot Kaur

Editor

RANKING & AWARDS

1. Chandigarh Engineering College was presented with a Certificate of Recognition by the Ministry of Education, Government of India. On 29th December 2021, the college was recognized in the band "Excellent" under the category of "Colleges/Institutes (private/self-financed) (technical)" in Atal Ranking of Institutions on Innovation Achievement (**ARIIA**) **2021**.
2. _____
title during **World Education Summit 2021**
3. CEC has received the highest **4 star rating** _____
Council in association with All India Council for Technical Education (AICTE).
4. **DL Ranking 2021 (Top private Engineering Institute of India 2021)**

Ranked 10th Pan India

Ranked 2nd in Punjab
5. **NIRF Ranking 2021**

Engineering All India Rank: 147

In Punjab

Position including all institutes and universities (Government + Private) : 8th Rank
Position with only institutes (Government + Private) : 1st Rank
Position with only private universities & institutes : 5th Rank
Position with only private institutes : 1st Rank

North India: (Punjab, Chandigarh, Delhi, Haryana, Himachal, Jammu and Kashmir, Rajasthan, Uttar Pradesh, Uttarakhand)

Position including all institutes and universities (Government + Private) : 42nd Rank
Position with only institutes (Government + Private) : 1st Rank
Position with only private universities & institutes : 17th Rank
Position with only private institutes : 1st Rank
6. **Outlook I-Care Rankings 2021-**

62nd among top 110 private institutes in India

5th _____

1st among private colleges in Punjab (excluding university's Institutes)

19th among private colleges in North India (including University Institutes)

5th among private colleges _____
7. **Dataquest Tech School survey, 2021**

3rd in Punjab in Top 100 T-Schools (Overall) . Government and Private

2nd in Punjab in Top T-Schools (Private)

29th Rank in Top T-Schools (Private)

40th Rank in Top 100 T-Schools (Overall) . Government and Private
8. **India Today Ranking 2021**

3rd Rank in Private Colleges in Punjab

6th Rank in Private Colleges and Universities in Punjab

80th Rank across country (Overall India)

Applied Science Department organized National Science Day 2022

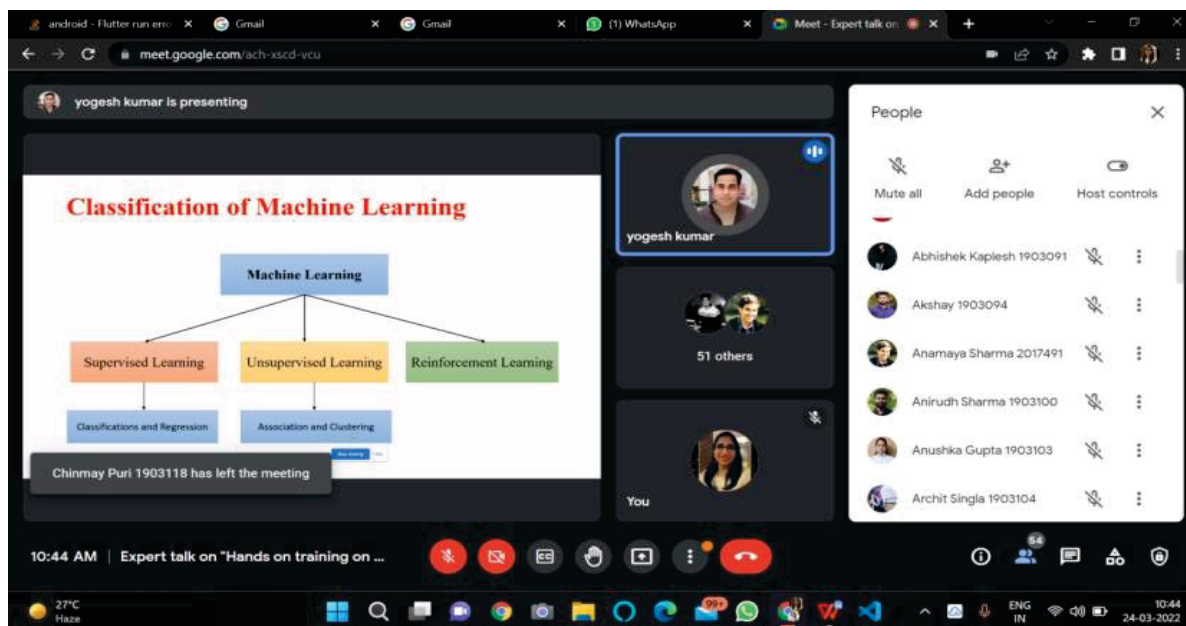
National Science Day 2022 was organized by Department of Applied Sciences CGC in association with Department of Student Welfare on 28th February, 2022 with the theme, _____

Many events were organized on the occasion that included: Sci-Stroke, Voice of Science, Code o. Fiesta, Tech-Hunt and Research for Pioneer. Special Attraction for the event was the Research for Pioneer segment that was the Project Display. In total there were 700+ entries for all the events including 200+ projects within the CGC compound. The events were further divided into two sub categories one for colleges and the other one for schools.

There were cash prizes for the winners worth up to 1.5 Lakh Rupees. The event ended with the cultural events in which the Fashion Show was the attraction that left the audience spellbound.



Under the auspices of RCED, the CSE Department hosted an expert lecture on "Hands-On Training in Machine Learning" for B.Tech third-year students on March 24th, 2022. Machine Learning seeks to train an algorithm/model with historical data in order to predict the value of a quantity against new data with unknown classification. Professionals with these abilities are in high demand now-a-days. Dr. Yogesh Kumar of Indus University, Ahmedabad, gave a two-hour Expert lecture on this topic.



