GLOBAL TIMES

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GLOBAL Sports Meet 2019

DEPARTMENTAL ACTIVITIES

Coding EPIC : by Department CSE & IT

Students of CSE 4th Semester Win 2nd prize in International Conference on Safer Mobility Organized by Indian Road Safety Campaign at IIT Delhi

Product Launch Activity, by Department of MBA

Model Presentation in SRAJAN, Bhopal Dept. of ME

Workshop conducted by Entrepreneurship Development Cell on 23rd April 2019

Parents Teacher Meeting : Department of EC

Students Interaction organized by T&P Cell with Associate General Manager, Mr. Satish Warrier from Hexaware Technologies

Editorial

Dear Students,

It gives me immense pleasure to pen a few words as prologue to our in-house magazine 'Global Times' exclusively ,meant for churning out the latent writing talent which bears immense potential of sharpening your communication skill as part of your overall personality development.

"The function of education is to teach one to think intensively and to think critically. Intelligence plus character that is the goal of true education."

Dr. Martin Luther King Jr.

Keeping in mind these words of Dr. Martin Luther King Jr., We at Global Nature Care Sangathan's Group of Institutions aim to teach our students to LEARN, not to just Study. We always move forward to travel beyond the boundaries of mere books. We have realized that the future is abstract and unknown but the youth in our hands can be moulded. Today, our college has grown in all directions and has become a distinguished centre for learning. The role of a college magazine is therefore vital in promoting what our institution offers. It brings out into the open things hitherto unrevealed. It is a nice platform for the both the faculty and the students to exhibit their talent in technical writings and also strongly believe that it would be an excellent medium through which people outside can learn about the potential and achievements of Globalites. Our magazine is intended towards technical writings, cultural events and also bring in light various achievements of our students.

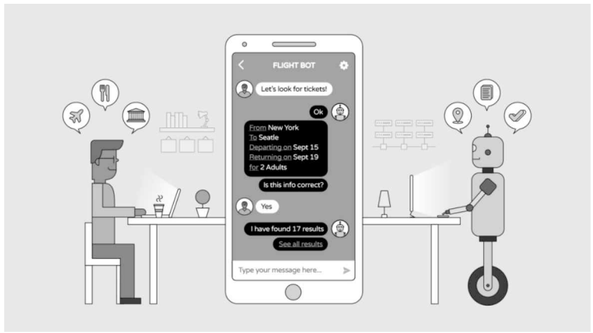
I am sure, being stars and their painstakingly and gainfully developed culture, a strong foundation to march ahead and achieve the within mentioned education objectives for a stronger and brighter tomorrow. Measure initiated by our Hon.Chairman Sir ,support of the college administration and willing contribution of the teaching and non-teaching staff of our Department and over whelming response and enthusiastic participation of dear students, we are able to present eighth edition of our college magazine.

Prof. Sumit Nema
Head of Department
Computer Science & Engineering

TEAM MAGAZINE

INDEX

How Chatbots have become more 'Personalized' and less 'Robotic'



ChatBots create a bond between people and technology, which these days are almost done by Artificial Intelligence ChatBots is a customized and automated program to Interact with humans, which is available twenty-four by seven as an Interactive-Agent. Almost every Brand now is using ChatBots Service on their websites, applications, blogs, and software for better and quicker customer support.It is time-saving, which means it is helpful for any customer-centric organization. It is quicker than humans and can curate the content faster with better accuracy. Once the data is fed in the feedbox it will have the answers quicker and solve all your queries.

ChatBots create a bond between people and technology, which these days are almost done by Artificial Intelligence. ChatBots have a different personality and can create a persona which seems to be real.

- **It helps us In finding the answer**
- **Its availability is good**
- **It is also personified**
- **It is fast and accurate**

Effects of UX Strategy

Understanding the real need of designing ChatBots or VUI

People of new age want everything speedily when it comes to interface conversation. For instance

We look for a quick response If you are lost, you can verbally command your device to locate the exact location you are looking for

We need a reminder A great example is SlackBot which is a messaging channel used by 6.6k teams across the globe.

You can also set reminders for **other people** (e.g. @xyz) on the team too. /**Remind @xyz to book the cabin for the meeting in1 hour.**

Build a guise for your bot

We all have our own imagination towards a digital language, voice or text. For example, Talking Tom sounds like a local boy.

Reputation and User satisfaction are the main objective of any brand. They use the right character to exemplify their brand. If you visit any Hi-tech website, they do have their ChatBots system which initiates a conversation with a concerned tone “How may I assist you? Can I help you?” and so on.

Following are the things we need to plan while creating a friendly and chatty interface.

- **Know the User?**

It is essential to know what Conversation attracts our users. Is it formal or Informal? What would the users look for? What are the FAQs? Make sure to create a personality according to our users' needs.

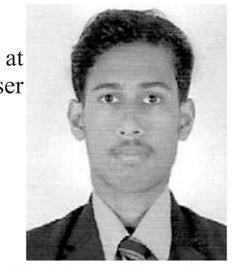
Google is a search engine which is Informative and the Interface of its Bots is also with the same persona.

- The persona should replicate our brand personality

It is important to understand the significance of User Psychology. ChatBots are created for the Users, By the Users, and to the Users. The bonding of an automated program with humans has not always been great, but if we can create a great program then we can create builds more and more connection.

