BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY
NAVI MUMBAI

Prayaas 2019

Message

Dr. Vishwajit Kadam
Secretary,
Bharati Vidyapeeth, Pune

Bharati Vidyapeeth which has recently celebrated its Golden Jubilee is known for the academic excellence of its 80 Colleges of different disciplines. All these Colleges are ranked very high by various Periodicals and Assessing Agencies for their academic excellence.

I am particularly very proud of the three Polytechnic Colleges which are being run by Bharati Vidyapeeth. All of them are known for the high academic traditions which they have nurtured. Our Polytechnic College in Navi Mumbai is one of the most preferred Colleges for admissions by the students within the jurisdiction of Maharashtra State Board of Technical Education take this opportunity to offer my hearty congratulations to the Principal and his colleagues.

I am happy to know that the College is publishing its annual number. The College magazine in my opinion is an important document which in the years to come becomes a source of historical information about the College. It also gives opportunity to the students to give expression to the literary impulses.

My best wishes for the College magazine, the College, the Principal, the faculty and the students.

Dr. Vishwajit Kadam

Message

Prof. Dr. Shivajirao Kadam
Vice Chancellor,
Bharati Vidyapeeth University, Pune

It gives me immense pleasure to say a few words to the magazine 'PRAYAAS' of Bharati Vidyapeeth Institute of Technology, Navi Mumbai, exclusively meant for churning out the latent literary potential of the students.

To equip the students for their all round development through education is our cherished motto. Today education means much more than merely acquiring knowledge. The process of education involves acquisition of knowledge and skills, building up of strong character and enhancing employability of the students.

Bharati Vidyapeeth runs 3 Polytechnic Colleges and all of them are known for their academic excellence. This Polytechnic College has created a respectable space for itself among the institutions of Pharmacy Education under Maharashtra State Board of Technical Education.

I believe this publication of this magazine will provide further stimulus, both to the students and teachers to prove their mettle.

I have gone through the earlier issues of this magazine and I remember they have been indeed very remarkable. I wish this one also will be of the same quality. I congratulate the Principal, faculty and the students for sustained interest in publication of this magazine. My best wishes for them for now and forever.

Dr. Shivajirao Kadam

Message

Dr. V.J. Kadam
Director,
B.V. Educational Complex, Navi Mumbai

Bharati Vidyapeeth, Navi Mumbai has a group of institutes in various streams like Management, Dental, Engineering, Polytechnic, Pharmacy, Architecture, Hotel Management, and Schools, all doing excellently in their streams, keeping their mission in their minds and their commitment to the society and nation.

Bharati Vidyapeeth Institute of Technology, Kharghar, Navi Mumbai has excelled in teaching and learning due to continuous efforts of faculty and students. | appreciate that the students are keeping abreast with curriculum and maintaining pace with present day challenges of personal and social development. Apart from academic activities, co-curricular activities, sports, cultural and social-service activities form important parts of their life.

I am happy to know that BVIT is publishing its annual magazine Prayaas this year too. The entire team deserves appreciation for their creativity, ingenuity and dedication.

My best wishes to Prayaas and all related to the magazine.

Dr. V. J. Kadam

Message

Mr. P. N. Tandon
Principal, BVIT

"It's your aptitude, not just your attitude that determines your ultimate altitude." Zig Ziglar

Bharati Vidyapeeth Institute of Technology, Navi Mumbai aims at preparing students to face all challenges in life and reach the culmination of success. Our excellence in academics is the result of the diligence of the students consorted with the dedication of the teachers. The students not only excel in academics but also bring laurels to the college through their successful performance in co-curricular activities and sports. Our Institute conducted the State Level Technical Quiz Competition for two course Computer Technology & Chemical Engineering & our students got first prizes in both the events.

This year our students here bagged prizes at zonal Inter Diploma Engineering Sports Tournament and State Level Diploma Engineering Sports Tournaments and Received Gold & Silver Medal in State Level Swimming Competition.

Social welfare activities also go as per the curriculum. The initiative and zeal exhibited by our students during anti-norcotics events organized by Navi Mumbai Police is worth commendable. Also, the Blood Donation camp organized on 8/1/2019 reflects their compassion and love for fellow brethren.

It is my pleasure and pride to present this edition of PRAYAS-19 which is feasible due to the contributions and active participation of the students and the ceaseless efforts put in by the members of the editorial board. I hope that my readers will enjoy reading the magazine.

Mr. P.N.Tandon

Editors Desk

Dear Readers,

It gives us an immense joy and satisfaction to re-introduce our college magazine “PRAYAAS”. We have tried to churn out creativity. The name and fame of an institute depends on the caliber and achievements of the students and teachers. The role of a teacher is to be a facilitator in nurturing the skills and talents of students. This magazine is a platform to exhibit the skills and innovative ideas of teachers and students. A lot of effort has taken for making this magazine. The best thing about this prayaas is that it represents the creativity of BVIT students that we think we all need to reconnect with.