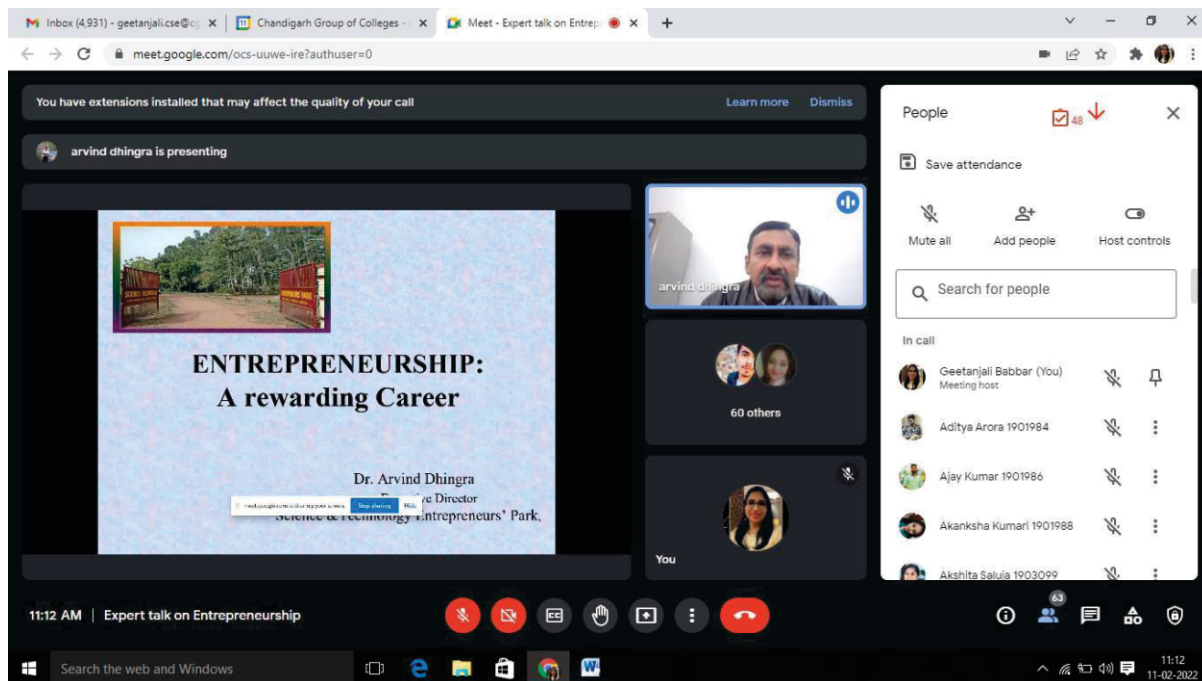
was organized in association with Hacker Rank

Department of CSE, CEC organized a Coding Event named CODE CRAZE on 25th February, 2022. The event was held through an online coding platform "Hacker rank" participated in this event. Beginner winner was Aditya Parthak(CSE), Intermediate winner was Sagar Chaddha(CSE) and Advance winner was Khem Singh(IT).



Expert lecture on Entrepreneurship under the aegis of RCED

Department of CSE, CEC organized _____th February, 2022. It was a 2 hour online expert lecture which was delivered by Dr. Arvind Dhingra, Executive Director, Science and Technology, Entrepreneurs Park, GNDEC, Ludhiana.



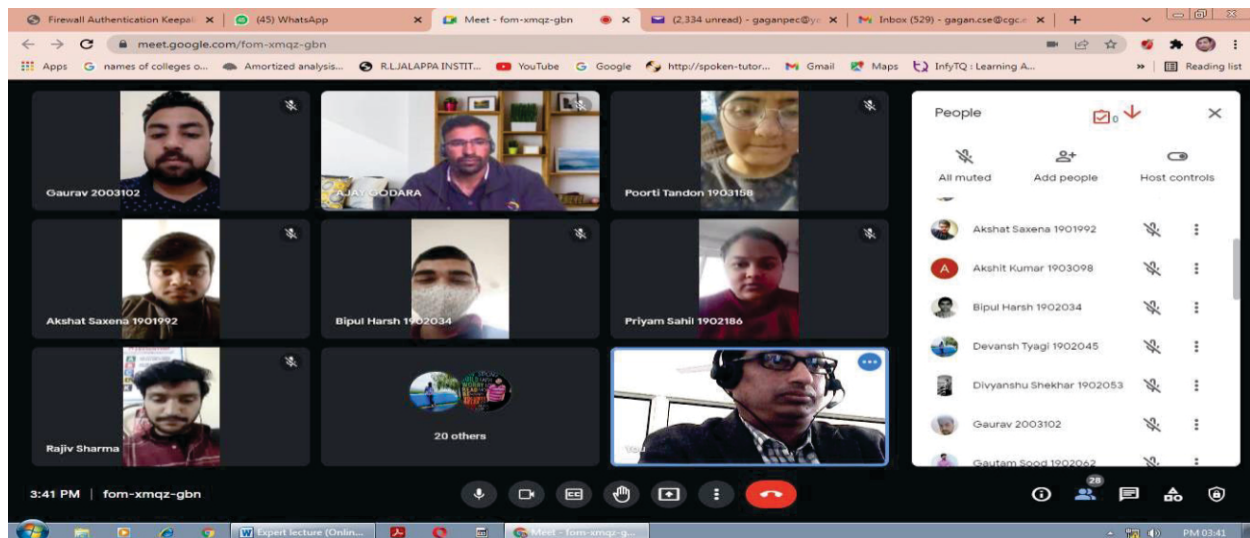
Industrial Visit to Ocean Tech Mohali

The department of Computer Science & Engineering, Chandigarh Engineering College organized an Industrial visit to Ocean Tech Mohali on 22nd March, 2022 with an objective to provide real time exposure of industrial life to B.Tech 2nd year students. Mr. Harjot Singh, faculty of CSE department accompanied the students in this visit.