- **Availability matters**

A Chabot should be accessible at all times to ensure that the User queries are resolved instantly.



Shubham Choudhary
CSE 8th Sem.

Blu-Ray Disk

Blu-ray or Blu-ray Disc (BD) is a Digital optical Dics storage format. is capable of storing several hours of video in high-definition (HDTV 720p and 1080p) and high-definition resolution (2160p). The main application of Blu-ray is as a medium for video material such as feature films and for the physical distribution of video games for the Play Station 3, Play Station 4, and Xbox one.

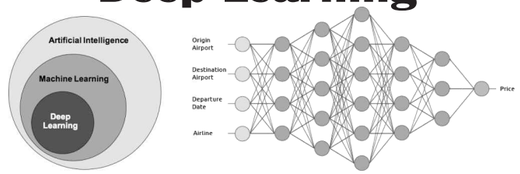
The name Blu-ray Disc is derived from the blue-violet laser used to read and write this type of disc. Because of its shorter wavelength (405 nm), substantially more data can be stored on a Blu-ray Disc than on the DVD format, which uses a red, 650 nm laser.

Blu-ray or Blu-ray Disc (BD) is a digital optical disc data storage format. It was designed to supersede the DVD format, and is capable of storing several hours of video in high-definition (HDTV 720p and 1080p) and ultra high-definition resolution (2160p).

How Blu-ray Discs Work: The industry is set for yet another revolution with the introduction of Blu-ray Discs (BD) in 2006. With their high storage capacity, Blu-ray discs can hold and play back large quantities of high-definition video and audio, as well as photos, data and other digital content. A current, single-sided, standard DVD can hold 4.7 GB (gigabytes) of information. That's about the size of an average two-hour, standard-definition movie with a few extra features. But a high-definition movie, which has a much clearer image (see How Digital Television works), takes up about five times more bandwidth and therefore requires a disc with about five times more storage. As TV sets and movie studios make the move to high definition, consumers are going to need playback systems with a lot more storage capacity.

Durga Singh
CSE 6th Sem

Deep Learning



(Deep Neural Network)

Deep learning is an aspect of artificial intelligence (AI) that is concerned with emulating the learning approach that human beings use to gain certain types of knowledge. At its simplest, deep learning can be thought of as a way to automate predictive analytics.

While traditional machine learning algorithms are linear, deep learning algorithms are stacked in a hierarchy of increasing complexity and abstraction. To understand deep learning, imagine a toddler whose first word is dog. The toddler learns what a dog is (and is not) by pointing to objects and saying the word dog. The parent says, "Yes, that is a dog," or, "No, that is not a dog." As the toddler continues to point to objects, he becomes more aware of the features that all dogs possess. What the toddler does, without knowing it, is clarify a complex abstraction (the concept of dog) by building a hierarchy in which each level of abstraction is created with knowledge that was gained from the preceding layer of the hierarchy.

How deep learning works

Computer programs that use deep learning go through much the same process. Each algorithm in the hierarchy applies a nonlinear transformation on its input and uses what it learns to create a statistical model as output. Iterations continue until the output has reached an acceptable level of accuracy. The number of processing layers through which data must pass is what inspired the label deep.

In traditional machine learning, the learning process is supervised and the programmer has to be very, very specific when telling the computer what types of things it should be looking for when deciding if an image contains a dog or does not contain a dog. This is a laborious process called feature extraction and the computer's success rate depends entirely upon the programmer's ability to accurately define a feature set for "dog." The advantage of deep learning is that the program builds the feature set by itself without supervision. Unsupervised learning is not only faster, but it is usually more accurate.

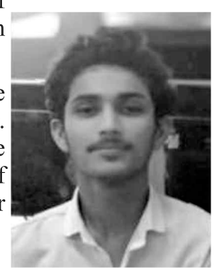
Kirti Ramharia
M. Tech. Scholar

Kaalink

(Converting Air Polluted Carbon Into Ink)

KAALINK™ is patent pending retrofit technology used to capture air pollution particulate. Bengaluru-based Graviky uses its proprietary technology, Kaalink, to capture particulate pollution emitted from vehicles, and diesel generator chimneys. A MIT graduate started this project of capturing carbon and converting into carbon black that can finally being converted into air-ink. In 2016, the team started to retrofit Kaalink to car engine exhaust pipes in Bengaluru. They captured approximately 95 percent of the particulate matter pollution without inducing back-pressure.

The soot undergoes various processes to get rid of heavy metals, oils, dust, and carcinogens. The end product is a purified carbon-based pigment. This carbon undergoes further chemical processes and is converted into different types of inks and paints. The team experimented with several formulations to develop five grades of ink meant for specific industries permanent marker ink, calligraphy ink, acrylic emulsions, screen printing ink, and inkjet printer ink. This process can convert upto 80-95% of polluted air into ink that ink can be used in type writters,markers, paints etc.. It takes just 45 minutes worth of vehicular emissions captured by Kaalink to produce 1 fluid ounce of inkenough to fill one of the pens being offered through this Kickstarter campaign.