Amidst the busy schedule of a semester, submissions exams & assignments that make you to bang your head on the wall, we tried to lose these tensions and make it capable of, things that we could have been proud of. So this time we have captured and published the talent concealed within our student community. This issue includes achievements, articles, poems, paintings, and lot of things that make us proud. We hope you enjoy reading this issue as much as we have enjoyed making it. We the editorial team is very thankful to our management for giving us an opportunity to create this magazine. Last but not the least we are thankful to all the authors who have sent their articles. We truly hope that the pages that follow will make an interesting read.

Happy Reading!!!!!!!!!!!!!!!!!!

Mrs.Vijaya Chavan

Editorial Committee

Chief Editor	***- Mrs. Vijaya Chavan***
Marathi Section	***- Mrs. Suwarna Nimkarde***
Hindi Section	***- Mrs. Anagha Bade***
English Section	***- Mr. Yuvraj Mane***
Technical Section	***- Mr. Vinod Rathod.***

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Big Data & Hadoop A Huge Starage

Mrs. Vijaya Chavan

ABSTRACT

Big data is a very large volume of structured and unstructured data. An example of big data is petabytes i.e.1,024 terabytes or Exabyte. 1,024 petabytes of data consist of billions to trillions of data of millions of people. Its a process of collecting and processing the huge amount of data. Big companies are using mostly big data for specific surveys. Hadoop is a platform provided that is used for big data. Hadoop stores massive amount of data that have massive power and can process multiple things at a single time. Hadoop Files are called as HDFS. Big data is data that contains large amount in increasing volumes and higher velocity. Hadoop is used to store large amounts of data. Big data consist of very larger, and more complex data sets. These data sets are so large so difficult manage but it is used to solve business problems

INTRODUCTION

Big data includes storing data sets which cannot be stored and used to capture, manage, and process data within a very short time. Large companies are successful in their economy that is totally based on knowledge. Data drives the modern organizations of the world and hence making sense of this data and undo the various patterns and revealing unseen connections within the big sea of data becomes sensitive and a hugely rewards to achieve it.Big data should be correct so that it lead to more positiveand satisfactory decisions resulting in greater effective, cost reduction and reduced risk. Big data consist of 5 V's that are Volume, Velocity and Variety,Veracity,Valuey.Hadoop is a free programming framework that supports the processing of large data sets in a distributed system. Hadoop is an open source software framework which provides huge data storage facility. In hadoop cluster, a number of machines are connected in a network and when a request comes from the client the number of computers or machine will process the data and will provide the output in a very short period of time. Cluster is nothing but group of machines connected in a network. The use of Hadoop makes it possible to run applications on systems with thousands of computers involving thousands of terabytes. Its distributed file system helps in rapid data transfer rates among computers and allows the system to continue process uninterrupted in case of a node failure. Hadoop is providing a platform to the purpose of the Big Data.

5V's in Big Data

1) Volume –Many companies are now collecting data from various sources, including business transactions, social media and from survey. In the past, storing that huge amount of data was very difficult – but new technologies such as hadoop have made it easy to store.

2) Velocity - Data streams is at now unstoppable speed and must be dealt with in a timely manner. RFID tags, smart metering are driving the need to deal with torrents of data in near-real time.

3) Variety - Data is in the form of structured, unstructured, numeric data in traditional databases to unstructured text documents, email, video, audio etc.

4) Data veracity-It is used to check accuracy and truth of a data set . Accuracy means not only quality but also truthfulness of the data sources type, and processing of it. To increase the accuracy it is needed to remove bias, abnormalities or inconsistencies, duplication, and volatility.

5) Value – It is data which is whether structured or unstructured consist of boundless process with endless options.

Big data in Government industry-

Governments, requires very huge amount of data daily because they have to keep track of various records and databases regarding the citizens in the country. All these records requires big data to store all these records.It is also used to store records of political programs.It is used in agriculture field for keeping track of all the land and livestock.To overcome national challenges such as unemployment, terrorism, energy resource exploration and more.Governments are also uses of big data in catching tax evaders.

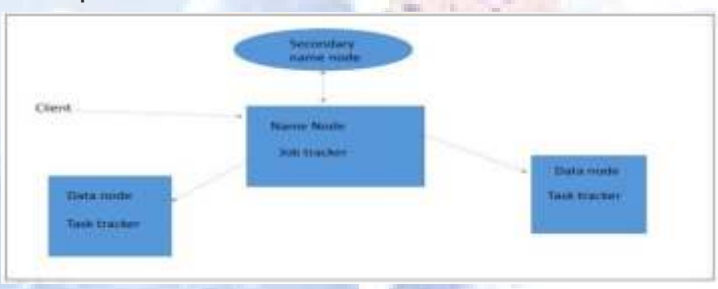
Where Big data is used?