Expert Lecture on IOT design and its use cases

CSE _____ for the third year students of B. Tech CSE on February 17, 2022 under the aegis of RCED. It was a 2 hour online expert lecture which was delivered by Dr. Ajay Godara (Innovator, NITI Ayog, and Govt of India). IoT applications promise to bring immense value into our lives. The speaker emphasized that with newer wireless networks, superior sensors and revolutionary computing capabilities, the Internet of Things could be the next frontier in the race for its share of the wallet.



Industrial Visit to CS Soft Solutions Mohali

The department of Computer Science & Engineering, Chandigarh Engineering College organized an Industrial visit to CS Soft Solutions Mohali on 18th April, 2022 with an objective to provide real time exposure of industrial life to the 2nd year students. The teaching faculty of CSE department, Mr. Jashanpreet Singh and Mr. Abhishek, accompanied 94 students in this industrial visit.



Expert talk on Leadership Challenges for the Budding Marketing Professionals

MBA Department, CEC Landran organized an expert talk titled Varta on Leadership Challenges for the Budding Marketing Professionals th March 2022. The expert of the session was Mr. Shrish Mudgal, Regional Head (Market Development), Business Standard. The objective of this session was to provide assistance to the 2nd semester students to opt for specialization wisely as per the career opportunities and requirements of marketing domain.

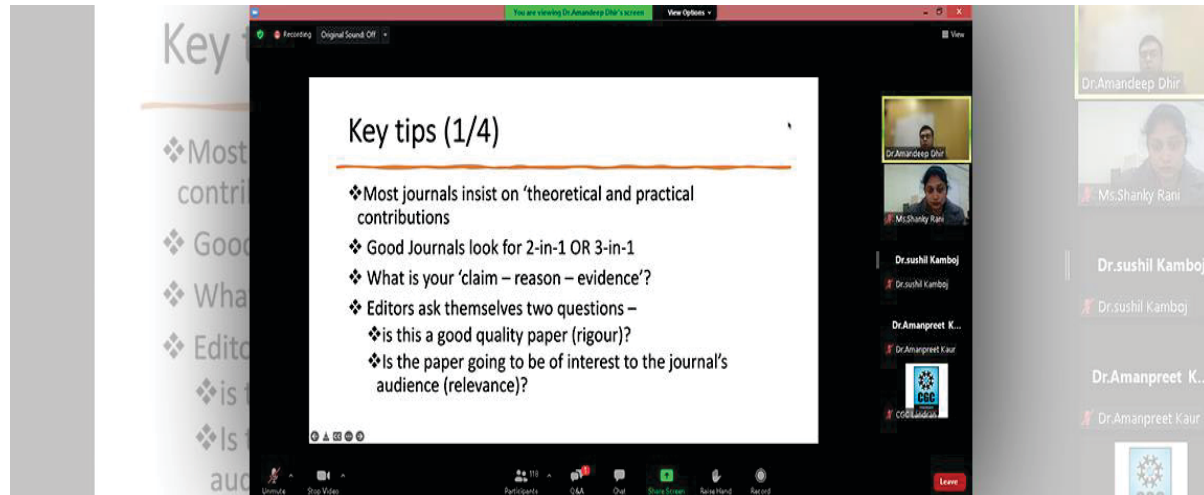


Ex

students of MCA and BCA on 12th February, 2022 in virtual mode. The objective of organizing this session was to provide an information and guidance for Startup and Entrepreneurship.



Department of Information Technology, Chandigarh Engineering College, Landran, organized an Online th Jan, 2022 through Zoom meeting. This session was taken by Dr. Amandeep Dhir (DSc, PhD). He is currently a Professor of Research Methods at the University of Agder, Norway. This session drew a total of 125 faculty members. Dr. Amandeep Dhir emphasised the importance of publishing papers, the publication procedure, and the review process of reputable journals.



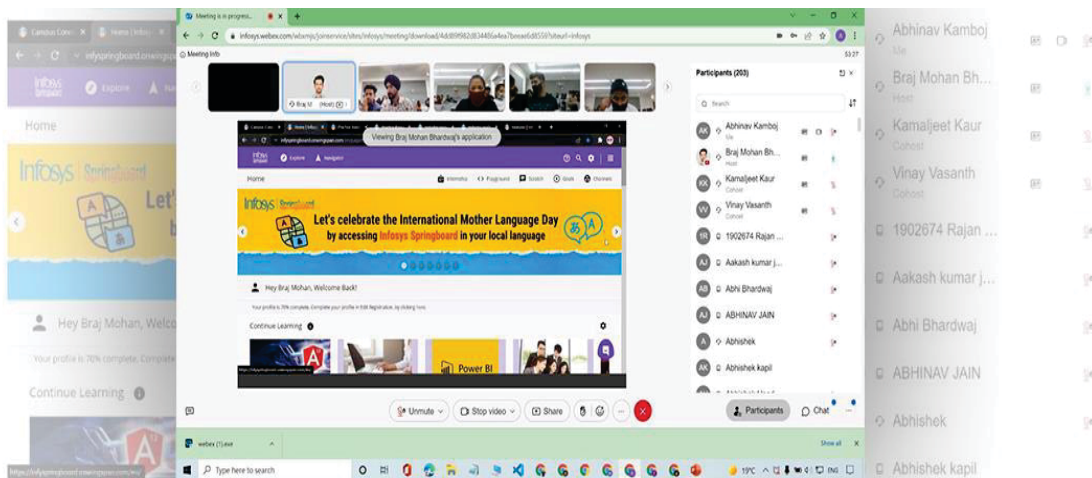
Department of Information Technology, Chandigarh Engineering College, Landran, organized an online th Feb, 2022 through google meet. This session was taken by Mr. Joseph Dolphin (Head Digital |EFHX). The purpose of the talk was to educate students about Blockchain Technology and the future of digital assets. In addition, students learned about ledgers, keychain technology, digital assets, and their applications in today's world.



