



SFC - BYTES

NEWS LETTER



DEPARTMENT OF COMPUTER SCIENCE
ST. FRANCIS COLLEGE FOR WOMEN, HYD-16

FROM THE PRINCIPAL: DR. SR.SANDRA HORTA

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Hearty Congratulations for the milestones of the Department. Many hands have joined together and many minds have worked together to make us celebrate our achievements. As I fondly remember all of them, their great contributions, I pray for God's blessings on them. May the bytes of knowledge snowball into huge chunks of information bringing about a revolution in the young minds to enhance the quality of life on our planet. This newsletter I am sure is a platform to express new ideas and disseminate it to hundreds of students who in turn will spark out novel thoughts to be shaped into the future techno startups.

God bless the efforts of all the staff and students involved in this venture.

Sr. Sandra Horta

CSC DEPT.

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FROM THE VICE PRINCIPAL: DR. SHERLYE E.D.

Department of Computer Science has reached a milestone as they are celebrating the twin jubilees – the pearl jubilee of the UG and the Vicennial jubilee of the PG programmes. Congratulations to the staff and students both past and present, who are part of this department. You have put in a lot of hard work to bring the department to the current status. Your technological contributions are not just limited to your department alone but to the entire college. Thanks for that. I recall with gratitude the pioneering work of Mrs.Nirupama, whose contributions to the department and college is praiseworthy. May she enjoy her eternal reward.

Best wishes to Sr.Sujatha Yeruva and her team of dedicated staff and the current batch of students. May you have a beautiful year of celebrations and great learning.



FROM HEAD DEPT OF COMPUTER SCIENCE

CELEBRATING PEARL AND VICENNIAL JUBILEES

With deep sentiments of gratitude to God I announce that the department of Computer Science is celebrating Pearl Jubilee (30 yrs) of UG courses and Vicennial Jubilee (20 yrs) of PG course. We have launched the celebrations through students' activity C@nnect 1.0 on 28th July 2018 catering to the hundreds of students with 12 spectacular events. A yearlong celebration through workshops and seminars at various levels for staff and students have been planned. My fond memories of 20 years of association with the department both as alumnae and as faculty give me immense joy recalling gratefully all the faculty members who have toiled to bring it to these glorious moments. Special note of thanks to late Mrs Nirupama who relentlessly worked for the gradual progression of the academics. We are proud of thousands of students who have successfully graduated through our department and are now serving at different corners of the world. As we march forward with zest and zeal, I place in the hands of God every member of the department both faculty and students, praying that all of us strive to take it forward to much greater heights bringing many more laurels and cross many more milestones.

CONTEXT RICH SYSTEMS - AN ADAPTIVE TECHNOLOGY

Context-rich systems is an adaptive technology that personalize the user and their context by pulling in a diverse number of signals. It can be the user's location or the device they are logged onto or the weather or their traveling speed and adjust the content accordingly. The heart of context-rich system is to team up the raw data with deep analytics by integrating both awareness of the surrounding environment and responds to the user actions. These systems depend on users connecting and computing from anywhere in order to collect the constant data required to build its context because building of the context is the major difficulty faced. 'Intelligent inferencing', is the solution over it. In the near future the context-rich systems will lead the upcoming strategic technology trends as contextually relevant data sharing is the ultimate goal of modern technology, with user ease being the ultimate outcome. Context-rich results are of extreme importance in ensuring swift decision making with better operations control. The change to context-rich systems is advancing people from constant interconnectedness towards gaining awareness of every object, place, environment, happenings in the surroundings and the way to interact to them. Finding the right data and bridge the gaps and boost our network intelligence is demand of the day. Data by its own is totally worthless. In the near future networks have the ability to react to data's context and then the context will be determined by a combination of four data layers: 1. Device layer: where devices communicate with each other 2. Individual layer: where information about browsing history, location history and online records will be there 3. A social layer: which links people across social platforms 4. Environmental layer : information about current conditions, such as nearby businesses, streets and the weather. Context-rich systems are currently used for security reasons by adding a supplementary layer of protection to computer networks by determining the geo locational aspects through IP addresses the time of day to determine the likelihood of a threat preventing cyber attacks or fraudulent behavior.



DR. SR. SUJATHA
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*Nobody else can
create a miracle
for you,
But your trust is
the source of all
miracles*



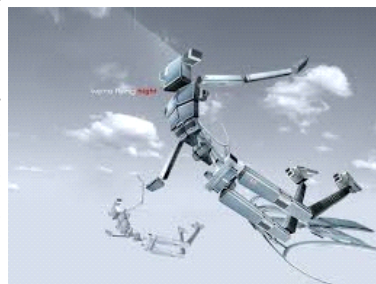
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FLYING ROBOTS

Like a mushroom shape with a hole in it, you can't do a whole lot with flying insect robots tethered to power sources. Small airborne robots can sneak into hard-to-reach places that larger drones can't, accomplishing few things, like surveillance and detecting trace chemicals like methane in the air. At the University of Washington, scientists are fixing that problem. They've invented RoboFly, the first wireless robot insect. By cutting the

cord, robot flies are one wing flap closer to navigating the heights and narrow crevices that their living counterparts can. So the RoboFly traded a cable for a laser beam. Laser power constantly feeds energy to the robot from far away, so there's no wire and no bulky battery. RoboFly's back has a solar cell that, when hit with a laser, converts light to electricity. A microcontroller is present in it. MISSION is allowing to overcome the human physiological limits of crew, the FR SWAN X1 (Soft Wing Aerial Navigator) Unmanned Aircraft System is able to ensure diverse and varied missions, in fully automatic configuration from takeoff to landing. The SWAN X1 is the only UAV with a 40-

hours endurance non-stop flight capability. SURVEILLANCE is equipped with appropriated sensors, the FR SWAN X1 collects and transmits in real-time images useful for decision making. Prevention Tool reliable, efficient and discreet if needed, it can detect any abnormality, danger or offense constituting a threat to the safety of persons and property or the protection of populations DROPPING is Very economical (low operating costs) and offering a good payload capacity (up to 450kg / 1m3), the FR SWAN X1 is an excellent alternative to land transportation in hilly, difficult or dangerous areas. The SWAN X1 can carry safely any kind of payloads to isolated populations or in dire straits. TRANSMISSION is the FR SWAN X1 belongs to the class of multi role drones capable of carrying a wide range of equipment.. SOFT WING after the century of fixed and rotary wings, arrives century of soft/flexible wings that will bring to humanity all the flexibility it needs so much in fields as diverse as environment respect, economy, transportability and the feeling of freedom .Here's why Soft Wing Technology is going to revolutionize the aviation.



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*Relationship is
like an Onion
which has
many layers of
Trust and Care.
If we try to cut it
we find nothing
Except Tears in
our Eyes.*

LATEST VERSION OF ANDROID

Android is a mobile operating system developed by Google, based on a modified version of the Linux kernel and other open source software and designed mainly for touch screen mobile devices such as smart phones and tablets. Google's Android division certainly has a sense of humor: It named all of its version codenames after desserts. To celebrate a new version, a giant mock-up of the dessert that matches the codename is usually delivered to the Google Campus and put on display. Alongside every version of

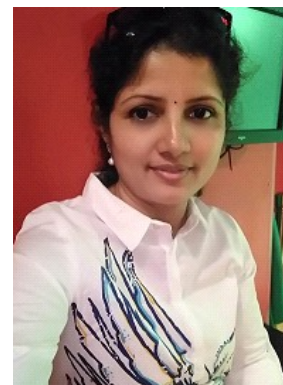
Android is a code name, which many people use instead of the version number. Each one is named after a dessert or some other form of confection, which is more for fun than anything else. Android 1.0 and 1.1: Unnamed, and "Petit Four"? There appears to be no codename assigned to versions 1.0 Android OS. An update of Android, version 1.1, was released in February 2009.



Android 1.5: Cupcake - released on April 27, 2009, Android 1.6: Donut-released on September 15, 2009, Android 2.0 and 2.1: Éclair - released on October 26, 2009, Android 2.2: Froyo - released on May 20, 2010,, Android 2.3, 2.4: Gingerbread - released on December 6, 2010,, Android 2.4: Still Gingerbread - released on December 6, 2010, Android 3.0, 3.1, and 3.2: Honeycomb - released on February 22, 2011, Android 4.0: Ice Cream Sandwich - released on October 18, 2011, Android 4.1: Jelly Bean - released on July 9, 2012, Android 4.4: KitKat- released on October 31, 2013, Android 5.X: Lollipop - released on November 12, 2014, Android 6.X: Marshmallow - released on October 5, 2015, Android 7: Nougat - released on August 22, 2016, Android 8: Oreo - released on August 21, 2017, Android 9: Pie - released on August 21, 2017.

LET'S HUNT SOME HUNTERS

Man has been trying to make his life more and more comfortable since ancient times. Development in the 21st century, a digital era has taken the shape of "Artificial Intelligence" AI. In AI, today's advancements are impacting global trends on industry and modern technology. AI is a branch of computer science which involves making intelligent machines that work and behave like humans. By intelligent behavior we mean planning, speech recognition, learning, problem solving and modern day requirements. Recently a scientist and his team developed a new AI system that is used for hunting POACHERS!. Extinction of endangered animals is not a new thing. Every year around 27,000 elephants and other animals are being hunted. If this trend continues, elephants will be extinct in five to six decades. To counter this problem a scientist Milind Tambe and his team developed an Artificial Intelligence program that helps in detecting and preventing Poaching in many ways. This AI program was named "PAWS" which stands for protection assistant for wild life security. PAWS is a machine learning algorithm which uses past patrols to predict where poaching is likely to occur in the future. PAWS also uses a game like theory to generate randomized and unpredictable patrol routes so that poachers wouldn't know that there is someone watching their movements all the time. PAWS has been tested in biosphere reserves and national parks in places like Uganda and Malaysia that too with good results. This year the makers are planning to expand PAWS to China and Cambodia. The department of Uganda's Queen Elizabeth National Park has tried a one month trial of PAWS. It detected that there was more poaching in certain areas and sure enough the rangers found some traps and



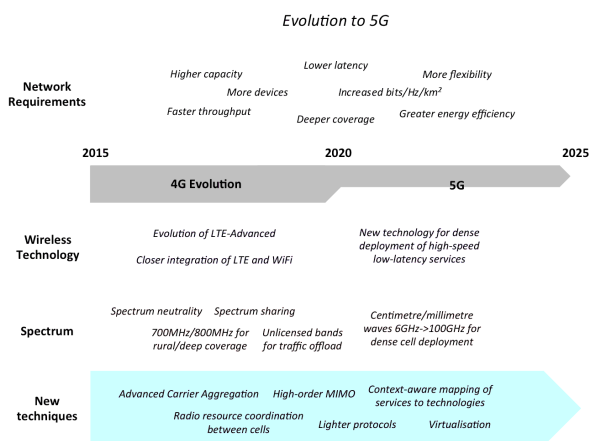
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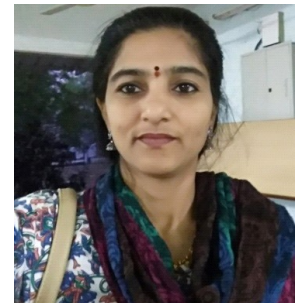
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other illegal stuff in those areas. Those areas were seldom patrolled by rangers and it was found that there was high probability of poaching in those areas. This proves that AI can be used to save and preserve the natural resources and not only for modern technology and Industry. So, I would like to conclude by saying that miracles keep happening all the time especially in this era we never know what might come next. So brace yourself for change as the 21st century welcomes the world to a Hunter-Hunting intelligent system.