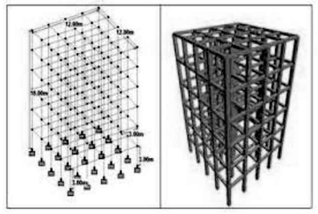


"Pollution is nothing but the resources we are not harvesting. We allow them to disperse because we've been ignorant of their value."~ R. Buckminster Fuller

Harshit Chouksey
CSE 4th Sem

Impact of Different Soils and Seismic Zones on Varying Heights of RC Framed Structures

To determine the impact of different soils and seismic zones on diiferent heights of framed structures.In high rise building we should concern about all the forces that act on a building,its own weight as well as the lateral forces. In this work, total 48 models are analyzed. To determine the impact of different soil and seismic zones on varying height of framed structure, this work is carried out. Three different soils types are taken as soft, medium and hard. Stories i.e., G+4,G+5, G+6 & G+7 are taken of heights 15m, 18m, 21m & 24m respectively are considered and analyzed for seismic zones II,III,IV & V. SMRF(Special Moment resisting Frame) & IS 1893-2002/2005 are used in STAAD PRO.(V8i) series 4 to analyze all models.



As the height of the building frame is increases, the values of maximum beam end force (Shear-Y in beam - KN) & (Moment-Z in beam - KNm) is also increases for soft and medium soil types. For maximum shear forces & maximum bending moment : Seismic Zone-2 & Seismic Zone -4 shows same increase in percentages for medium and hard soil strata in Model-4. In Seismic Zone - 2, Seismic Zone - 3 & Seismic Zone 5: For Model-2, Model-3 & Model-4, the values of maximum Shear forces & maximum bending moment are decreasing in hard soil strata when compared with soft soil strata & found the least for the same. For Seismic Zone- 4: In Model-3 , there is no variation in maximum Shear forces & maximum bending moment among soft, medium & hard soil strata.

Tahseen Qureshi
CE 5th Sem

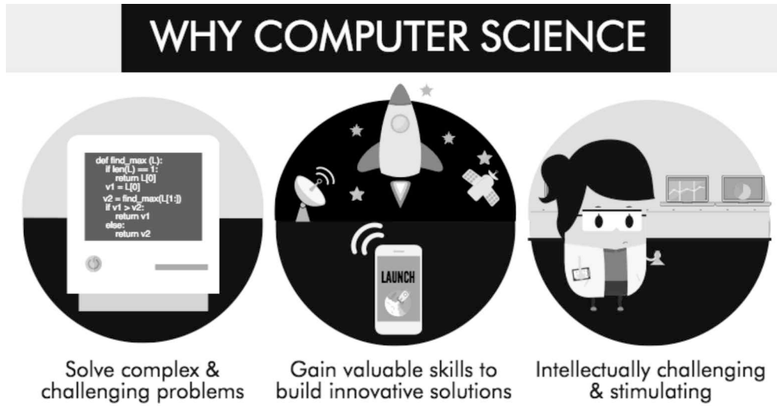
How Computer Engineering Helps You Think Creatively...

At first glance, computer engineering and related fields may not seem like they have much to do with creativity. In our culture, we tend to draw a heavy line between fields related to math and/or logic and fields related to creativitythink of it as an external split between left-brained and right-brained subjects. Because computer science depends heavily on careful calculations and strict adherence to logical rules, it doesn't seem to demand much in the way of creative thinking, or at least not to an outsider. But in reality, learning the basics of computer science can help you think more critically and with more novel inspiration, ultimately helping you in other areas of your life.

Applying Creative Problem Solving to Other Areas

Let's start by explaining why the creative problem-solving skills you'll learn in computer science can help you in everyday life

· Novel solutions and new products. Being familiar with creating and polishing hardware and/or software can help you come up with ingenious solutions for your everyday life.for example, one former computer engineer used his creativity to engineer a pillow that reduces pressure on your face while sleeping.



· Lateral thinking and breaking patterns. Writing code and creating applications from scratch also incentivizes you to think laterally and break the patterns you'd otherwise fall into. Traditional lines of thinking just won't work for some problems, so you'll be forced to think in new, creative ways. That allows you to experiment with new approaches and keep trying until you find something that works.

· Seeing problems from other perspectives. As a computer engineer, you'll see problems from other perspectives. That might mean reviewing code that someone else wrote, getting feedback from a client who has no familiarity with engineering, or imagining how an application might look to a user who's never seen it before.

How Computer Engineering Improves Your Abilities

So how exactly does computer engineering improve your creative abilities in this way?

· Generating new ideas. You have to be creative if you're going to generate new ideas

· Reviewing code. Reviewing your own code forces you to see it from an outsider's perspective, and reviewing the code of others gives you insight into how they think.

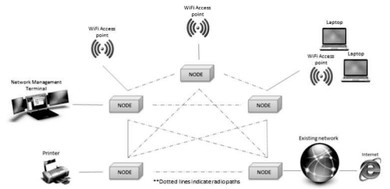
· Fixing bugs. Finding and fixing bugs is an important part of the job, and it's one of the most creatively enlightening. To resolve the problem, you first have to understand why it's happening.

Is It Worth Learning?

If you're not already experienced in a field related to computer science, you might feel intimidated at the idea of getting involved in the subject. After all, people spend years, if not decades studying computer science to become professionals. The good news is, you don't need decades of experience to see the creative problem-solving benefits of the craft.

Suyash Kr. Shrivastava
IT 4th Sem

Mesh Radio



A Wireless Mesh Network (WMN) is a communications network made up of radio nodes organized in a mesh topology. It is also a form of wireless ad hoc network.