Department of Information Technology, Chandigarh Engineering College, Landran, Organized an Expert Talk on _____rd Feb, 2022. The speaker for the talk was Mr. Siba Prasad Pulugurty, Co-Founder, Cloud Techner. Mr Siba Prasad's talk was full of students involvement in which the speaker gave the relevant information about Cloud Technology. He also discussed how businesses are evolving by lowering their costs and using the savings to better serve their customers.



CEC-Institution Innovation Council and Department of IT jointly organized an Expert talk on the topic, _____ Ms. Kamaljeet Kaur, Mr. Biligiri Ranga, and Mr. Braj Bharadwaj from Infosys Pvt. Limited presented an awareness session on Innovation Development and informed the students about the various areas where they can participate in Internships. Students from the departments of CSE, ECE, IT, and ME actively participated in the discussion. They were also told about the platform that Infosys Springboard provides for conducting trainings and projects.



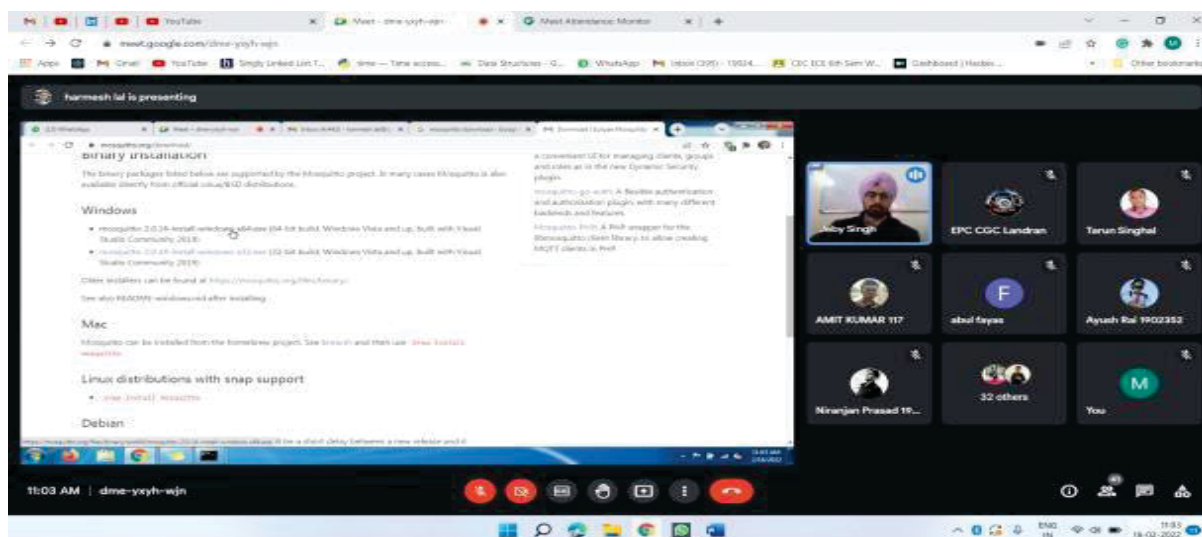
An Industrial visit to Solitaire Infosys Pvt. Ltd., Mohali was organized for the students of Information Technology Department, on 06th April, 2022. Solitaire Infosys Pvt. Ltd. was founded in 2011 with the goal of being the world's top IT service provider. This company is run by a group of seasoned professionals that bring their expertise to every project they work on.



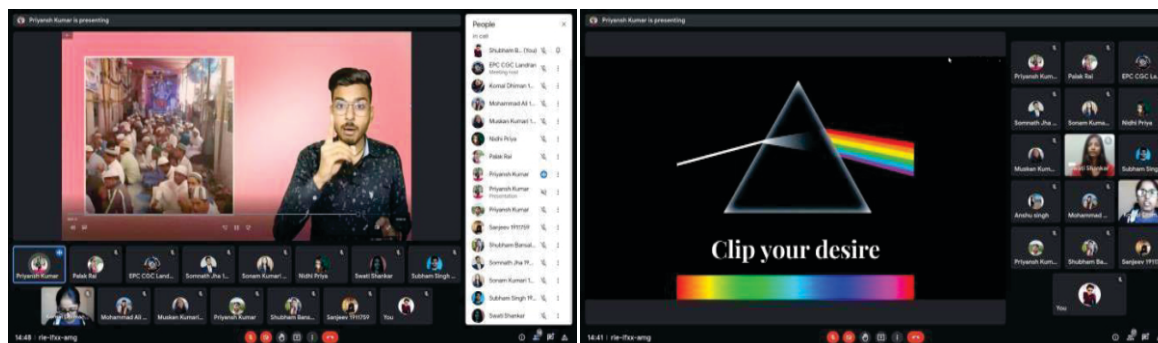
Electronics Project Club (EPC) & IETE, Department of Electronics and Communication Engineering organized an IoT Workshop on 17th February, 2022. Mr. Harmesh Lal, Head (R&D), TCIL-IT Enterprise, Chandigarh having experience of 14+ years in Embedded System Design & Product Development discussed about various industrial and domestic applications of IoT. During this session, the students learnt how to monitor various sensor data, values, and status from anywhere, as well as control devices or machines from anywhere.