5G

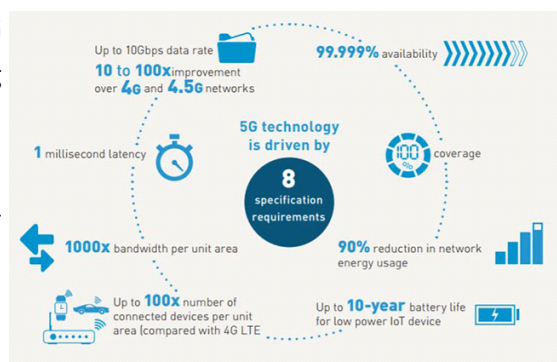


5th-Generation Wireless Systems (abbreviated 5G) is the marketing term for technologies that satisfy ITU IMT-2020 requirements and 3GPP Release 15. 5G simply stands for Fifth Generation and refers to the next and newest mobile wireless standard based on the IEEE 802.11ac standard of broadband technology, although a



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formal standard for 5G is yet to be set. The Key features of 5G include: High throughput, Low latency, High mobility and high connection density. 5G will use additional spectrum in the existing LTE frequency range (600 MHz to 6 GHz) and Millimeter wave bands (24-86 GHz), which can support data rates of up to 20 gigabits per second (Gbps). 5G infrastructure will use Massive MIMO (Multiple Input Multiple Output) to significantly increase network capacity. ITU has divided 5G network services into three categories: enhanced Mobile Broadband (eMBB) or handsets, Ultra-Reliable Low-Latency Communications (URLLC), which includes industrial applications and autonomous vehicles, and Massive Machine Type Communications (MMTC) or sensors. Initial 5G deployments will focus on eMBB. And according to the Groupe Speciale Mobile Association (GSMA) to qualify for a 5G a connection should meet most of the criteria like One to 10Gbps connections to end points in the field, One millisecond end-to-end round trip delay, 1000x bandwidth per unit area, 10 to 100x number of connected devices etc. Deployment: Wireless network operators in countries like the United States, Japan, South Korea and China are largely driving the first 5G build outs. Development of 5G is being led by companies including Intel and Qualcomm for modem technology and Nokia, Huawei, Ericsson, ZTE and Samsung for infrastructure.



Nobody else in the world can inspire you, the way you can inspire yourself. Surprise yourself with the things you can do.

OPTIMIZATION-THE MUSICAL INSPIRATION

Music is an ultimate form of art with boundless prospects for performance improvisation. A beautiful analogy could be drawn between musical improvisation and solution optimization in the real-world scenario. Optimization is required everywhere in problem solving and the objective of optimization is to achieve the best possible solution to the problem considered. Any optimization problem requires objective function, decision variable and solution vector. On equating the music with the optimization task, every musician correspond to a decision variable, the pitch range correspond to the value range of the decision variable, improvised musical harmony correspond to a solution vector at a given iteration, and the aesthetic response from the audience is analogous to the objective function of the optimization problem. This analogy has made Zong Woo Geem to propose the successful Harmony Search algorithm in the year 2001 for solving optimization problems, inspired by the improvisation process of Jazz musicians. In view of the computational benefits, this musically inspired algorithm is being exhaustively utilized as an optimization technique in diverse disciplines such as telecommunication, genomics, business intelligence, crime prevention studies, forensics, imaging, smart grids, renewable energy, logistics and supply chain etc., as well as uncovering improved variants from time to time.

BOTNET OF THINGS

A botnet is a number of Internet-connected devices, each of which is running one or more bots. Botnets can be used to perform distributed denial-of-service attack, steal data, send spam, and allows the attacker to access the device and its connection. The owner can control the botnet using command and control software. The word "botnet" is a combination of the words "robot" and "network". The term is usually used with a negative or malicious connotation. A botnet is a logical collection of internet-connected devices such as computers, smartphones or IoT devices whose security has been breached and control ceded to a third party. Each such compromised device, known as a "bot", is created when a device is penetrated by software from a malware distribution. The controller of a botnet is able to direct the activities of these compromised computers through communication channels formed by standards-based network protocols such as IRC and Hypertext Transfer Protocol. Botnet architecture has evolved over time in an effort to evade detection and disruption. Traditionally, bot programs are constructed as clients which communicate via existing servers. This allows the bot herder to perform all control from a remote location, which obfuscates their traffic. Many recent botnets now rely on existing peer-to-peer networks to communicate. These P2P bot programs perform the same actions as the client-server model, but they do not require a central server to communicate. The first botnets on the internet used a client-server model to accomplish their tasks. Typically, these botnets operate through Internet Relay Chat networks, domains, or websites. Infected clients access a predetermined location and await incoming commands from the server. The bot herder sends commands to the server, which relays them to the clients. Clients execute the commands and report their results back to the bot herder. Newer botnets fully operate over P2P networks. Rather than communicate with a centralized server, P2P bots perform as both a command distribution server and a client which receives commands. A botnet's originator (known as a "bot herder" or "bot master") controls the botnet remotely. This is known as the command-and-



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*If you want to
shine like a sun,
first burn like a
sun.*

control . The program for the operation which must communicate via a covert channel to the client on the victim's machine.

ZERO GRAVITY



Every object in the universe has mass. Every planet or heavenly body has a core that exerts a gravitational pull on any object on or near its surface. Weightlessness, or an absence of weight, is an absence of stress and strain resulting from externally applied mechanical contact-forces, typically normal forces (from floors, seats, beds, scales, etc.). Counter intuitively, a

uniform gravitational field does not by itself cause stress or strain, and a body in free fall in such an environment experiences no g-force acceleration and feels weightless. This is also termed zero-g, where the term is more correctly understood as meaning "zero g-force." When the gravitational field is non-uniform, a body in free fall suffers tidal effects and is not stress-free. Near a black hole, such tidal effects can be very strong. In the case of the Earth, the effects are minor, especially on objects of relatively small dimension (such as the human body or a spacecraft) and the overall sensation of weightlessness in these cases is preserved. This condition is known as microgravity and it prevails in orbiting spacecraft. ZERO-G's Weightless Lab (in NASA) provides the much-needed opportunity for new technological advances in biomedical and pharmaceutical research, fluid and fundamental physics, materials science, aerospace engineering, space exploration hardware and human space habitation. Astronauts, by necessity, work hard in space. But during their precious time off aboard the International Space Station (ISS), some space flyers are picking their brains to come up with the future of space sports. Some Places on Earth where Gravity becomes zero like Mystery Spot, Santa Cruz California, St. Ignace mystery spot, Michigan, The Hanging Pillar at Lepakshi, Andhra Pradesh etc. This temple dedicated to Lord Shiva is among the most mysterious places in India, owing to its famous floating pillar. Mystery Spot, Santa Cruz California: This place is called is also called Mystery Spot. This is a place where you will see strange irregularities in gravity, such as flowing of water in the upward direction, deflection of magnetic compasses at different angles, changes in the size of people and things. A place that is free from any force of gravity is known as anti-gravity. In Gujarat, one such place exists. Although, we can't explain the phenomenon exactly, but there have been reports suggesting that the vehicles parked close to this hill tend to roll upwards if the hand brakes aren't applied.



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*Little Adjustment is
always better than
lengthy Arguments
&
Meaningful Silence
is always better
than Meaningless
Words*

DEEP LEARNING (DEEP NEURAL NETWORK)

Both machine and deep learning are subsets of artificial intelligence, but deep learning represents the next evolution of machine learning. In machine learning, algorithms created by human programmers are responsible for parsing and learning from the data. They make decisions based on what they learn from the data. Deep learning learns through an artificial neural network that acts very much like a human brain and allows the machine to analyze data in a structure very much as humans do. Deep learning machines don't require a human programmer to tell them what to do with the data. This is made possible by the extraordinary amount of data we collect and consume—data is the fuel for deep-learning model. 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. The biggest limitation of deep learning models is that they learn through observations. It means they only know what was in the data they trained on. If a user has a small amount of data or it comes from one specific source that is not necessarily representative of the broader functional area, the models will not learn in a way that is generalizable.

COMPUTER ANIMATION

Computer animation encompasses a variety of techniques, the unifying factor being that the animation is created digitally on a computer. 2D animation techniques tend to focus on image manipulation while 3D techniques usually build virtual worlds in which characters and objects move and interact. 3D animation can create images that seem real to the viewer. 3D animation is a digitally model and manipulated by an animator. The animator usually starts by creating a 3D polygon mesh to manipulate. Mesh typically includes many vertices that are connected by edges and faces, which give the visual appearance of form to a 3D object or 3D environment. Sometimes, the mesh is given an internal digital skeletal structure called an armature that can be used to control the mesh by weighting the vertices. This process is called rigging and can be used in conjunction with key frames to create movement. Other techniques can be applied, mathematical functions (e.g., gravity, particle simulations), simulated fur or hair, and effects, fire and water simulations. These techniques fall under the category of 3D dynamics. 3D terms: Cel-shaded animation is used to mimic traditional animation using computer software. Shading looks stark, with less blending of colors. Examples include *Skyland* (2007, France), *The Iron Giant* (1999, United States), *Futurama* (Fox, 1999) *Appleseed Ex Machina* (2007, Japan), *The Legend of Zelda: The Wind Waker* (2002, Japan), *The Legend of Zelda: Breath of the Wild* (2017, Japan) *Machinima* – Films created by screen capturing in video games and virtual worlds. The term originated from the software introduction in the 1980s demoscene, as well as the 1990s recordings of the first-person shooter video game *Quake*. Motion capture is



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*A firm belief in
oneself is better
than magic, and
easier to attain.*



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used when live-action actors wear special suits that allow computers to copy their movements into CG characters. Examples include Polar Express (2004, US), Beowulf (2007, US), A Christmas Carol (2009, US), The Adventures of Tintin (2011, US), Kochadaiyan (2014, India). Photo-realistic animation is used primarily for animation that attempts to resemble real life, using advanced rendering that mimics in detail skin, plants, water, fire, clouds, etc. [Examples include Up (2009, US), How to Train Your Dragon (2010, US).