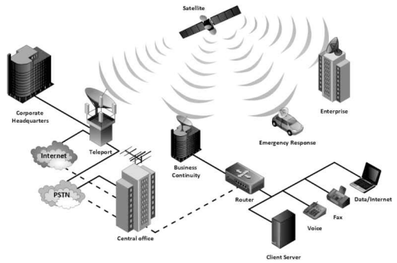
A mesh refers to rich interconnection among devices or nodes. Wireless mesh networks often consist of mesh clients, mesh routers and gateways. Mobility of nodes is less frequent. If nodes constantly or frequently move, the mesh spends more time updating routes than delivering data. In a wireless mesh network, topology tends to be more static, so that routes computation can converge and delivery of data to their destinations can occur. Hence, this is a low-mobility centralized form of wireless ad hoc network. Also, because it sometimes relies on static nodes to act as gateways, it is not a truly all-wireless ad hoc network.

Mesh clients are often laptops, cell phones, and other wireless devices. Mesh routers forward traffic to and from the gateways, which may, but need not, be connected to the internet. The coverage area of all radio nodes working as a single network is sometimes called a mesh cloud. Access to this mesh cloud depends on the radio nodes working together to create a radio network. A mesh network is reliable and offers redundancy. When one node can no longer operate, the rest of the nodes can still communicate with each other, directly or through one or more intermediate nodes. Wireless mesh networks can self form and self heal. Wireless mesh networks work with different wireless technologies including 802.11, 802.15, 802.16, cellular technologies and need not be restricted to any one technology or protocol. See also mesh networking.

Wireless mesh architecture is a first step towards providing cost effective and low mobility over a specific coverage area.

Ayushi Shrivastava
CSE 6th Sem

Advanced Cuckoo Search



The radio spectrum is a naturally limited resource which is needed for wireless communication systems. If we analyze a particular part of radio spectrum, It is found that some frequency bands of radio spectrum are not used for large time duration, some other frequency bands are used for moderate time duration and the remaining frequency bands are heavily used. This results to inefficient use of available radio spectrum. Cognitive Radio (CR) is a new technology to enhance the spectrum utilization efficiency. Spectrum utilization can be improved by allocating licensed band to secondary user/unlicensed user (SU) when the primary user/licensed user (PU) is not present. In Cognitive Radio (CR), a transceiver is used to sense which communication channels are in use and which are not in use, and according to this information, it intelligently move into unoccupied channels and avoids occupied channels and interference to primary user. The main feature of the cognitive radio is spectrum sensing. By using Advanced Cuckoo Search method, spectrum holes (unoccupied channels) can be sensedeasily, and these empty channels can be allocated to secondary users. In Advanced Cuckoo Search method, Total wide frequency spectrum bands are divided into numbers of narrow band sub-channels, and then fewsub-channels are chosen by levy flight (random walk). Quality/Fitness of these sub-channels is evaluated and compared it with threshold. If Quality/Fitness is greater than threshold, then primary user is present and secondary user cannot use these sub channels and if Quality/Fitness is less than threshold, only then these sub-channels can be allocated to secondary user. By doing this the time of capturing free sub-channels is reduced.

Published in AJCT through IEEE 5th 12CT 2019 Pune conference under the guidance of Dr. Swapnil Nema.

Ashu Malviya
M.Tech. (DC)

The mind is not a vessel to be filled, but a fire to be kindled..

CODING EPIC

Coding EPIC was organized by CSE and IT department. Event was totally based on programming skills. It was 12 hours coding hackathon. Students got topics on spot and implemented their ideas within 12 hours. Event was graced by the presence of Honourable Chairman Mr Saurabh Baderia and Director Dr. Rajiv Khatri

Inaugural by Director Sir

Understanding problem statement

Supervision by Honourable Chairman Mr. Saurabh Baderia Sir

Output presentation by the students

Taking advice from mentor

Participants : Coding EPIC

Girls Cricket Team

Table Tennis

Kabaddi Final

Tug-of-War

Badminton Girls Single

Shot Put

Cricket

Sack Race

Football

Football Final

Price Distribution - Sports Meet 2019

IT 8th Semester

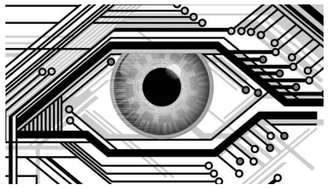
CSE 8th Semester

CE 8th Semester

ME 8th Semester

EC 8th Semester

Smart Eye Technology



Today, Smart Eye has one of the market's leading systems for advanced eye tracking.

Ever since the start in 1999, the objective has been to provide an eye tracking system that can handle several cameras, complex environments and any lighting conditions, including switching between sunlight and complete darkness. Using several cameras expands the space in which eye tracking can be used.

In a situation where a person is in a fixed position, such as in front of a screen or in a car, one camera is usually sufficient. In a larger environment, such as a simulator, often several cameras are needed in order to cover a larger area. Several cameras and larger systems increase the complexity and thereby the requirements of the algorithms and software in the system. Smart Eye has extensive experience with advanced systems and provides robust systems that can handle the most complex environments. For more than ten years Smart Eye has provided advanced eye tracking systems to demanding industrial customers in the automotive industry and other sectors and, in the company's assessment, holds a world-leading position within advanced multi-camera systems.