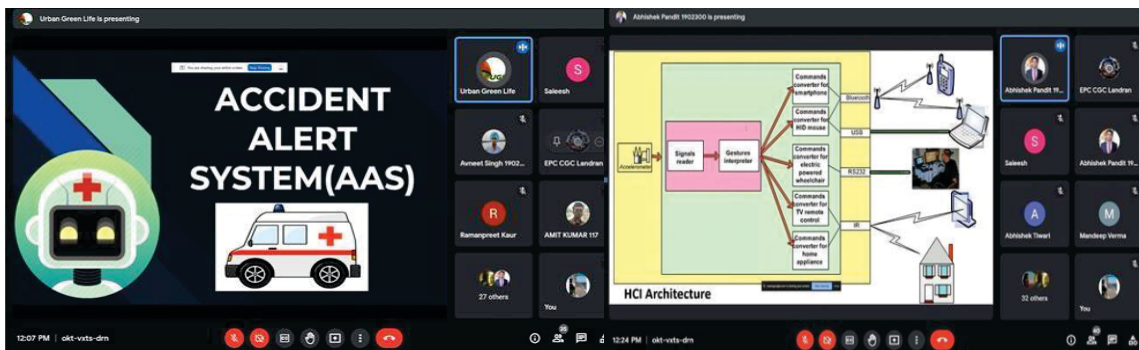
IETE & Electronics Project Club (EPC), Department of Electronics and Communication Engineering organized of the event was Mr. Jeby Singh, Project Head, TCIL-IT Chandigarh. IoT communication protocols are modes of communication that protect and ensure optimum security to the data being exchanged between connected devices. Students learnt how to use Message Queuing Telemetry Transport (MQTT) protocols to connect with different servers so that they can send or receive the information from one device to the server.



Institute of Electronics and Telecommunication Engineers (IETE) & Electronics Project Club (EPC), Department of Electronics and Communication Engineering organized TECHVIESTA on 18th February 2022. A total of three events were organized: Interbrains (Debate Competition), Clip Your Desire and RJ wars (Open mic). Winners of Interbrains were Shantanu, Rahul and Muskan Kumari from B.Tech CSE & ECE. Winners of Clip your desire were Sanjeev, Mohd. Ali and Muskan Kumari from Pharmacy & B.Tech ECE. Winners of RJ wars were Rashid Hussain, Kunal Verma and Mohd. Ali from Pharmacy & B.Tech ECE.



Electronics Project Club (EPC) & Institute of Electronics and Communication Engineers (IETE), Department of Electronics and Communication Engineering organized National Technical Fest SPECTRUM 2k22 on 17th February 2022. In this, two events were organized: Epic Presenters (Ideathon) and ... Epic Presenters (Ideathon) was about innovations and technical ideas that were presented by participants in front of jury. There were total 22 teams out of which 7 teams were from CGC and 15 teams were from outside CGC. Winners of Epic Presenters (Ideathon) were team Solace, Gandhi.



-e-

Electronics Project Club (EPC) and Institute of Electronics and Telecommunication Engineers (IETE), -e- on 15th March 2022. A total number of 23 teams participated from ECE department. This Event provided a fair chance to every team to showcase their innovative ideas verbally as well as with the help of presentation. The winning teams were Team Mind-ink-bots, Team Phoenix, Team Phoenix 2.O, Team Alfa and Team Zaz from B.Tech ECE fourth and sixth semester.



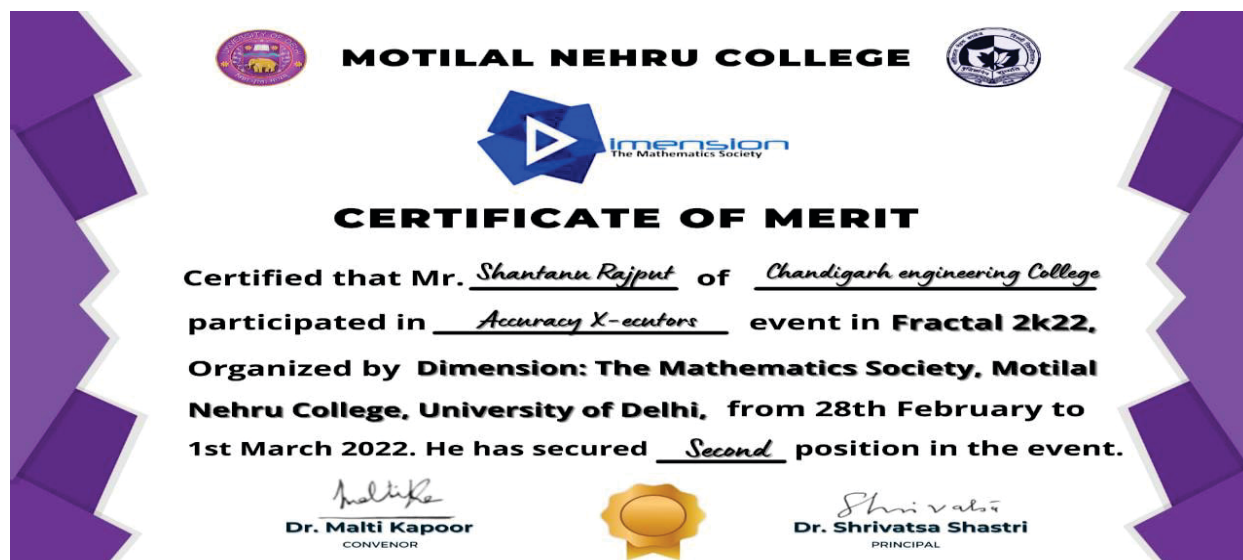
Workshop on Interacting Raspberry pi with wireless devices and IoT

A workshop on Interacting Raspberry pi with wireless devices and IoT was organized by ECE Department for 100 registered students on 24th-25th March. Resource Person for the workshop was Er. Rohit Khosla, an IoT and Embedded System Design Expert, Cadence OrCAD PCB design developer, Android Designer, Power System Designer and System Design, Specialities in Embedded System, IoT and Robotics. He has experience of Embedded System and Automation System Development in the field of IoT, IIOT and ML. Students gained the knowledge on Raspberry Pi, IoT, Zigbee Wireless, IIOT. In two days workshop, students learnt how raspberry pi and Zigbee wireless devices work and how can we connect and work on the same networks.