PRESENT TECHNOLOGY

Since the days of dial-up, access to the Internet is available almost everywhere. It is rare these days for consumers to go into a coffee shop, library or any place of business and not be able to access a Wi-Fi signal. If there isn't a Wi-Fi signal in close range, most people still have access to the Internet via their cellular data connection on their smartphones and personal hotspots, no problem. Technology perpetually reshapes our communication. Perhaps the most noticeable difference in the Internet today is the ability to be personable in such an impersonal setting. Constant connection seems to be the name of the game. And along with connection, we see instant availability. Bluetooth connections, talk-to-text, every form of messaging apps – while you're driving, in meetings, at home. Social networks continue to change the way people engage with one another. Ironically, the constant connection and way people interact with one another seems to morph to a more superficial setting online. Although superficial at times, this form of communication helps people stay closer to each other when they would have otherwise lost contact. Face-to-face conversations via technology are resurfacing, though, and even strengthening, thanks to higher-quality video and streaming capabilities. With more people engaging in web/video conferencing online, geographic barriers that once hindered communication were torn down. Instead, companies can engage with consumers in a more human manner, people can talk to people face-to-face without the need for costly travel and reaching out to people all over the world is faster.

MYRIAD TECHNOLOGIES

Myriad technologies create distance between patient and caregiver and all meant to make it more efficient to heal the sick. Smythe reminds us of telemedicine platforms and other forms of "virtual visits" or self-care tools. Such care will be the norm much more quickly than most would like. He cites Dr. Rushika Fernandapulle, the co-founder and CEO of Iora Health, for the position that medical care is still fundamentally human. Fernandapulle writes: The thing that heals people is relationships – the problem is that technology has the ability to actually facilitate relationships, but it can also get in the way of them. Above all, Smythe doesn't want distant medicine to lead doctors to be desensitized by death. He draws an interesting parallel – the use of drones in war. Without boots on the ground or vivid and live battlefield images, death can become abstract and sanitized. Navigating a drone to a drop site is relatively easy – and we should all emphasize relatively – in terms of seeing and feeling the results of war. By contrast, tossing a grenade over a wall, driving over an IED, engaging in close quarter combat, and other critical military missions cannot bring one any closer to both one's enemy and the realities of death.



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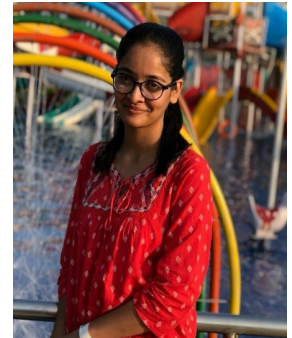
BITCOIN - VIRTUAL CURRENCY



A bitcoin is a decentralized digital currency or in common called the virtual currency. It can be transferred from a person to person. There is no bank or government prerequisites to own a bitcoin. Bitcoin was the first popular cryptocoin which appeared in the year 2009 by the developer named Satoshi Nakamoto. This developer stays unknown as no one has ever known the actual identity of Satoshi Nakamoto. Bitcoin was the first major cryptocurrency. Cryptocurrencies are just lines of computer code that hold a monetary value. With electricity and high-performance computers these lines of code are created. Since there is no central location that is governed by specific country it is very difficult to hack. All the bitcoin transactions are processed by a large distributed network of computers running special software. Cryptocurrencies are supposed to be "mined" and cannot just be printed. Bitcoin is obtained by solving mathematical problems where in the user can solve it using the high end computer parts such as the GPU (Graphics Processing Unit) and ASICs. ASICs are tailored to mine bitcoins. Everytime a solution to the problem is found the users are rewarded in the form of a bitcoin. Only 21 million bitcoins can be mined and as the bitcoins become rare eventually they become more expensive. Bitcoin is divisible to 8 decimal places and we can infinitely breakdown the bitcoin to a very small amount. One of the biggest factor is that the Bitcoin transactions are irreversible unlike any other bank transactions. Bitcoins can be stored on a person's local hardware called the cold storage or on the internet called the hot storage. Bitcoin is completely unregulated and hence there is no guarantee of its value. By the year 2140 there will be no new bitcoins being produced.

VIRTUAL MEMORY

Visual Effects (abbreviated VFX) is the process by which imagery is created or manipulated outside the context of a live action shot in film making. Visual effects involve in the integration of live-action footage (special effects) and generated imagery (digital effects) to create environments which look realistic, but would be dangerous, expensive, impractical, time consuming or impossible to capture on film. Visual effects using computer-generated imagery (CGI) have recently become accessible to the independent filmmaker with the introduction of affordable and easy-to-use animation and compositing software. VFX can be categorized into: Simulation, Animation, Modeling, Matte painting, Compositing. Visual effects are often integral to a movie's story and appeal. Although most visual effects work is completed during post production, it usually must be carefully planned and choreographed in pre production and production. Visual effects primarily executed in post production with the use of multiple tools and technologies such as graphic design, modeling, animation and similar software, while special effects such as explosions and car chases are made on set. A visual effect supervisor is usually involved with the production from an early stage to work closely with production and the film's direct design, guide and lead the teams required to achieve the desired effects.



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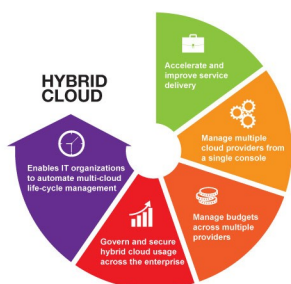
*"Setting goals is
the first step in
turning the
invisible into the
visible"*



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HYBRID CLOUD-THE BEST OF BOTH WORLDS

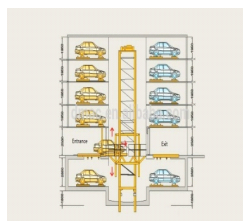
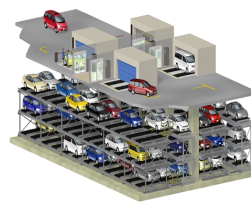
A mix of public and private cloud models-refers to policy-based and Coordinated Service provisioning use and management across a mixture of internal and external cloud services. 70% of Federal CIOs reported they will pursue a hybrid cloud strategy in the near future. A hybrid IT approach can help federal agencies meet business objectives while tapping into the transformative potential of social, mobile and the information insights to be derived from big data. Microsoft announced the upcoming releases of its enterprise IT solutions for hybrid cloud, which include Windows Server 2012 R2, System Center 2012 R2 and SQL Server 2014. Windows Server 2012 R2, System Center 2012 R2 and SQL Server 2014 will illustrate how Microsoft is the company that business can bet



on as they embrace cloud computing, deliver critical applications, and empower employee productivity in the new and exciting ways. Hybrid cloud, given its flexible nature, also allows for greater experimenting in terms of figuring out what data, or applications are best served in the cloud, and from a security standpoint, gives companies more peace of mind since they are combining both on and off premise resources.

AUTOMATED CAR PARKING SYSTEM

An automated (car) parking system (APS) is a mechanical system designed to minimize the area and volume required for parking cars. Like a multi-story parking garage, an APS provides parking for cars on multiple levels stacked vertically to maximize the number of parking spaces while minimizing land usage. The APS, however, utilizes a mechanical system to transport cars to and from parking spaces (rather than the driver) in order to eliminate much of the space wasted in a multi-story parking garage. All APS take advantage of a common concept to decrease the area of parking spaces - removing the driver and passengers from the car before it is parked. With either fully automated or semi-automated APS, the car is driven up to an entry point to the APS and the driver and passengers exit the car. The car is then moved automatically or semi-automatically to its parking space. Parking space width and depth (and distances between parking spaces) are dramatically reduced since no allowance need be made for driving the car into the parking space or for the opening of car doors (for drivers and passengers. No driving lanes or ramps are needed to drive the car to/from the entrance/exit to a parking space. Ceiling height is minimized since there is no pedestrian traffic in the parking area. No walkways, stairways or elevators are needed to accommodate pedestrians in the parking area. The parked cars and their contents are more secure since there is no public access to parked cars. Minor parking lot damage such as scrapes and dents are eliminated. Drivers and passengers are safer not having to walk through parking lots or garage. Driving around in search of a parking space is eliminated, thereby reducing engine emission. Only minimal ventilation and lighting systems are needed. The volume and visual impact of the parking structure is minimized. Shorter construction time.



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*Never wait for a
Perfect
Moment;
Just take a
Moment, and
Make it Perfect.*

BRAIN GATE

Brain Gate is a brain implant system developed by the bio-tech company Cyberkinetics in 2003 in conjunction with the Department of Neuroscience at Brown University. The device was designed to help those who have lost control of their limbs, or other bodily functions, such as patients with amyotrophic lateral sclerosis (ALS) or spinal cord injury. The computer chip, which is implanted into the brain, monitors brain activity in the patient and converts the intention of the user into computer commands. Cyberkinetics describes that "such applications may include novel communications interfaces for motor impaired patients, as well as the monitoring and treatment of certain diseases which manifest themselves in patterns of brain activity, such as epilepsy and depression." Currently the chip uses 100 hair-thin electrodes that sense the electro-magnetic signature of neurons firing in specific areas of the brain, for example, the area that controls arm movement. The activities are translated into electrically charged signals and are then sent and decoded using a program, which can move either a robotic arm or a computer cursor. The BrainGate System is based on Cyberkinetics' platform technology to sense, transmit, analyze and apply the language of neurons. The System consists of a sensor that is implanted on the motor cortex of the brain and a device that analyzes brain signals. The principle of operation behind the BrainGate System is that with intact brain function, brain signals are generated even though they are not sent to the arms, hands and legs. The signals are interpreted and translated into cursor movements, offering the user an alternate "BrainGate pathway" to control a computer with thought, just as individuals who have the ability to move their hands use a mouse. The braingate pilot device consists of a Sensor of the size of a contact lens, a cable and pedestal, which connects the chip to the computer, a cart which consists the signal processing unit. The advantage of using BrainGate is we can directly connect to the parts of the brain that controls hand movement and gestures.