Smart Eye invests continuously in the further development of its eye tracking technology. Considerable resources are also invested in product development within, first of all, the Automotive Solutions business area, but also within Research Instruments. Overall, 30 employees are engaged in research and development. Smart Eye's technology is protected by several patents and the company has an active patent strategy to file patents for new innovations. Today, the company holds two eye tracking patents. Smart Eye filed eye tracking patent applications at an early stage and therefore holds a number of important patents in this area.

Aakash Prajapati
CSE 6th Sem

Research & Development Cell

Achievements & Awards

1. M. Tech. student 'Aarzu Dixit' has presented a paper in International conference "SUSCOM-2019" at Amity University, Rajasthan on 28.02.2019.This paper will be indexed in Elsevier Notes.

2. 'AshuMalviya' One M. Tech. student paper has been selected in IEEE 5th international conference I2CT on 29th-31st March 2019.

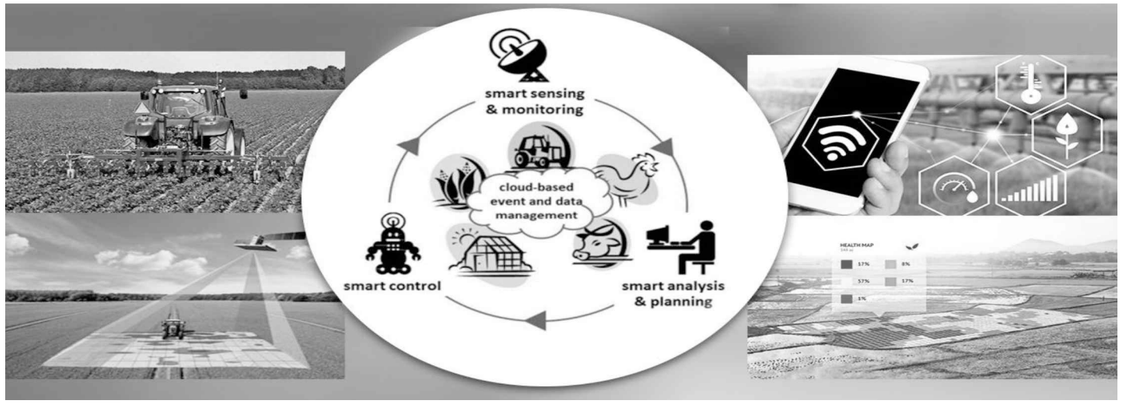
3. SIH-2019 had organized in Guru Nanak Institute of Technology Kolkata, West Bengal. Six students of CS went on 27th March 2019.

4. One paper title 'Investigation of free vibration examination of rectangular overlaid plate without cut-out' has been accepted for International Conference of Sustainable Material and Structures for Civil Infrastructures on 14-15 March 2019 organize at UIT-RGPV. Authors are Prof. Vinamra Sharma, Prof. Arun Khare and Prof. Manish Tiwari.

Dr. Swapnil Nema
Co-ordinator R&D Cell

Education is the most powerful weapon which you can use to change the world.

IoT in Agriculture: Why it is a Future of Connected Farming World



Agriculture is a field, where modern technologies can be applied efficiently. Although, the farming sector may seem something archaic for many people. Anyway, a smart farming conception is not a sci-fi one, it is a real working approach that simplifies agricultural processes and makes them automated.

Smart farming can be divided into two conception□—□smart agriculture and agritech.

- Agritech is a software that is created for the improvement of some farming processes.
- Smart agriculture is referred to the application of the Internet of Things, utilization of various devices connected to each other.

Advantages Of IoT In The Agricultural Sector:

Data collection- Data like weather condition, health condition of cattle, crops, etc. Can be collected using sensors.

Reduction of risks-When farmers up-to-date information collected, they can understand what situation will be in the future.

Business goes automated-Many business processes become automated and their efficiency is growing.

Higher quality-Smart agriculture makes it possible to avoid challenges and remove all issues that may arise during farming processes.

How IoT Can Be Used In Agriculture...

Livestock monitoring-Sensors and wearables make it possible for farmers to check the condition of livestock and get access to all data.

Monitoring climate conditions-Weather stations equipped with smart sensors can collect weather data and send useful information to a farmer.

Greenhouses automation-An installed system with multiple sensors monitor conditions and parameters in a greenhouse and automatically adjust equipment to provide the most appropriate condition for each greenhouse.

Crop monitoring-As in the case of weather condition monitoring, sensors for crop monitoring also collect all information like crop health, humidity, precipitation, temperature, and other parameters.

Farm management systems-Such systems are required to collect all information together and manage it efficiently. Also, such systems have reporting, analytical and accounting features, so it is a must-have for farmers.

Drones may be very useful for agriculture since they can sprinkle various pesticides or simply stream video to let farmer see what is going on in a real-time mode.

That is how IoT revolutionizes the farming sector and allows farmers to improve their business and make many processes automated. To implement this, you just need to find a reliable provider, and you will succeed!

Shivam Vishwakarma
CSE, 3rd Sem

Rapid Prototyping: Trending Additive Manufacturing Process

Rapid Prototyping (RP) also referred as 3-D Printing can be defined as a group of techniques used to quickly fabricate a scale model of a part or assembly using three-dimensional computer aided design (CAD) data. What is commonly considered to be the first RP technique, Stereolithography, was developed by 3D Systems of Valencia, CA, USA. The company was founded in 1986, and since then, a number of different RP techniques have become available.