- In Banking Sector
- In Transportation Industry
- In Weather patterns
- In Media and Entertainment industry etc.

Hadoop

Hadoop is used for storing large amount of data across distributed group of servers and then running it from “distributed” analysis applications in each cluster. It’s designed to be strong, in that your Big Data applications will continue to run even when individual servers or clusters fail. And it is also designed to be more efficient, because it doesn’t require your applications to transfer huge amount of data across your network. In hadoop, there are several numbers of client and in hadoop cluster number of machines or computers are connected through a network which process the job given by the client to the hadoop. It is divided in to small parts which is explained in the physical architecture of the hadoop.

Physical Architecture of Hadoop



Components present in Physical Architecture of hadoop

1) Name Node (NN)

i) The job from the client goes to the name node and it's on the name node that accepts the job given by the client.

ii) It is the master of HDFS i.e. Hadoop File System.

iii) It has job tracker which keeps track of files distributed to data nodes.

iv) Name node is the only single point to failure.

If the name node fails then the whole structure is crashed

2) Data Node (DN)

i) The job is given to the data node by the job tracker. Data node will then further pass the job to the task tracker to be performed.

ii) It is the slave of HDFS.

iii) It takes client block address from name node.

iv) For replication purpose it can communicate with other name node.

v) Data node informs local changes/ updates to name node.

vi) Each node in the structure can communicates with each other.

3) Job Tracker (JT)

i) Job tracker divides the job in to number of small parts that are easy to be executed and are passed to the data nodes.

ii) It determines the files to process,

iii) Only one jobtracker per hadoop cluster is allowed.

iv) It runs on a server as a master node of cluster.

4) Task Tracker (TT)

i) Task tracker does the job given by the data node.

ii) There is a single task tracker per slave node.

iii) It may handle multiple taskparallelly.

iv) Individual tasks are assigned by job tracker to task tracker.

v) Job tracker continuously communicates with task tracker and if anytime it fails to reply then it assumes that the task tracker has crashed.

5) Secondary Name Node (SNN)

i) State monitoring is done by SNN.

ii) Every cluster has one SNN.

iii) SNN resides on its own machine.

iv) On that machine or server no other daemon (DN or TT) can work.

v) SNN takes snapshot of HDFS metadata at constant intervals.

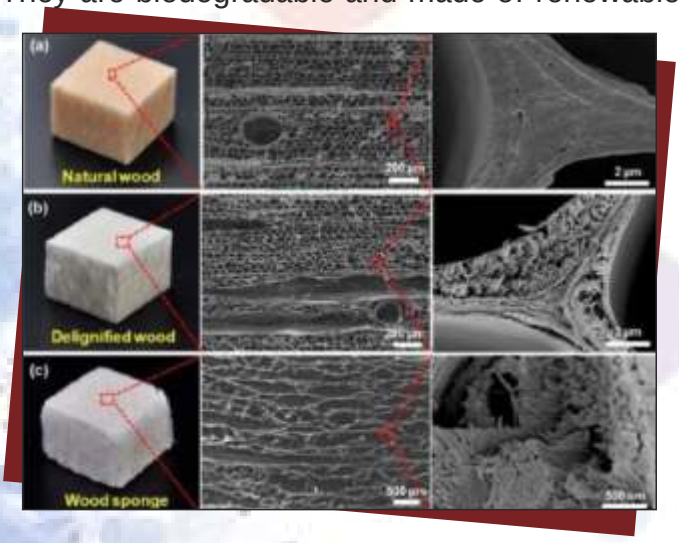
A wood sponge for oil spills.

AAKANKSHA PAL

Oil spills and industrial discharge can contaminate water with greasy substances. Although it's true that oil and water don't mix, separating and recovering each component can still be challenging. Now, researchers have created sponges made from wood that selectively absorb oil, and then can be squeezed out and used again.