WIRELESS SENSOR NETWORKS

Wireless Sensor Networks have emerged as the next bigger thing to succeed in the times to come and it posed to dominate the trend of technology, however they bring in their own share of challenges. Most of these networks consist of thousands or more of minute sensors that work independently. Limitation of cost availability and the requirement of abundant, undetectable placements would be resultant in small sensor node that have limited resources. Sensor network is referred to a mixed system that combines minute sensors, their actuators with some other computing elements. The range of application that a Wireless Sensor Network can be applied to is huge as the low power communication devices and micro sensors are so easily and readily available. Dissimilar to a traditional sensor network, the deployment is done in a dense manner in the remote sensor networks. A large number of sensors are used. Security is a critical issue for the sensor networks being accepted and being used for many software applications. Specifically, WSN products in the industry wouldn't be accepted if they do not have security that is robust and fool proof. Mechanism of Link layer authentication and encryption can be considered for reasonably defending the network from the mote class outsider, yet cryptography itself is not sufficient for defending the network against insiders and laptop-class attackers; thus designing the protocols carefully is required as well. Denials of attack on security are an important aspect of today's WSNs. WSNs which contain several sensor nodes and actuators are highly distributed. Due to the high distribution only security is very much needed in the network.



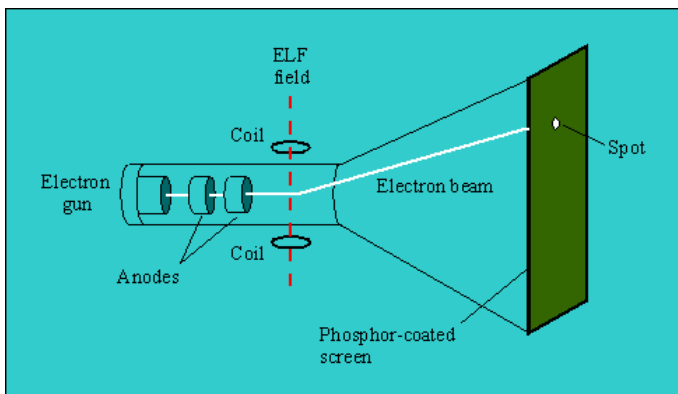
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"A satisfied life is better than a successful life, because our success is measured by others. But our satisfaction is measured by our own soul,."



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CATHODE RAY TUBE

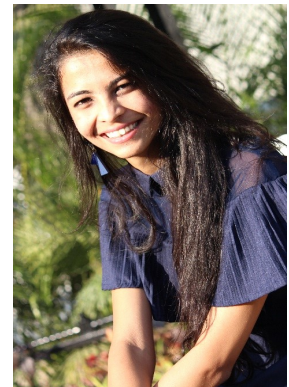


The cathode ray tube (CRT) is a vacuum tube that contains one or more electron guns and a phosphorescent screen and is used to display the images. The special-purpose electron tube in which electrons are accelerated by high-voltage anodes and then formed into a beam by focusing electrodes and projected towards a phospho-

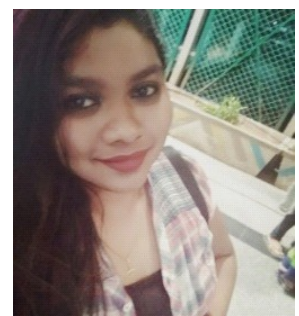
rescent screen that forms one face of the tube. The beam of electrons leaves a bright spot wherever it strikes the phosphor screen. To form a display, or image on the screen, the electron beam is deflected in the vertical and horizontal directions either by the electrostatic effect of electrodes within the tube or by magnetic fields produced by coils located around the neck of the tube. Some cathode-ray tubes can produce multiple beams of electrons and have phosphor screens that are capable of displaying more than one color. Cathode-ray tubes are used in television sets, computer monitors, automated teller machines, oscilloscopes, and radar displays. The diagram shows only one electron gun. This is typical of a monochrome or single-color CRT. These devices have three electron guns one for the primary color red, one for the primary color green, and one for the primary color blue. The CRT thus produces three overlapping images: one in red (R), one in green (G), and one in blue (B). This is the so-called RGB color model.

MULTIMEDIA IN BUSINESS MARKETING

Three ways Businesses use Multimedia: 1. Website Design: Internet marketing, website hosting and the coding of websites are all big business these days and they grew out of the proliferation of websites for business. Managing the website design project, creating appropriate art, selecting colors for the website, working with the coding developers, laying out the site, incorporating responsive design elements are all skills necessary for successful website design and as long as there are businesses new to the market place, there will always be the need for website design expertise. 2. On Demand video: This video sharing platform offers everything from band videos and art film cartoons, commercials, documentaries and TV programs from other eras. Using YouTube for business purposes is part of Internet marketing. Skills needed for producing videos include camera work, editing, sound editing and computer digital graphics. 3. Powerpoint Presentations: Powerpoint has become common in the work place due to its ease of use and simple system for creating the actual slides. With Powerpoint, images taken from the Web or from personal cameras can be merged with text and some graphic design essentials to create striking presentation that can be used in-house, with clients, or as presentations that are downloadable from the Internet. Almost anyone can make a professional looking Powerpoint presentation that can convey information easily. Multimedia skills necessary for Powerpoint presentations include graphic design, color coordination, photography, content generation and more.



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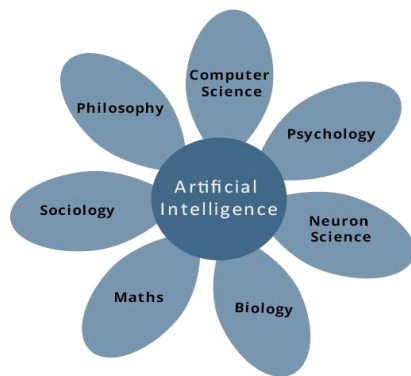
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ARTIFICIAL INTELLIGENCE

Artificial Intelligence is defined as an area of computer science, used for creation of intelligent machines that work and act like humans. The main goal of AI is to exhibit its behaviour, learn, advice its users and to create systems that think and behave like humans. Contributions to AI :Artificial Intelligence (AI) is categorized into 2 types : WeakAI and Strong AI . WeakAI is designed for a particular task , on the other hand StrongAI is designed for the systems which are given unknown tasks and the system must use its ability has to find a solution for it. A mathematician Alan Turing in 1950 developed a turing test that is used to determine whether the systems can actually act like a human. Arend Hintze, an assistant professor of integrative biology and computer science and engineering at Michigan State University categorised AI into 4 types. Type1: Reactive Machines: TheseAI systems are used to make early predictions but has no memory and cannot use past experiences to predict future. Type2: Limited Memory : These type of AI systems uses past experiences to tell about the future i.e for eg. like the decision making finctions in automobiles. Memory is not permanent. Type3: Theory of Mind: This psychological



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term tells us that everyone has their own beliefs , desires and intentions depending on which the decisions they take reflect. Type4: Self-Awareness: This AI systems is used to understand the current state of the system and use that information to find what others are feeling. AI has many applications i.e, it is used in health, business, law, education , military , robotics etc. This is not the end of AI , there is more to come in future and we never know later our whole society maybe covered by robots.

*Good Things
come to those
who wait
But
The Best Things
come to those
who do.*

EVERYTHING MADE EASY

Internet of things (IOT) is anything that's connected to a network (including the internet) or other machines and works autonomously without needing human intervention. IOT is nothing but how we can use technology in every aspect. The Internet of Things is the concept of everyday objects – from industrial machines to wearable devices – using built-in sensors to gather data and take action across a network, for instance a building that uses sensors to automatically adjust heating and lighting or production equipment alerting maintenance personnel to an impending failure. In retail industry specifically supermarkets one of the major frustrations for customers today are long queues at the billing counters. In the current model that the supermarkets operate in India, requires a lot of resource to manage these billing counters and also results in customers waiting in queues for a long period of time – by applying IOT through AI, we can introduce self-check-out counters for customers where time taken to stand in queues will reduce by 90% and the no of resources that the supermarket will require will also reduce nearly by 90%. There will be no threat of goods been taken away without billing as the scanners will flag lost or any theft of goods. This whole process will result in efficiency in supermarket and enhance customer experience. There are nearly 12 billion devices that are connected to the internet and IOT aims at making everything easy. Simply put together the Internet of Things is the future of technology that can make our lives more efficient.



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GRAPHICS

Graphics word taken from greek language means “belonging to drawing” are images or designs on wall , paper , surface etc to inform, illustrate or demonstrate . Graphics are combination of text illustration and color. Graphic Design consists of selection , creation or arrangement of typography like creation of website , poster etc. Graphics are basically visual representation of an image or video by enhancing it by adding special affects. Graphic designers have various tools with the help of which they format the images for the use of creation of content on web platform. Different cases for graphic require different solutions, thus their are different technologies available . Graphics are represented as follows: Portable network graphics: PNG is lossless , well compressed storage, portable file format for images mainly designed for web with features depicting rich color control, graycolor support . PNG is supported in a creative tool chain like web browsers , image toolkits etc , and maybe used with HTML , CSS , Canvas API using the extension “PNG” or “png”. Scalable vector graphics: SVG is like HTML for graphics is a markup language used to describe the aspect of an image. It supports wide range of features like clipping, filters, masking. Client – side and Server – side script languages use SVG export and import drawing tools. Cascading style sheets: CSS is a language used to describe the presentation of web pages including color , layout and font information. Canvas API: Is a client – side scripting technology for rich creation or alteration of raster images. It is a vector based program for creation of shapes , gradients and other graphical effects and canvas performance is quick. Web Computer Graphics Metafile : WCGM is a web profile of CGM .CGM signifies technical illustration, interactive electronic documentation, geophysical data visualization etc.

AUGMENTED REALITY

Augmented Reality is a technology that superimposes a computer-generated image on a user's view of the real world, and provides a composite view. It's an interactive expertise of a real-world atmosphere whose components are "augmented" by computer-generated sensory activity data. The vital distinction between augmented reality and virtual reality is that augmented reality alters ones in progress perception of a real world environment, whereas virtual reality fully replaces the user's real world environment with a simulated one. Unlike virtual reality, which needs you to inhabit a completely virtual environment, augmented reality uses your existing natural environment and simply overlays virtual data on top of it From social media filters, to surgical procedures, AR is rapidly growing in popularity because it brings elements of the virtual world, into our real world, thus enhancing the things we see, hear, and feel. Augmented reality is also transforming the globe of education, where content could also be accessed by scanning or viewing an image with a mobile device. An example is an AR helmet for construction employees that display data concerning the development sites. In Augmented Reality, the distinction is made between two distinct modes of tracking, known as "marker" and "marker-less". Markers are visual cues which trigger the display of the virtual information. Marker- less also called instant tracking does not use marker. Instead the user positions the object in the camera view preferably in a horizontal plane. Various technologies are used in augmented reality, including optical projection systems, monitors, handheld devices, and display systems worn on the human body. Augmented reality devices are often controlled either by touch a pad or voice commands. A head-up display (HUD) is a transparent display that presents data without requiring users to look away from their usual viewpoints. Contact lenses that display AR imaging are in development. This lens, when finished, is meant to have a built-in camera on the lens itself.