Rapid Prototyping has also been referred to as solid free-form manufacturing, computer automated manufacturing, and layered manufacturing. RP has obvious use as a vehicle for visualization. In addition, RP models can be used for testing, such as when an airfoil shape is put into a wind tunnel. RP models can be used to create male models for tooling, such as silicone rubber molds and investment casts. In some cases, the RP part can be the final part, but typically the RP material is not strong or accurate enough. When the RP material is suitable, highly convoluted shapes (including parts nested within parts) can be produced because of the nature of RP.

There is a multitude of experimental RP methodologies either in development or used by small groups of individuals. This section will focus on RP techniques that are currently commercially available, including Stereolithography (SLA), Selective Laser Sintering (SLS®), Laminated Object Manufacturing (LOM™), Fused Deposition Modeling (FDM), Solid Ground Curing (SGC), and Ink Jet printing techniques.

Why Rapid Prototyping?

The reasons of Rapid Prototyping are

- To increase effective communication.
- To decrease development time.
- To decrease costly mistakes.
- To minimize sustaining engineering changes.
- To extend product lifetime by adding necessary features and eliminating redundant features early in the design.

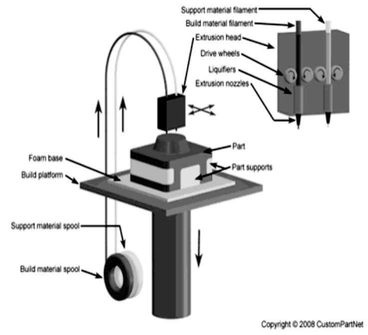
Rapid Prototyping decreases development time by allowing corrections to a product to be made early in the process. By giving engineering, manufacturing, marketing, and purchasing a look at the product early in the design process, mistakes can be corrected and changes can be made while they are still inexpensive. The trends in manufacturing industries continue to emphasize the following:

- Increasing number of variants of products.
- Increasing product complexity.
- Decreasing product lifetime before obsolescence.
- Decreasing delivery time.

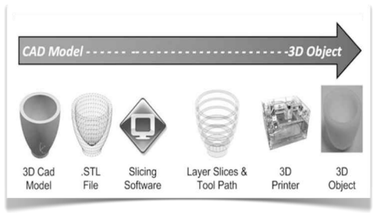
Rapid Prototyping improves product development by enabling better communication in a concurrent engineering environment.

Methodology of Rapid Prototyping

The basic methodology for all current rapid prototyping techniques can be summarized as follows:



(Fused Deposition Modeling)



1. A CAD model is constructed, and then converted to STL format. The resolution can be set to minimize stair stepping.
2. The RP machine processes the .STL file by creating sliced layers of the model.
3. The first layer of the physical model is created. The model is then lowered by the thickness of the next layer, and the process is repeated until completion of the model.
4. The model and any supports are removed. The surface of the model is then finished and cleaned.

Hrishabh Dubey
(ME 4th Sem)

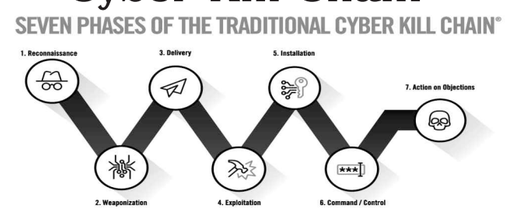
Virtual Reality

Virtual reality (VR) is an interactive computer-generated experience taking place within a simulated environment. It incorporates mainly auditory and visual feedback, but may also allow other types of sensory feedback. This immersive environment can be similar to the real world or it can be fantastical. Current VR technology most commonly uses virtual reality headsets or multi-projected environments, sometimes in combination with physical environments or props, to generate realistic images, sounds and other sensations that simulate a user's physical presence in a virtual or imaginary environment. A person using virtual reality equipment is able to "look around" the artificial world, move around in it, and interact with virtual features or items.

The effect is commonly created by VR headsets consisting of a head mounted display with a small screen in front of the eyes, but can also be created through specially designed rooms with multiple large screens. Other forms of VR include augmented reality and mixed reality systems. VR systems that include transmission of vibrations and other sensations to the user through a controller or other devices are known as haptic systems. This tactile information is generally known as force feedback in medical, video gaming, and military training applications.

Anurag Rai
IT 4th Sem

Cyber Kill Chain



The cyber kill chain (developed by Lockheed Martin) is an industry-accepted methodology for understanding how an attacker will conduct the activities necessary to cause harm to your organization. An effective understanding of the cyber kill chain greatly assist the information security professional in establishing strong controls and countermeasures, which will serve to protect their organization's assets.

It contains 7 steps:-

Stage 1: **Reconnaissance**: - In this stage the attacker will be looking for information systems with few protections or exploitable vulnerabilities.

Stage 2: **Weaponization:** - The threat actor develops malware specifically crafted to the vulnerabilities discovered during the reconnaissance phase of the cyber kill chain.

Stage 3: **Delivery: -** Itinvolves transmitting the malicious code from the attacker to the target information system for exploitation.