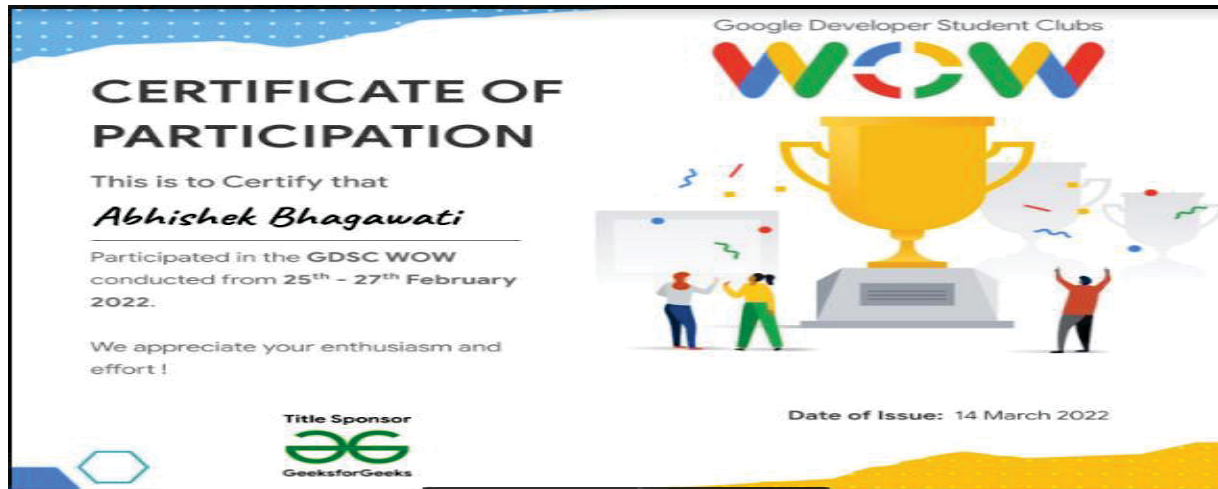
CSE department student secured 2nd position in _____

Shantanu Rajput, a student of CSE department participated in an _____ in which he secured second position and received a certificate for the same. This event was organized by Dimension, The Mathematics Society, Motilal Nehru College, University of Delhi. The event was held from 28th February 2022 to 1st march 2022.



CSE student participated in GDSC WOW

Abhishek Bhagawati, a student of CSE department received a certificate of participation from Google Developer Student Clubs
February 2022 to 27th February 2022.



Avatar- Sign Language Interpreters



Ramanpreet Kaur
(Assistant Professor, ECE Department)

Avatar was developed to make content accessible in Sign Language for 80% of the deaf community who a very basic level and to help governments and organizations become accessible for the deaf. It uses AI to translate text into sign language. Avatar provides accessible content in Sign Language for websites, social media and printed material through different products, including our:

- Website Interpreter
- Facebook Interpreter
- Twitter Interpreter
- Accessible QR Codes
- Mobile interpreting applications

Mobile applications are used by over 250,000 users worldwide, website interpreters are used by over 12 governmental entities in the UAE, several private and semi-governmental entities in Jordan, with over 2.5 million sessions performed using the web interpreters. Credit: <http://empowering-people-network.siemens-stiftung.org/solutions/>



Harshmeet Kaur

(AP, English)

And this is when we start to lose our motivation and begin to fall victim to the world around us. Even the most successful and confident person must have paused on the path of his life for once and wondered: Am I on the right track or Am I completely lost?

There is absolutely no harm in taking a break from your daily chores and doubting and questioning yourself. back or sit and cringe but rather be ready with a snappy comeback.

The road to success is not always a straight path ahead, there are challenges and hardships on every step overwhelming that it makes it too hard to distinguish whether or not you are headed in the right direction.

mind.

Secondly, when you start coming out of your comfort zone and start taking risks in achieving all the things ry opportunity that comes your way to take things and yourself on the next level.

for your commitments does not let you stop the hard work even if the situation gets the toughest.

Lastly, never underestimate your intuition. When you get a strong feeling of certainty about an upcoming Sometimes it may even include difficult or painful

Hydroponics! Future of Farming



Dr. Preeti Mehta
(AP, Chemistry)

Hydroponics comes from the meaning labor. The water is doing the work here and enabling the fast growth of plants. At its core, hydroponics is a method of growing plants but, instead of using soil, hydroponics depends on a water-based nutrient—been around for thousands of years and helped to enable population growth as the availability of arable land decreases.