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**Actions Prove
Who someone is ;
Words just Prove
who they want to
be.**

LI-FI (LIGHT FIDELITY)

Imagine a world where every light could connect you to the internet. Isn't it fascinating to hear about it. Li-Fi is a technology for wireless communication between devices using light to transmit data and position. It is one of the most exciting technologies to emerge in recent years. It's a little like Wi-Fi, but has reached speeds 100 times faster in testing, making it far more suited to the demands of the future of data. It's not in widespread commercial use yet, but it probably will be soon. Unlike Wi-Fi which uses radio frequency (radio waves) to transmit data, Li-Fi creates a network using the visible light spectrum (visible light waves). Li-Fi comprises of multiple light bulbs that form a wireless network, offering a substantially similar user experience to Wi-Fi except using the light spectrum. Li-Fi is a Visible Light Communications (VLC) system. Li-Fi uses visible light from LED lightbulbs. The technology was first invented by Professor Harald Haas from the University of Edinburgh back in 2011, but it's now being tested outside the lab. Li-Fi does boast impressive speed, but it also comes with downsides. Unlike radio waves, light can't go through walls – so connection ranges should be far smaller. Although that's fine for an



office context, it's not ideal for home use. Where there is a lack of light bulbs, there is a lack of Li-Fi internet so Li-Fi does take a hit when it comes to public Wi-Fi networks. Due to its limitations (primarily the fact that it can't pass through walls), Li-Fi is never likely to replace Wi-Fi, 4G or 5G, but it could become a key complementary technology, handling data in areas where its limitations aren't a problem and lessening the load on radio frequency spectrum in the process.

VISION AND SCOPE OF IOT

The Internet of Things (IoT) is the network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors and connectivity which enables these objects to connect and exchange data. Each thing is uniquely identifiable through its embedded computing system. IoT allows objects to be sensed or controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit in addition to reduced human intervention. "Things", in the IoT sense, can refer to a wide variety of devices such as heart monitoring implants, biochip transponders, cameras streaming live feeds of wild animals in coastal waters, DNA analysis devices for environmental or field operation devices that assist firefighters in search and rescue operation. Many people, including myself, hold the view that the world itself will be overlaid with sensing and actuation, many embedded in "things" creating what is referred to as a smart world. But it is important to note that one key issue is the degree of the density of sensing and actuation coverage. I believe that there will be a transition point when the degree of coverage triples or quadruples from what we have today. For example, today many buildings already have sensors for attempting to save energy; people have smart phones with sensors for running many useful apps; and healthcare services are relying on increased home sensing to support remote medicine and wellness. All of these are just the tip of the iceberg. They are all still at early stages of development. The steady increasing density of sensing and the sophistication of the associated processing will make for a significant qualitative change in how we work and live.



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*Change is
Inevitable.
Growth is
Intentional.*

IS CLOUD SECURITY A SAFE BET FOR HIGHLY SENSITIVE GOVERNMENT DATA

Sensitive data is vulnerable to attacks and threats. It is indeed the most evident pitfalls when government agencies store data in the cloud, that too when it is controlled by third party. Moreover the intricacy of mobile devices poses a noteworthy challenge when it comes to cloud security, as data generally flows from one cloud provider to the next and amid national boundaries, which runs counter to the physical security dealings every government agency ought to contain in place. A Cloud Security Alliance (CSA) study found that seventy three percent of respondents indicated their concerns in adopting cloud computing. Unless it is within private clouds or on premises, most governments are reluctant to store highly sensitive government data in commercial cloud network. Cloud security and safeguarding highly confidential data being the criteria, it ought to be on-premises or within private clouds that aren't commercial but government owned. Physically a secured network is separated from an unsecured one where some agencies like government financial institutions, stock exchanges and industrial control systems within nuclear power plants - air gap their computer systems. In addition difficulties in the transfer of data between unsecured and secured networks, requiring human interference that is prone to errors. Data diodes are useful in a way as they offer a secure, one-way channel where data can go by in just one direction thus assuring secure data cannot be leaked back to the unsecured network. Data diodes which are specialized, unidirectional devices that alter Transmission Control Protocol (TCP) connections to User Datagram Protocol (UDP). They convert the connections back on the other side that is when the File Transfer Protocol (FTP) tells the applications that a connection has been established, allowing users to transfer a folder from the unsecured network to the secured one, but not in reverse. But in spite of regulations laid down by the government as a baseline, to secure cloud the problem of new security threat constantly evolves. Moreover major commercial cloud providers possibly will not entirely adhere to strict data security requirements. Apparently, for the sake of national security, highly sensitive information will not be available in the commercial cloud. In spite of the overwhelming degree of attacks and threats across the globe the cloud platform is the most useful platform for intelligence sharing between nations with private, government-owned cloud storage.

THE INTERNET OF THINGS

In today's increasingly hyper-connected world, almost every gadget comes with sensors and some way of communicating with networks and the Internet. This evolving global interconnected network of millions of devices is popularly called the Internet of Things (IOT), and it is taking the world by the storm! With its market expected to touch a good USD 11 trillion by 2025, the technology itself is still a work in progress. Internet of Things (IOT) is an ecosystem of connected physical objects that are accessible through the internet. It enables devices/objects to observe, identify and understand a situation or the surroundings without being dependent on human help. For example a light bulb that can be switched on using a smart phone app is an IOT device. Despite continued security problems, the IOT will spread and people will be increasingly dependent on it. The cost of the breaches will be viewed like the toll taken by car crashes, which have not persuaded many people not to drive.



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*Be Happy not
because
Everything is
good, But
because you
can see the Good
side of
Everything*



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QUANTUM COMPUTERS - ERA OF QUANTUM COMPUTING

Quantum computing takes privilege, of the anomalous capability of subatomic particles to exist in more than one fluster at any time. Due to the way the negligible of particles acquit, performance can be done much more at a gallop and use fewer exuberance than Hellenic computers. They also use two mind-bending quantum phenomena called superposition and entanglement. By disparity, quantum computers use quantum bits, or qubits. A qubit delineate 0 and a 1 at the same time, a solitary quantum phenomenon known in physics as a superposition. This allows qubits manages extensive omputations at once, gigantically progressive rapidity speed and magnitude. It's predictable that quantum computers would swiftly be able to crevice many of the systems that keep our online information sturdy since prime numbers are so predominant in cryptography. Because of these threats, researchers are already trying to thrive technology that is impervious to quantum hacking which means unauthorized access, and on the flipside of that, it's feasible that quantum-based cryptographic systems would be much more secure than their traditional analogues. Researchers have a passion about the usage of quantum computers to model complex chemical reactions, a quest that conventional super-



computers are not that efficient. A quantum mechanism was used by Google engineers in July 2016 to simulate a hydrogen molecule for the first time. Researchers are expecting that they'll be able to use quantum simulations to design completely naive molecules for use in medicine. The competition is on to build the world's first ever purposeful quantum computer- the technology's promised ability in the long run and to assist scientists to do things such as develop unaccountably new materials, encrypt data with high security and accurately envisage that how Earth's climate will be changing in coming years.

3D ANIMATION

The process of generation of three dimensional moving images in a digital environment is known as 3 dimensional animation (3D Animation). This is a digital model manipulated by an animator .They can be rotated and moved like real objects. 3 Dimensional animation has more depth and more realistic when compared to 2 dimensional , as 2 dimensional animation deals more about drawing and framing . 2 dimensional (2D) animation is a flat animation i.e., it has only 2 axes (x and y) but 3 D animation has z axes also along with x and y axes. 3D animations needs a suitable 3D software and a computing device with many inbuilt tools in the digital content. The usual startup of 3D animation is by creating a 3D Polygon mesh to manipulate. Generally a mesh contains many vertices ,edges and face which are connected to each other and thus gives the visual look of form to a 3D environment. In some cases ,the mesh contains armature which is an internal digital skeletal structure and this is used to control the mesh by weighing the vertices .This method of controlling is called 'rigging'. These services are mainly used in a number of Industries, Film making, Television series, designing, gaming etc. The common 3D most of them knew is seen in movies like Jurassic Park. The famous games could have been impossible without the 3D animation technique .



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*Challenges
makes you
more
Responsible.
Always
remember that
life without
struggle is a life
without
Success.*



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MULTIMEDIA

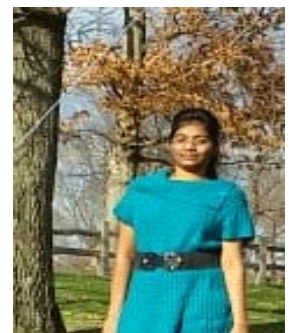
Multimedia is the integration of text, graphics, animation, sound, and/or video. Using this very broad definition of multimedia, multimedia in the classroom could include Power Point presentations that are created by the teacher, commercial software (such as Multimedia encyclopedias) that is used for reference or Instruction or activities that directly engage the students In using multimedia to construct and convey knowledge. For this we will focus on -- engaging students in the use of multimedia to Construct and convey knowledge. Examples of multimedia, then, could include : Students using concept-mapping software (such as Inspiration) to brainstorm, Students using a spreadsheet or graphing calculator to record data and produce charts,, A small group of students creating a digital movie to demonstrate a procedure, A class website that displays student artwork, Students scanning their hands and importing the images into Power-Point for a presentation about fingerprints. Multimedia activities encourage students to work in groups, express their knowledge in multiple ways, solve problems, revise their own work, and construct knowledge. The advantages of integrating multimedia in the classroom are many.

STAGES OF MULTIMEDIA PROJECT

Multimedia is content that uses a combination of different content form such as text, audio, video, images, animation and interactive content. Multimedia projects are complex, they often Involve skills and efforts of multiple teams or people. During the process of development, the project moves to specialized parts Of the team from story , creating to editing. Each and every stage is designed to meet client's needs, technical requirement and audience preferences. Four stages of multimedia project development are: Planning and costing: this stage of multimedia application is the first stage with an idea and need. This can be further refined by outlining messages and objectives. Before starting to develop a multimedia project, it is necessary to plan what writing skills, graphics, art, music, video and other multimedia expertise will be required. It is also necessary to estimate the time needed to prepare all elements of multimedia and prepare a budget accordingly. After preparing the budget the proof of concept can be developed. Designing and production: the next stage is to execute each of the planned stages or tasks and create a finished product. Testing: testing a project is to ensure the product to be free from bugs. Apart from their testing is to ensure multimedia application meets the objectives of the project. It is also necessary to test whether the multimedia project works properly on intended deliver that forms and meet the needs of the clients. Delivering: the final stage of multimedia application development is to pack the project and deliver the completed project to end users. This stage has several steps such as implementation, maintenance, shipping and marketing the product. Depending on the goals of the project, the staff might observe the user's reaction or have them answer questions to see if the project hits the right marks. After user testing, there is usually a further adjustment to the project. Once the team and clients are satisfied the project goes out for distribution.