Stage 4:**Exploitation: -**Malware code is executed on the target network through remote or local mechanisms.

Stage 5: **Installation: -** Once the exploitation of the system has been successful, the malware code will install itself onto the targeted information system.

Stage 6: **Command and Control: -** Command and control, also known as C2 Using management and communication tool attacker gets full control over network and conduct destruction or denial of service operations.

Stage 7: **Actions On Objectives:** - The actions and objectives of the APT are dependent on its specific mission. The APT could be focused on data exfiltration, denial of service or destruction.

Defence in Depth Recommendations: -

Implementation of an enterprise-wide information security program with the leadership backing and authority

Effective user training and awareness related to email-borne threats (phishing). Strong cyber hygiene practices throughout the organization.

Prof. Nivedita Tamrakar
Department of CSE

Report of the Workshop conducted by Entrepreneurship Development Cell on 23rd April 2019

Topic- "Emotional intelligence as a tool for idea generation"

Emotional intelligence (EI), emotional leadership (EL), emotional quotient (EQ) and emotional intelligence quotient (EIQ), is the capability of individuals to recognize their own emotions and those of others, discern between different feelings and label them appropriately, use emotional information to guide thinking and behavior, and manage or adjust emotions to achieve one's goals

The following characteristics are common in emotionally intelligent people:

- The Emotional Intelligent is self aware.
- They know how to talk about their emotions at an elevated level.
- They care about what people around them are going through.
- They aren't afraid of change.
- They're aware of their own strengths and weaknesses. .
- They are socially aware. .
- They are confident in who they are.
- They know when to say no.
- They don't hold onto mistakes or grudges.
- Workshop helped them to be aware about MBT (Mindfulness based techniques) based techniques
- Workshop not only motivated them but MBT helps them to discover hidden talents in them

In terms of entrepreneurship, having high emotional intelligence is extremely beneficial. With high emotional intelligence comes a better understanding of the needs, feelings, and overall situation of others. As such, an entrepreneur with high emotional intelligence can better create a product or service to fit the needs of their target customer. Similarly, entrepreneurs with high emotional intelligence can better work with and understand their co-workers and clients, and cultivate better relationships with them as a result of their heightened sensitivity to the emotional states of those around them.

सकारात्मक रहेंगे तो हर चुनौती छोटी लगेगी

ग्लोबल इंजीनियरिंग कॉलेज में एक दिवसीय कार्यशाला में स्टूडेंट्स को किया मोटिवेट

जबलपुर। नईदुनिया रिपोर्टर

हम सभी के जीवन में उतार-चढ़ाव आते रहते हैं लेकिन हम सकारात्मक रहेंगे तो हर चुनौती छोटी लगेगी। सकारात्मक सोच के साथ अपने जीवन की कार्यशैली में हम थोड़ा सा बदलाव कर अपने आईक्यू और ईक्यू को बढ़ा सकते हैं। यह कहना है अंतरराष्ट्रीय मोटीवेशनल वक्ता पंकज राय का। अवसर था ग्लोबल इंजीनियरिंग कॉलेज द्वारा आयोजित इमोशनल, इंटेलीजेंस और आइडिया जनरेशन के विषय पर एक दिवसीय कार्यशाला का। इस कार्यशाला का मुख्य उद्देश्य स्टूडेंट्स को आत्मजागरूक , रचनात्मक और सकारात्मक सोच को बढ़ाना।

कार्यशाला का आयोजन चेयरमेन सौरभ बड़ेरिया के मार्गदर्शन में आयोजित की गई।

आत्मजागरूक बनें

पंकज राय ने कहा कि स्टूडेंट्स आत्मजागरूक हैं तो इनोवेटिव, क्रिएटिव और एक अच्छे लीडर बन सकते हैं। स्टूडेंट्स को उन तकनीकों को भी बताया गया जिनसे वे अपना इमोशनल कोशंट बढ़ा सकते हैं। कार्यशाला में कॉलेज के डायरेक्टर राजीव खत्री, रजिस्ट्रार पुनीत दुबे, मीता शाह, डॉ. शैलेंद्र श्रीवास्तव, विनय शर्मा, मनीष तिवारी, अरुण खरे, वैभव हुंका, अमित शर्मा उपस्थित रहे। कार्यक्रम का संचालन प्रेरणा सोनी, तान्या नेमा, शुभम, सूरेख, यश सैनी, अभिलाष, गौरव, कार्तिक द्वारा किया गया।

Finally, if one works to cultivate emotional intelligence, one is able to regulate one's own emotions better.It is an idea that triggers the entrepreneurial journey and the quality of idea plus successful execution depends upon how emotionally intelligent a person is. Keeping this in mind an insightful workshop under the aegis of The Entrepreneurship Development Cell Global College and the guidance of our dynamic Chairman Hon'ble Shri Saurabh Baderia Sir was organized today. The keynote Speaker for this workshop was Mr. Pankaj Rai (International Trainer and Motivator). Students from BE and MBA participated in this Workshop. All participants were given a questionnaire to check their Emotional intelligence and also provided with a participation certificate. The Cell wants to thank Hon'ble Dr. Rajiv Khatri Sir who graced the inaugural session with his valuable presence. The activity was graced by the presence of Dr. Arun Khare, Er. Manish Tiwari, Er. Vaibhav Hoonka, Er. Arpit Bajpai and Er. Vinamra Sharma. We wish to thank our active volunteers Shubham Sureka,Yash Saini, Uddeshya Chourasia,Rahul Singh, Abhilash, Gaurav, Dhairya, Kartik, Monika Hinduja and Avinash. The inaugural speech was given by the Incharge Dr. Mita Shah, comparing by Ms. Prerna Soni and Ms. Tanya Nema and vote of Thanks was proposed by Er. Vaibhav Hoonka. "All that begins well ends well" but the workshop did not end here the participants will be provided free counselling on the basis of their questionnaire and results. We look forward to more such activities in future.