Types of Hydroponics Systems

Hydroponics is a complex mechanism and there are multiple techniques on the basis of investment required and level of complexity, some are listed below:

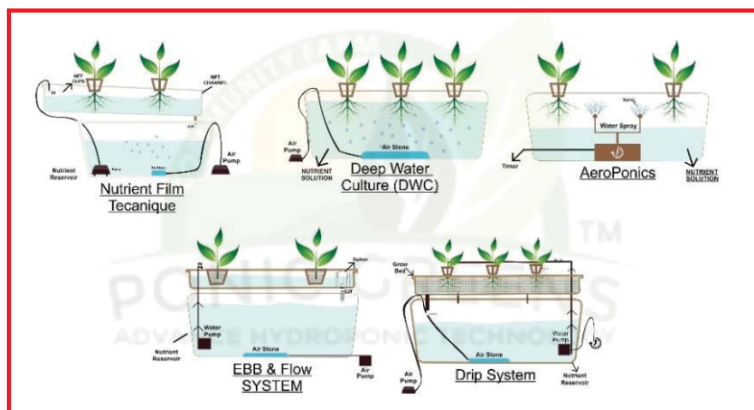


Figure : Different types of hydroponic techniques

Deepwater Culture

Also known as the reservoir method, deepwater culture is thought to be the easiest method of running hydroponics. The roots are suspended directly inside the nutrient solution and growers

Nutrient Film Technique

This method depends on absorption of oxygen from the air by running a continuous flow of grown on a slight tilt that allows the solution to flow downwards.

Aeroponics

Aeroponics depends on suspending the roots in the air and misting them with the solution. one can promote growth by hitting the roots with either a pond fogger or a fine spray nozzle.

Wicking

This method is thought to be the simplest and most cost-efficient method. The plant and reservoir of a nutrient solution are connected by the wick, which slowly feeds them over time. Absorbent materials like cotton are the most common medium and slowly move the water/nutrient solution to the plant.

Ebb & Flow

Also known as a flood and drain system, this technique requires the flooding of the growing area at specific intervals based on a timer. In between floods, the nutrient solution drains back into the reservoir. This is considered to be an intermed water.

Drip System

Finally, with the drip system a slow feed of nutrient solution is distributed to the hydroponics medium using a slow-draining medium like rock wool, coconut coir, or peat moss.

Benefits of Hydroponics

Increased Growth

Plants have been shown to grow faster and larger because obtaining nutrients from their surroundings requires less energy. The plants are essentially being force-fed all they need to sprout into flourishing specimens.

Less Resources Required

It has been demonstrated that plants operating on a hydroponic system use only 10% of the water a field-grown plant would use. This phenomenon occurs because they have an enclosed system ocess of feeding the plants.

Reduced Interference

The ancillary benefits of using hydroponics are massive. First off, there are no weeds, fewer use soil. As a bonus, the insecticide requirement is significantly reduced.

Other Benefits

On top of everything mentioned above, hydroponic systems are subject to less evaporation, are more controlled (i.e. temperature, humidity, and air composition), and are better for the environment due to the reduced pollution and waste.

Potential Harms

vegetables there are naturally going to be higher costs in a system where you have so many more considerations than plants grown in soil. The setup and creation of a hydroponic system can be very time- always the worry that an unforeseen event like a pump failure may harm the plants and finally, farmers still need to be careful about how they control their nutrient solution and pH levels. *So now that you know what hydroponics is and all the advantages it has over traditional soil grow*

IoT & Automation



Nidhi Chahal

(Assistant Professor, ECE Department)

IoT is now a days, a need and demand of the time. IoT stands for Internet of Things a brief introduction to IoT says as; the network of objects (things) that are embedded with sensors, software, and more for achieving a purpose.

such a problem is that IoT is responsible for the automation in the industry. IoT is a thing that is from the internet to the internet but for the users.

Another aspect is how does IoT works, IoT has some basic principles of working those are:

1. People to People - IoT works more on ideas moreover good ideas. This is more of a discussion because IoT is the internet of things and it is quite simpler to execute on the internet.
2. Man to Computer . Once you have a plan or in technical terms or a blueprint you can go for the execution of the software the programming part, and the designing of the hardware part.
3. Data to Machine . _____
in the state to give the data to the machine. The data brought is from the cloud.
4. Machine to Data . The last step of IoT is Machine taking input and giving output to the server.

Whereas IoT devices communicate by different methodologies:

1. WiFi . There are various connectivity modules for connecting one device to a WiFi facility, ex- Node MCU, Arduino, etc.
2. Bluetooth . Even when we think of connecting a hardware set-up to Bluetooth then we have to connect a proper Bluetooth module and code it accordingly.
3. There are some other basic ideologies by which we could connect our hardware to software and communicate with it then those are as follows:
RFID (Radio Frequency Identification)
NFC (Near Field Communication)
RF (Radio Frequency)

Working of IoT

IoT works on 5 main principal components; building blocks of IoT are as follows:
Hardware . Software . Internet . Security . Mobile.

IoT has an architecture of performing all the tasks, which consists of some layers:

Sensing layer . Network layer . Data Processing layer . Application layer.

This includes various types of sensors that could take input from the user for processing it in the clouds and get into the network after going through this process the data gets processed into the cloud for going into the output. Lastly, the output is displayed in the application layer.

Applications of IoT

There are many uses of the internet of things in different fields, like:

1. Health Care System
2. Agriculture
3. Smart Homes
4. Smart Cities

Automation has many live-action adaptations, many live life examples, talking about live-action adaptation than many movies like Iron Man, Interstellar, etc movies. And talking about live form adaptation then there is automated smart homes technology, even in health care there are smart sanitization system and smart doc — -farm technology. IoT is helping cities to grow smart and enhance their potential. Developing nations such as India must switch to IoT and automation as the demand of the world is growing the current need is machinery and automation that could easily be fulfilled by the IoT industry.

Mango Man and Price Tags

Actually we have a thing in common, we are the middle section of the society, not too stable neither too weak, just managing our expenses while trying to be happy. Then what makes us worried about our livelihood; managing day-to-day expenses due to sky—

keep shutting it out. Not here, to talk why they are going sky-high, or to talk on how will it go down. Not an economist but an engineer, so can just think of some creative ways to cut the cost out? Well, just a

hyped inflation was of lemon. Not more but just 5 years ago, we used to say to our vegetable vendors to put the lemon for free, by paying no more than 10-20 rupees we used to get about half a kilogram or a

have a lemon tree at home. My friend suggested me to keep a security guard to guard my lemon tree from the intruders. Like seriously?