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*Not all Storms
come to disrupt
your life,
Some come to
clear your path.*

MULTIMEDIA AND EDUCATION

Multimedia has become the most effective modes of learning. It makes learning more interesting, for example in order to learn a computer program, the multimedia instructions which are in the form of websites or tutorials can be considered as the most effective way of communication. The distance learning is the best scenario for this type of learning method. The e-learning is fast compared to the conversational chalk and talk method. The instructions given through the tutorials or websites contains at least two basic parameters that is the visual part which is video and the audio part which is the human voice, these when combined can give same perhaps more impact than the chalk and talk method. The usage of multimedia is so impactful that one's own imagination can be turned into reality through animation for example a scenario can be given where a teacher has to explain abstract concepts of science irrespective of it being medical or physical, if the teacher is able to imagine the abstract object in his/her mind, he/she will be able to deliver the point to the students through animations more effectively, whereas the chalk and talk method restricts the perfect communication from happening, the teacher can imagine the abstract concepts but he/she won't be able to effectively make the students clear about it. Here multimedia instructions show its importance. A simple animation or cartoon can be very helpful to let the students understand these new concepts. Before the use of the multimedia little amount of data or info was lost but by the help of these latest developments the teachers are able to share their hundred percent knowledge to their students more effectively. As we know that our brain can store the visual data for a longer time than the rest of the senses therefore if we perceive our data through multiple mediums then our learning and exploration rate will definitely increase, hence helping us reach our highest potential to achieve and reveal the still hidden challenges that the world can give us!

CYBER MONDAY

Cyber Monday is a marketing term for the Monday after the Thanksgiving holiday in the United States. The term "Cyber Monday" was coined by Ellen Davis and Scott Silverman, and made its debut on November 28, 2005. A lot has changed since 1992. The internet arrived and web-based retailing took hold as an attractive alternative to the mall. Remote sellers will no longer be using the tax code as an arbitrary competitive advantage". Buying stuff online is an easy option that sometimes comes with an extra discount: no sales tax. That unfair advantage for web retailers was called out Thursday by the U.S. Supreme Court in a decision that should help level the playing field between bricks-and-mortar and internet-based sellers. If you enjoyed the illicit thrill of avoiding the 6.25 percent Illinois sales tax on internet purchases of running shoes or steaks, you'll mourn the court's opinion in South Dakota v. Wayfair. But if you believe in fair competition or if, say, you work at a store and worry about losing your job, you'll likely agree with the result of the 5-4 ruling: Sales tax should be collected in web.

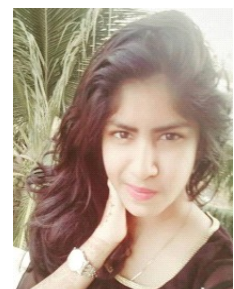


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*Your best teacher
is your last
mistake.*



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MINHAZ KHADAR
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TRENDS IN MULTIMEDIA CONSUMPTION ON MOBILES

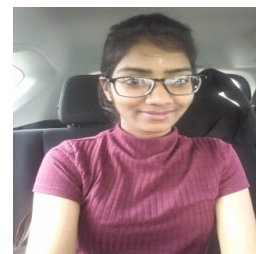
The multimedia capabilities of this generation mobile have increased manifold. This has resulted in a tremendous increase in the consumption of digital content in the form of apps, videos, and websites on the mobile. Mobile usage as a whole account for 60 percent time spent in consuming new age media content. This is interesting to find that today mobile apps make up about 47 percent of internet traffic and 8 percent of digital consumption traffic originate from mobile browsers. It is projected that the number of smartphone users will grow from 150 million to 250 million by 2020. Growth in the usage of mobile phones is primarily driven by social media, surfing and app downloads. Extremely advanced technology, robust hardware accompanied by the very low price of smartphones has resulted in tremendous popularity of mobile devices. In late 2014, the average price of Android mobile phones in the global market dropped to nearly \$255. Mobile phones with multi-core CPU, 3G connectivity and GPS can be bought in India within the pocket-friendly price rate, even without Telco subsidization. Moreover, the launch of iPhones and iPad models nearly twice per year pushed the prices of second-hand and older models to the affordable levels as well. Therefore, app developers now need to create apps that are not only more feature rich, perform better, and offer a better user experience compared to just a few years ago. The second pioneering change is that recently over 100 million people access internet over mobile phones, which is 52 percent of the world as of January 2016, making India world's largest online user country. The entrance of a large number of private internet service providers in the Indian broadband market has allowed people to enjoy low cost internet connectivity on their handsets, either through taking advantage of buckets of data services on demand, by using low-cost monthly unlimited usage plans, or simply connecting to free Wi-Fi hot-spots that have now become mainstream in public spaces.

IMAGE EDITING

Image editing is the process of altering images whether they are digital photographs, traditional photographs or any other illustrations. A bitmap image is stored in computer in the form of grid of picture elements or pixels. Pixels contain lot of information about brightness and image colours. Pixels can be changed based upon convenience. Some of the software like Adobe Illustrator, Pixel Style Photo Editor, Ink Scape etc., can be used to modify or create new image. By using filters and editing options one can adjust the sharpness, zoom features and automatic cropping. There are many image editing features like selection where one can select a part of the image that is to be edited. The other feature under graphical application is layers which is used to maintain transparency of sheets. The next feature is image size alteration wherein we can make the image larger or smaller. Most of the image editors can be used to remove unwanted branches, clone tool is used to remove unwanted part of the image and there are many ways to merge images by using graphical applications. By using software, colour depths of the image can be changed, and by using image editors we can contrast the image by brightening or adding filters to the image. The best image editing tools are Adobe Photoshop, Gimp, Picasa. Image editing enhances the original images according to our requirements and they can bring more colours and life to the image, Image editors help in bringing out the best possible image in the interests of the viewers.



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K.K.NISHIKA
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*Never stop
believing in
Hope because
Miracles happen
Everyday*

MULTIMEDIA IN MEDICAL FIELD

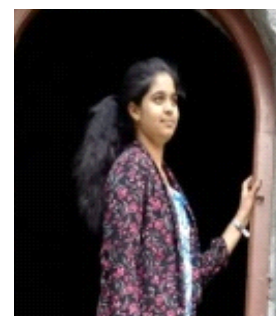
In these days Multimedia is characterized by a very complex nature due to the combination of different type of media, data sources, formats and resolutions. One of most important and rapidly growing part of multimedia processing is in the medical field. Multimedia based healthcare is furnished with various exciting applications and encouraging achievements. The modern health care industry fueled by increasing use of medical devices and sensors, becomes one of the world's largest and fastest-growing industries. The emerging wearable sensor technology and mobile computing stimulate both more opportunities and challenges for low-cost healthcare. The integration of wearable medical sensors with wireless communication and mobile network has made significant impact on e-healthcare and telemedicine. Medical experts get more used to interact with multimedia content because of their daily live interaction and they also want to use it in their work. In Medicine, doctors can get trained by looking at a virtual surgery. They can simulate how the human body is affected by diseases spread by viruses and bacteria and then they develop techniques to prevent it. Live multimedia stream processing and low resource consumption which is important for the medical field and can help to save lives. Major advantages can be created in the medicine domain by realizing Informatics systems for hospitals to manage the patients list, Image archiving, and communication systems to help doctors and researchers to manage medical images.

EXPOSURE TO AIR POLLUTION CAN CAUSE INFERTILITY

After heart and respiratory diseases, inflammation and even strokes, pollution is found to be a reason for reducing conception rates and increased pregnancy losses. Emission of hydrocarbon, soot and chemicals released from vehicles and industries contribute to pollution along with dust from construction work sites. Infertility is a multifactorial problem. "these problems can be found in people who are suffering from obesity, who eat junk food and are exposed to radiation." Compared to rural population, people in the urban areas are more exposed to air pollution. Some of the other problems caused by exposure to air pollution are irregular heartbeats, development of chronic bronchitis, irritation of the eyes, nose and throat, short of breath, coughing. "it is usually difficult to correlate air pollution as the reason for any particular problem. But we can say that it is a contributing factor. Exposure to polluted air may lead to miscarriage, low birth and indoctrinate death." The pollutants contain oxidants, which oxidizes low-density lipoprotein (LDL) in the blood and these form blocks in blood vessels. Sulphur dioxide is a main component of the emission from vehicles, which causes respiratory problems. There are studies which say that by controlling air pollution, the lung performance can be improved. Apart from physical health, pollution also has an impact on mental health. So much so that a doctor compared air pollution to consuming alcohol. While people are advised to take measures against pollution, experts say that urban planning plays a key role in reducing pollution. "city planning should be done but keeping in mind the wind direction which is currently not happening due to increasing concretisation. The government should remove encroachments mercilessly," said environmentalist Subba Roa.



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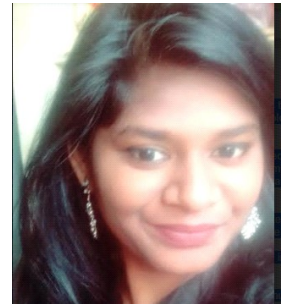


D.NIHARIKA
121317052011
BSC 2H

*"The Quality of
Life Cannot be
Raised
Unless
We Raise the
Texture of Our
Thoughts and
the Depth of
Our
Understanding"*

PRESENT TECHNOLOGY

We are living in a society which is called "technologically civilized" society. Every small work we do is technology dependent. Today every other person is recognized with the device or gadget ,he carries; which is technically advanced. Ultimately , we can say that , "living without technology is like living without air" in this technical world of today. Therefore, we are much dependent on technology. Starting with the simple example of food storage. Today the shelf life of the food products is increased with help of modern technology and even preparation time of food is reduced with the help of new machines and equipment. Thus ,making the consumer to have an ease at its consumption and also in saving a lot of productive time. Ultimately, making the person dependent on it for his own benefits. This is unlike to the times of traditional cooking where people had to spare time and even do physical labor compared to the modern technically advanced time of today. Technology made our lives simple but much dependent on it. We can sit in a corner and get connected to the world. Thus making the world a "global community." Communicate with a person in remote area within fraction of seconds ,make a trip of the world within no time, all these are possible with the advanced technology ,making us more dependent on its usage. In the health sector, technology advanced to a great extent that today a machine can assist a person in intensive care and monitor him ,which was a tiresome and risky job to do manually before. In a way we are coming closer with the machines developed technically. Technology is making the multitask functions to be available in a single device. Thus ,we can have multifunctional usage of the single device we own .The more simple ,the work gets with technology, the more we get dependent on it. Technology makes us lethargic with little or no physical activity, in one aspect; but the same technology provides a inspiration or motivation to do creative jobs including physical activity .Example games like "V" games which are challenging video games and at the same time recreational, helping to spend time in a joyful way. Today , we don't find even a single young kid without using the available technology to him/her. Technology made us dependent on it and we can't expect or imagine a life without using the word "technology" in it .Hence, technology plays a major role in our lives.