Dr. Mita Shah
In Charge EDC Cell

Importance of Technical Training Program...

Technical skill is mastery of complexity, while creativity is mastery of simplicity.

- Sir Erik Christopher Zeeman (Mathematician)

What are Technical Skills?

Technical skills are the abilities and knowledge needed to perform specific tasks. They are practical, and often relate to computer, mechanical, information technology, mathematical, or scientific tasks.

While technical skills are often most important for jobs related to information technology (IT) and other fields in the sciences, many other industries also want employees with at least some technical skills.

In addition to the technical skills that are needed in the workplace, your command of job-specific skills can help ensure you get hired or promoted. Often technical, hard, and job-specific skills are interchangeable, but this is not always the case.

Of course, required skills will vary based upon the job for which you're applying, so be sure to be specific when listing hardware, software, programs, applications, etc. Depending on the job you seek, a batch of skills can be referred to as a skill set or hybrid skills, as these skills often go together within a specific profession or industry.

Training Program:

Training program is an additional class which is provided by the institute, which cover the languages, software tools that are important for academia and during campus and also fulfil the industrial requirements.

Why Training Program required?

New developments and innovations have made industry volatile in recent years. Requirements often change but for many reasons the academic curriculum of universities cannot be changed quickly. The result is the gap created between the industry requirements and academic syllabus. Training programmes narrows this gap by playing an important role.

Training Program for campuses!

Most of the core subjects in all fields are very important for campus purpose and they need excess time and attention which is not permissible during regular sessions. In that respect, training programmes allow not only students but mentors as well to get hands-on experience on certain industrial tools and process by imparting that X-factor. Other reason is that, companies prefer those students which having the knowledge of current trends and know something extra beyond the academics syllabus. Training programmes is a source of awareness among students to opt for their choice of companies and vice-versa.

Outcomes Training Programs:

Training programs provides not only technical skills but also improves the Resilience, Teamwork, Leadership, Communication, Emotional maturity, Confidence and Enthusiasm for learning, Citizenship, Responsibility and Employability skills of the students. The impact of above qualities reflects in not only student's campus exams but they also apply it in the future to make their lives good.

Prof. Satpal Singh
Department of CSE

Students Achievement in SRAJAN 2019, Bhopal

Inauguration Srajan-2019, Bhopal

Prof. P. B. Sharma addressing the participants & mentors

Students of CSE presenting their model to judges

Selected team of CSE students for Software Innovation Model

Receiving Trophy : Global scored II rank in MP

Selected team of ME students for Robotics Innovation Model

Winners of Srajan-2019

Appreciation by Director, Dr. Rajiv Khatri

Placements 2019

Highest % of Placements

Showcasing some of the prominent selections

Hexaware TECHNOLOGIES — Location : Chennai

Left-Right (1st Row) : Kaustubh Sinha (EC), Nikita Anand (EC), Jatin Ahuja (CS)
(2nd Row) : Shrashti Tiwari (IT), Shivani Shrivastav (EC), Nandita Pathardikar (CS)

eClinicalWorks — Location : Mumbai

Ayush Gupta (CS) Anjali Sharma (IT), Simranjeet Kaur (CS), Shruti Gupta (IT), Shubham Choudhary (CS).

AURUS® — Location: Pune

Aditya Dixit (CS), Ayushi Newley (CS), Sudeep Dutta (IT)

Location: Mumbai — Rave Technologies

Left-Right (1st Row) : Aditya Dixit (CS), Vaibhav Mande (CS), Gaurav Thakur (CS).
Left-Right (2nd Row) : Adarsh Mehta (CS), Karan Singh Lodhi (IT), Kushagra Shrivastava (EC), Anuj Rajak (CS), Pradeep Rajoria (CS). **Left-Right (3rd Row) :** Namrata Lodhi (CS), Shrashti Tiwari (IT), Shruti Nema (EC), Shivani Shrivastava (EC), Nikita Anand (EC), Richa Vishwakarma (CS).

PARAmatrix™ — Location: Mumbai

Shubham Choudhary (CS), MunmunTanturay (IT), Gaurav Thakur (CS)

PIAGGIO® — Location : Pune

Saurav Kumar (IT), Prashant Shivhare (CS), Samriddhi Gupta (CS), Arpit Kumar Singh (ME).

Toppers 2015-19 Batch

Kajal Verma (CSE)
SGPA 9.00
CGPA 8.82

Shrashti Tiwari (IT)
SGPA- 9.25
CGPA- 8.95

Madhusudan Patel (EC)
SGPA 9.19
CGPA 8.47

Sourabh Namdeo (CE)
SGPA 8.75
CGPA 8.60

Sushant Kumar (ME)
SGPA 8.75
CGPA 8.45