Ok so, enough of bragging!

Before writing this article I researched as everybody does traditional custom methodology. I found out there are not that many taxes in our nation which are causing inflation, the main reason for the inflation is nothing but the things we expect for free. The government definitely has some flaws it is not perfect every democratic government flaws none of them is perfect so is our government full of flaws but blaming

things free. Every state certainly gives one or the other thing for free for example Delhi has free internet on public places, Punjab has some limited units of free electricity after these elections, Uttar Pradesh has free transport in some regions. Therefore, the tax payers give charges for these facilities not directly but indirectly. And if government does not generate revenue from these models then they increase tax on some other things like petroleum, food, tourism, entertainment, etc. That increases the inflation for the middle section of the society. And we do not have any other options other than complaining and bragging.

Aryan Srivastava

4th Sem, ECE Deptt.

Waste Heat Can Be Transformed Into Abundant Clean Electricity

Waste heat is a worldwide energy problem most people have probably never heard about. Every machine and power station, even renewable energy like wind and solar, creates heat that is simply lost in the atmosphere. Thankfully, scientists and engineers are devoted to capturing heat and transforming it into useful electricity.

There are huge gains to be made because around 70 percent of all fuel energy is lost when it converts to mechanical or electric energy. Now researchers at Penn State University have created a flexible thermoelectric generator that wraps around hot water or exhaust pipes, turning heat into electricity. Flexible devices are more efficient because they attach to pipes in factories or on vehicles without having to be glued on like rigid devices. Then the thermoelectric materials turn temperature differences between the surface fixed to the pipe and the cooler outer surface into electric current – called the Seebeck effect.

you could generate kilowatts of _____

Thermophotovoltaic devices are another promising way to use this waste heat. University of Michigan engineers have created a precisely machined thermophotovoltaic cell that could be used to generate electricity from surplus renewable power. The cells would use heat stored in molten salt and turn it into electricity on demand, in a form that is much cheaper than batteries, say its creators.

ic efficiency is its material. If higher electrical energy can be created with smaller temperature differences, then the materials are said to have a high ZT value. And a new material created by scientists in Vienna has smashed the ZT value world record. Engineers repair low-pressure steam turbines in a workshop. Using a thin layer of iron, vanadium, tungsten, and aluminum applied to silicon crystal, scientists have doubled the previous best. The random distribution of atoms in their material slows down the way heat passes through it, making the thermoelectric effect last longer, able to power sensors and small computer processors.

Any new thermoelectric material has to have a distinct advantage, and research is identifying a number of promising contenders. Pyroelectric films are aimed at waste heat emitted at less than 100 degrees Celsius (212 F) and can generate electricity when a material is either heated or cooled. Low-temperature generation includes computers and cars, making pyroelectrics particularly useful for squeezing more energy out of electronic systems.

Another relative advantage is inexpensive materials. More abundant elements like tin, selenium, and magnesium are cheap and abundant, with high ZT values when combined in the right way. Their use could lead to greener car engines and industrial furnaces. And when it comes to personal electronics, thermoelectric could eventually see off traditional charging hardware. Chinese researchers have built a wristband that gathers body heat to power a LED and may be able to power smartwatches or other mobile devices in the future. A wristband that turns body heat into electricity can power an LED.

Surbhi Raj
4th Sem, ECE Deptt

Faculty Publications

Dr. Dinesh Arora, Dr. Vinay Bhatia, Jagdeep -----
Wavelength division multiplexing approach for mitigating atmospheric attenuation in

Springer.

Gagandeep Kaur, "Monostatic Radar-Based Microwave Imaging of Breast Tumor Using an Ultra- wideband Dielectric Resonator Antenna (DRA) with a Sierpinski Fractal Defected Ground Structure", International Journal of MAPAN springer Nature.

Gagandeep K C- shaped Dual Polarized Dielectric Resonator Antenna for the Microwave Imaging of Breast Tumor Using Beam-----

Journal of International Journal of RF and Microwave Computer-Aided Engineering .

----- A feature level image fusion for IR and visible image using
mNMRA based segmentation ----- Neural Computing and
Applications.

Dr. Simarpreet Kaur, Performance Analysis of DP-QPSK with CO-OFDM using OSSB
----- in International Journal of Wireless Networks.

Ms Inderjot Kaur, "Digital Media and Man Woman Relationship: A Study of Meena
----- When I Hit You Or, a Portrait of the Writer as a Young Wife", Literary Voice, an
ESCI Journal.

Patents Filed

Dr. Pradeep K Gaur, Sanjeev Kumar, Ankita, Shivam Singh, Mohit Kaundal, Sanjeev Thakur

202211003140.

Dr. Simarpreet Kaur, Preeti Bansal, Shalini Sharma, Neetu Singh, Aryan Verma, Pallavi Bharti

202211003151

Dr. Simarpreet Kaur, Preeti Bansal, Aniket Mishra, Abhishek Thakur, Adarsh Gunjan filed patent

Faculty achievements

Ms. Priyanka Kamboj got 1st prize in Shotput during Athletic Meet organized in March
2022.

Ms. Priyanka Sood got 3rd prize in 100 meters faculty race during Athletic Meet organized
in March 2022.

Students Achievements

Kirtilata, Kajal Saxena and Komal won 2nd position in the event -----
during National Science day

Banum Bhuyan won Bronze medal in High Jump in Athletic Meet 2022.

Anshu won Gold Medal in 100 meters Race in Athletic Meet.

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