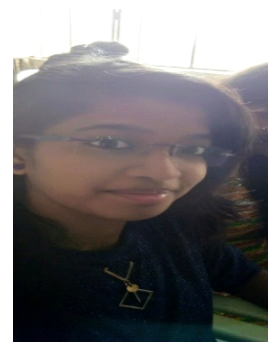


AROKIA MARY
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*The happiest
people don't
have the best of
everything, they
just make the
best with
everything they
have.*

FIREWALL

Firewall is originally referred to a wall (literally). It has been a first line of defense for over 25 years in the land of network security .It is constructed as a network security system that supervises and controls input and output of network traffic based on defined set of security rules (ex: internet). Firewall establishes a fence between a trusted internal network and untrusted external network. Firewalls are two types 1. network firewalls 2. Host-based firewalls. Network firewalls are those which filter traffic between networks and run on network hardware. On the other hand host-based firewalls are used to run on host computers and control network traffic in and out of machines. Firewalls differ in type depending on where communication originates, where it is intercepted, and the state of communication being traced. A firewall helps in blocking unwanted malware entering into systems. Using a router which is network based firewall can protect multiple systems simultaneously. A firewall can be represented as hardware, software or both. The following are different types of firewall: Proxy firewall, Stateful inspection firewall, Next-generation firewall (NGFW) and Threat-focused (TFW).



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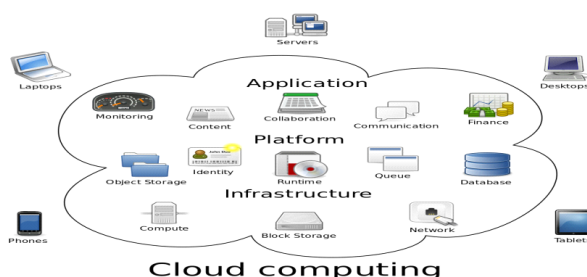
DARK WEB

The dark web is the content on web that exists on dark nets, overlay networks that use the Internet but require specific software, configurations or authorization to access. The dark web is often mistaken as deep web whereas dark web is just a part of the deep web. Deep web is not recorded in web search engines and doesn't exist in the open for people to access easily. The dark net which is a part of the dark web is made up of small networks as well as large networks which make the transactions secure. Users of the dark web coined the term "Clear net" to the regular web cause of its unencrypted nature. You can only access the dark web using specific networks like Tor and I2P. While Tor provides anonymous access to the internet, I2P focuses more on the hosting of websites, identities etc. The user's identities stay anonymous due to the layered encryption system. The dark web is encrypted due to the content is harbors; it consists of illegal trade of guns, drugs, black trade and various other media exchanges for terrorists and pedophiles. The trade is done using electronic cash such as bit coins as it doesn't require intermediaries. Many digital currency exchange services convert bit coins into an online currency game from where later it can be converted into real money. Due to the anonymity, it is a haven for criminal and illegal activities. While it is not illegal to just browse 'dark web' alone, in theory, unless you're looking at sites that host illegal content. Anonymity, privacy, freedom, no censorship and a smooth way to share information that the Clear net cannot offer is offered by dark web.



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CLOUD COMPUTING



Analysts predict that the latest technology inventions in cloud computing will significantly influence how we use our computers and mobile devices. Cloud computing is where tasks and file storage on your computer are performed and stored elsewhere. By using an internet connection

you can connect to a service that has the architecture, infrastructure and software to manage any task or storage requirement at less cost. The advantages of cloud computing is that it eliminates the difficulty and expense of maintaining, upgrading and scaling your own computer hardware and software while increasing efficiency, speed and resources. Your computer's processing speed, memory capacity, software applications and maintenance requirements are minimized. You could store and access any size or type of file, play games, use or develop applications, render videos, word process, make scientific calculations, or anything you want, by simply using a smart phone. As a comparison, let's say you had to generate your own electricity. You would need to maintain, upgrade and scale these resources as required to meet your demands. This would be expensive and time consuming. Cloud computing could be compared to how a utility provides electricity. It has the architecture, infrastructure, applications, expertise and resources to generate this service for you. You just connect to their grid. Microsoft, IBM and Google are some of the companies that are investing heavily into the research and development of cloud technology.



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BSC 3 E

*An Ounce of
Practice Is
worth more
than Tons of
Preaching*

VIRTUAL REALITY



While pressing the keys of your keyboard or keypad to convert the lost games to last moment victories the chances are you have encountered the virtual reality in your life. These games involve you with the characters or objects and with the amplification of the involvement, one feels a part of this virtual world. By using 3D imagery with a head mounted device (HMD)

and high quality surrounding sound equipment, these games creates more involvement in the virtual world and consequently shut down the cues of real world. This is what called virtual reality, which has applications far beyond gaming. Virtual Reality (VR) literally makes it possible to experience anything, anywhere, anytime. It is the most immersive type of reality technology and can convince the human brain that it is somewhere it is really not. Head mounted displays are used with headphones and hand controllers to provide a *fully immersive* experience. With the largest technology companies on planet earth (Facebook, Google, and Microsoft) currently investing billions of dollars into virtual reality companies and startups, the future of virtual reality is set to be a pillar of our everyday lives. MEDICAL SCIENCE: One of the most common uses of the virtual reality is in Virtual Reality Exposure Therapy (VRET) which treats the patients suffering from some specific anxiety or phobias. Patients are gradually introduced to the negative situations in a virtual environment until they become desensitized and are able to handle with their fear or anxiety. The diseases like acrophobia (the fear of heights), Agoraphobia (fear of spaces), Arachnophobia (social phobia) are treated using the VERT therapy. GAMING: Gaming is another industry where virtual reality technology is deployed and resultantly Applications of virtual reality in gaming have more interactive and entertaining games with us. These 3D games use a high definition helmet mounted with LCD or LED screen and 3D stereo headset. The gamers are highly immersed with the gaming scenario and the characters and objects interact with the gamer like live things. Some companies like Sony are now involved in developing games augmented with the VR technology.



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BSC 2F

*The Sea is
common for all.
Some take
Pearls, Some
take fish, Some
come out just
with wet legs!
The world is
common to all :
What we get, is
what we are
looking for.*

MODERN DAY TECHNOLOGY

The society has been dramatically changed with the evolution of technology. Immense opportunities are being provided by technologies which play an important role in human life. The access to education, medicine, industry, transportation etc. has been simplified due to modern day technology. Thanks to modern technology, a lot of burden has been lifted up from our shoulders & we have more time & energy to do what we want to. With so many advantages & comfort, comes some disadvantages too. Technology is being used imprudently these days resulting in affecting the society negatively & complicating our lives. Although in some cases parents resort to technology to communicate with their children & to know about their whereabouts but this is not adequate always. And yet, there is several positive impacts o technology on our lives but there are several down-sides too. We cannot abandon technology now but we can ensure not to let it control us.



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USES OF MULTIMEDIA

Multimedia wherein multi means “many” and media here is the the information in the form of images, text, audio, video or graphics. Multimedia is the process of representing computer information in the form of images, audio ,videos (moving images), animation or any other forms of media wherein every information can be stored, transmitted and processed digitally. Multimedia can be used in various fields like : Advertising :Multimedia plays a great and a vital role in the field of advertising. As whatever it is whether print or electronic advertisement, they first are prepared on the computer by using professionals' software's and then it is brought in front of the target audience eg: mobile advertising , television advertising etc . Education: it can be used in presentations wherein the information can be explains in an interactive manner . Mass media : it is used in fields of journalism , in many magazines , newspapers etc . here if we take newspaper it not only includes text but also includes photographs which makes it an perfect example of hypermedia . Gaming industry : the first application of multimedia was in the field of entertainment and that too in the video game industry . The integrated audio and video effects make various types of games more entertaining . Science and technology : it is used for transferring audios , messages and formatted multimedia documents . at the same time , it is useful for surgeons as they can use images from scans of human body to practice complicated procedures such as brain removal and reconstructive surgery. The plans can be made in a better way to reduce the costs and complications .



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WELCOME TO THE WORLD OF ANIMATION

A dynamic medium in which images or objects are manipulated to appear as moving images- “ANIMATION”. In TRADITIONAL ANIMATION, images are drawn or painted by hand on transparent celluloid sheets to be photographed and exhibited on film. Today most animations are made with COMPUTER GENERATED IMAGERY (CGI). Animations using computer can be very detailed 3D ANIMATION, while 2D COMPUTER ANIMATIONS can be used for stylistic reasons, low bandwidth or faster real-time renderings. Other common animation methods apply a stop motion technique to two and three-dimensional objects like paper cutouts, puppets or clay figures. The stop motion technique where live actors are used as a frame-by-frame subject is known as PIXILATION. Commonly the effect of animation is achieved by a rapid succession of sequential images that minimally differ from each other. The illusion—as in motion pictures in general—is thought to rely on the phi phenomenon and beta movement, but the exact causes are still uncertain. Analog mechanical animation media that rely on the rapid display of sequential images include the phenakistiscope, zoetrope, flip book, praxinoscope and film. Television and video are popular electronic animation media that originally were analog and now operate digitally. For display on the computer, techniques like ANIMATED GIF and FLASH ANIMATION were developed. Apart from short films, feature films, animated gifs and other media dedicated to the display moving images, animation is also heavily used for video games, motion graphics and special effects.

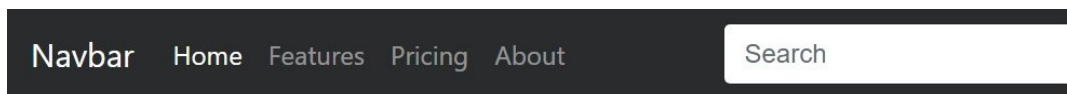


K. MEERA
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*Do Everything
with a good heart
and Expt
nothing in return,
and you will never
be disappointed.*

REACT-ING FOR THE FUTURE

The companies today are building and deploying these huge, complex JavaScript web applications including Facebook where the content is being entirely fetched and rendered using javascript. So these companies support various JavaScript libraries that are designed around the needs of the people who are writing big and complicated web applications. One among these JavaScript libraries is the React. React was developed by Facebook in 2011 that was designed to help them build their own pages providing the Facebook interface. Since then, React has become very popular in the community. React has been dominating the space of libraries and frameworks (according to Google trends) for building user interfaces, the other two players being Angular and Vue. React is also being used at Instagram and other companies designing their own web interfaces. React is a JavaScript library for building fast and interactive user interfaces. The React applications use components making it Component-based. A component is essentially a piece of user interface that are built independently and then grouped together to build complex user interfaces. With React, it is easy to parts of your webpage from each other. Without this type of Framework, it is hard to figure out how things map together. React is designed to bundle everything together easily. You can always use HTML, CSS, JQuery but with React, the components of your page are well isolated and put together. The components of the page can be something like this:



Each component in itself will contain other components, where each component is a part of UI. React essentially reacts to the state change of the components and updates the DOM (programming API for HTML and XML documents) hence the name – React. React is simple and only takes care of rendering the view and that the view is in sync with the state.

VISUAL EFFECTS

Visual Effects (abbreviated VFX) is the process by which imagery is created or manipulated outside the context of a live action shot in film making. Visual effects involve in the integration of live-action footage (special effects) and generated imagery (digital effects) to create environments which look realistic, but would be dangerous, expensive, impractical, time consuming or impossible to capture on film. Visual effects using computer-generated imagery (CGI) have recently become accessible to the independent filmmaker with the introduction of affordable and easy-to-use animation and compositing software. VFX can be categorized into: Simulation F, Animation, Modeling, Matte painting, Compositing. Visual effects are often integral to a movie's story and appeal. Although most visual effects work is completed during post production, it usually must be carefully planned and choreographed in pre production and production. Visual effects primarily executed in post production with the use of multiple tools and technologies such as graphic design, modeling, animation and similar software, while special effects such as explosions and car chases are made on set. A visual effect supervisor is usually involved with the production from an early stage to work closely with production and the film's direct design, guide and lead the teams required to achieve the desired effects.



UNNATI KORWAR
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MSC 2CS

*The surest way
not to fail is to
determine to
succeed.*



D.SOUJANYA
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IOT-WHAT IT IS AND WHY IT MATTERS

With the number of connected devices set to top 11 billion – and that's not including computers and phones – in 2018, Internet of Things will clearly continue to be a hot topic. The Internet of Things is the concept of everyday objects – from industrial machines to wearable devices – using built-in sensors to gather data and take action on that data across a network. The Internet of things (IoT) examines the interconnection of devices within the existing Internet infrastructure. The term "Internet of Things" was coined in the late 1990s by entrepreneur Kevin Ashton. Ashton, who's one of the founders of the Auto-ID Centre at MIT, was part of a team that discovered how to link objects to the Internet through an RFID tag. The Internet of Things is the future of technology that can make our lives more efficient. IoT is expected to offer advanced connectivity of devices, systems, and services that goes beyond machine-to-machine communications (M2M) and looks at a variety of protocols, domains, and applications. So it's a building that uses sensors to automatically adjust heating and lighting. We've been fascinated with gadgets that function on a grander scale for decades (think spy movie-type stuff) – but it's only been in the past several years that we've seen the IoT's true potential. We all know the Internet of Things is big – so it's no surprise that the language used to describe it is expansive. This A to Z guide includes 101 IoT terms that provide a quick, go-to resource for data professionals. It offers new sources of data and business operating models that can boost productivity in a variety of industries. Smart phones and other personal devices must be able to maintain a reliable connection to the Internet for the IoT to work effectively. Many people have already adopted wearable devices to help monitor exercise, sleep and other health habits. Simply put, the Internet of Things is the future of technology that can make our lives more efficient.

DIGITAL MARKETING

Digital marketing is the marketing of products or services using digital technologies mainly on the internet, but also including mobiles phones, display advertising, and any other digital medium. Digital marketing's development since the 1990s and 2000s has changed the way brand and businesses use technology for marketing as digital platforms are increasingly incorporated into marketing plans and everyday life, and as people use digital devices instead of visiting physical shops, digital marketing campaigns are becoming more prevalent. Digital marketing methods such as search engine optimization (seo), search engine marketing (sem), content marketing, influencer marketing, content automation, campaign marketing, data-driven marketing, e-commerce marketing, social media marketing, social media optimization, email direct marketing, display advertising, e-books, and optical disks and gains are becoming more common in our advancing technology. In fact, digital marketing now extends to non internet channels that provide digital media, such as mobile phones (sms and mms), call back and, on-hold mobile ring tones. In essence, this extension to non internet channels helps to differentiate digital marketing from online marketing. The research and practice of digital marketing is improving with the advancement of technology. The advancement in technology fosters multifaceted opportunities and at the same time poses unprecedented challenges for the marketers. Marketers make use of digital portfolio as a platform to promote a professional brand by defining the product in a manner that adds credibility.



VANI SHARMA
CHALLA
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BSC 2D

*Success springs
from calmness
of the mind. It
is a cold iron
which cuts and
bends hot iron.*



RANIYA
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SMART WRISTBAND WITH WIRELESS LINK TO SMARTPHONES COULD MONITOR HEALTH, ENVIRONMENTAL EXPOSURES.



Rutgers University-New Brunswick engineers have created smart wristband with a wireless connection to Smart-phone's that will enable a new wave of personal health and environmental monitoring devices. Their technology, which could be added to watches and other wearable devices that monitor heart rates and physical activity."It's like a Fitbit but

has a biosensor that can count particles, so that includes blood cells, bacteria and organic or inorganic particles in the air,."Current wearable's can measure only handful of physical parameters such as heart rate and exercise activity, ". "The ability for a wearable device to monitor the counts of different cells in our bloodstream would take personal health monitoring to the next level."The plastic wristband includes a flexible circuit board and a biosensor with a channel, or pipe, thinner than the diameter of a human hair with gold electrodes embedded inside. It has a circuit to process electrical signals, a micro-controller for digitizing data and Bluetooth module to transmit data wirelessly. Blood samples are obtained through pinpricks, with the blood fed through the channel and blood cells counted. The data are sent wirelessly to Android Smartphone with an app that processes and displays data, and the technology can also work in iPhones or any other smart phone. In the field, offices and hospitals, health professionals could get rapid blood test results from patients, without the need for expensive, bulky lab-based equipment. Blood cell counts can be used to diagnose illness; low red blood cell counts, for instance, can be indicative of internal bleeding and other conditions."There's a whole range of diseases where blood cell counts are very important," . "Abnormally high or low white blood cell counts are indicators of certain cancers like leukemia, for example."Next-generation wristbands could be used in variety of biomedical and environmental applications, he said. Patients would be able to continuously monitor their health and send results to physicians remotely.

SMART RINGS



Don't want a Fitbit or an Apple Watch on your wrist? No problem. You can wear in a more discreet manner with a smart ring. In the ever-expanding world of wearable tech. The "Smarty Ring" is a stainless steel ring with a built-in LED screen which can display all the notifications from your smart phone via Bluetooth 4.0 connectivity. The prototype screen has six different icons – for texts, phone calls, chat notifications, alarms and battery life – which each light up when a notification is

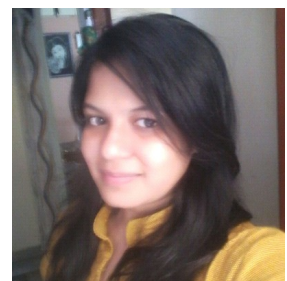
received. A smart ring is a wearable electronics device. Measures have also been put in place to prevent smart phone theft: the Smarty Ring beeps loudly if the user's smart phone is ever more than 30 meters away. Some smart Smart rings provide social feedback to users and can be used to engage in the user's environment in a way that other wearable's and mobile devices do not permit.



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DRONES TAKE OVER

No longer just a military tool, drones are responding to natural disasters, aiding conservation, and delivering lifesaving aid. Drones were created as a tool of combat: Militaries use them to spy and even to assassinate. But as with so much military technology, unmanned aerial vehicles are becoming consumer items. Recently consultancy firm PwC estimated that the global drone industry may be worth \$127.3 billion. In December, Amazon made its first delivery by drone, bringing a TV streaming device and a bag of popcorn to a customer in the U.K. One week after the Amazon delivery, UNICEF and the government of Malawi announced a plan to open. Africa's first testing site for humanitarian drones in 2017. On the 25-mile-wide airfield, companies can examine how drones fare on a range of assignments—tracking people fleeing disasters, for instance, or bringing cell phone networks to remote areas. “A company testing drones in a warehouse in San Francisco is not facing the same challenges,” says UNICEF's Andrew Brown. “What's produced here will work anywhere in the world.” Elsewhere in Malawi, UNICEF has experimented with sending drones to assess flash flood damage and transport HIV blood tests from rural medical centres to laboratories.

REPORT ON C@NNECT 1.0

On 20th July 2018, the Computer Science department of our college grandly celebrated its Pearl Jubilee and Vicennial Jubilee. This memorable day was filled with events held in the CSC block. The mega event was named C@NNECT 1.0 and had the participation of students from UG and PG making it a colourful event.



As light symbolizes brightness and prosperity, the inaugural followed the lighting of the lamp. It was also accompanied by a melodious song, hailing the Goddess of knowledge and wisdom.



SARA NAAZ
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SYEDA MOHMMEDI
121317084056
NIKHAT, BCOM 2C

*Don't be pushed
around by the
fears in your
mind. Be led by
the dreams in
your heart.*

The joyous event started with a warm inaugural initiated by the Principal Dr. Sr. Sandra S Horta, the Vice Principal Dr. Sr. Sherly ED, and the correspondent SR.Alphonsa P Kunjuvareed, Head of the Department Dr.Sr.Sujatha Yeruva, Asst. HOD Ms. Soujenya, PG coordinator Ms.Padmashree and Event coordinator Ms. Vyshnavi.



*Difficult Roads
Always Leads to
Beautiful
Destinations..*

The celebration comprised of numerous individual and group events which drew the attention of students, staff and non-teaching staff. The event included various competitions and games such as Mega Bubble, Sky Tale, Tech Teaser, Name Fame, Code Debug, Tambola. The group events namely Treasure Hunt, Shortcut of Life, Logo Quiz, Pic-tionary, Make a meme and Target Toss were enjoyed by each and every participant.



*The best and
most beautiful
things in the
world cannot be
seen or even
touched –they
must be felt
with the heart.*

The students also had their chance of interacting with the delegates present for the occasion.

With students organizing the above events, the faculty of the computer science department also had their share of conducting fun activities for the teaching as well as the non-teaching staff. The enthusiastic participation of the staff despite their busy schedules was commendable.



The best preparation for tomorrow is doing your best Today,



The end of a story is the new beginning for many others. On this note C@NNECT1.0 concluded as a remarkable, memorable and knowledgeable event. The happening event ended with a valedictory session which had the presence of the honourable Principal, Vice Principal and Mallika Madam.

Do What is Right, not What is Easy.