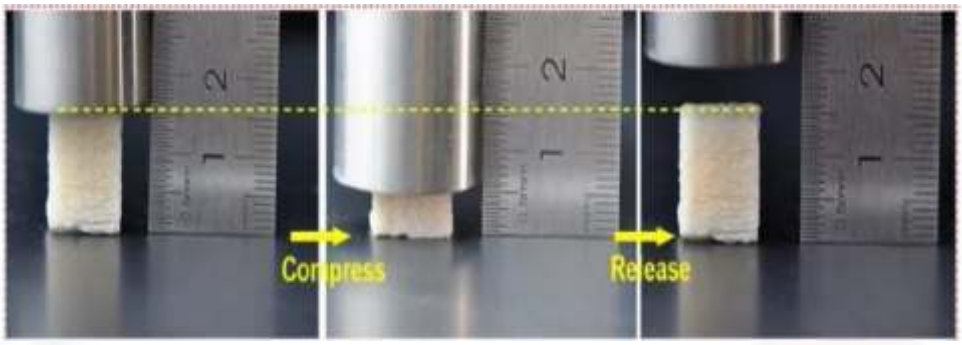
Each year 1.3 millions of oilare spilled into ocean waters, which has devastating effects on local ecosystems and causes contamination that lasts for years. Finding safe, effective, and earth-friendly methods for cleaning spills is of paramount importance to environmentalists and oil companies alike. Chemists and engineers have competed to created materials that are absorbent, reusable, and robust for decades, but few have matched the use of surfactants and separators in clean-ups. These surfactants and separators tend not to be eco-friendly or made of renewable materials.`

Over the years, scientists have developed numerous techniques to clean up oily water, from gravity separation to burning to bioremediation. But many of these methods suffer from limitations, such as low efficiency, secondary pollution and high cost. More recently, researchers have explored 3-D porous materials, such as aerogels or sponges, made from plant-based material such as cellulose found in plant cell walls, based on various building blocks including synthetic polymers, silica or cellulose nanofibers. These materials are highly absorbent, and can easily be modified with the addition of oil-loving (oleophilic) chemical groups. They are biodegradable and made of renewable resources. However, these are often difficult to fabricate, lack mechanical robustness or are made from non degradable materials. when these materials are synthesized from the raw materials, the structure tends to be random, making them less efficient and mechanically unstable. Xiaoqing Wang and colleagues wanted to develop a sponge made from wood—a renewable resource—that would absorb oil and tolerate repeated squeezing without structural failure.



The team made the wood sponge by treating natural balsa wood with chemicals that removed lignin and hemicellulose, leaving behind a cellulose skeleton. They then modified this highly porous structure with a hydrophobic coating that attracted oil, but not water. When placed in a mixture of water and silicone oil, the wood sponge removed all of the red-dyed oil, leaving clean water behind. Depending on the oil tested, the sponge absorbed 16 to 41 times its own weight, which is comparable to or better than many other reported absorbents. In addition, the sponge could endure at least 10

cycles of absorption and squeezing. The researchers incorporated the wood sponge into an oil-collecting device in the lab that continuously separated oils from the water surface.

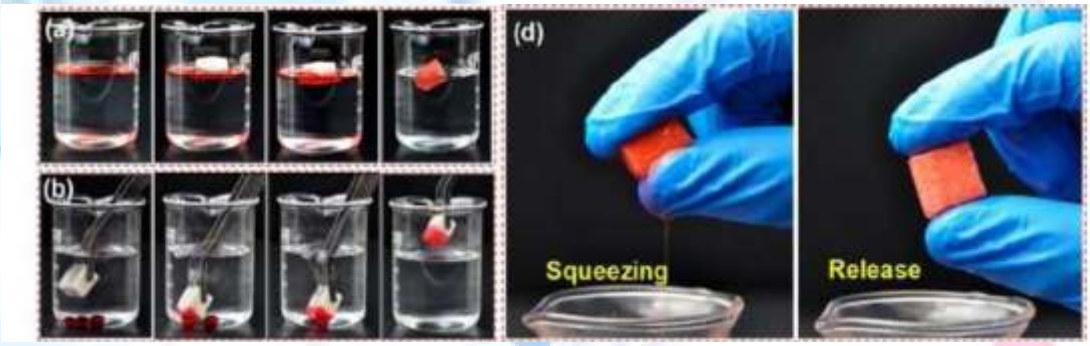


The oil sponge is made directly from balsa wood, bypassing many of the pitfalls of bottom-up aerogel synthesis. In a three-step process, the researchers removed lignin and hemicellulose from the wood and functionalized the remaining sponge to be hydrophobic and oleophilic.

First, a block of wood was delignified with a sodium chlorite solution, which removed the dark-coloured lignin and left behind only the pure white cellulose structure. The researchers used scanning electron microscopy (SEM) to monitor the cellular structure of the wood. After delignification, the wood retained its honeycomb-like structure, and wasn't quite springy enoughto be a proper sponge. When compressed, the wood didn't completely recover the way an idea sponge would.

SEM images of a balsa wood sponge.

(a) Image of the natural wood with no modifications. (b) Image of the wood after delignification. Note the preserved honeycomb-like structure compared to the natural wood, though there are some structural changes on the small scale that make it compressible. (c) Image of the wood sponge after removing the hemicellulose. The structure becomes more columnar than honeycomb-like.



To create a more elastic sponge, the researchers used sodium hydroxide to remove hemicellulose from the structure. Unlike the strong and highly ordered cellulose in wood, hemicellulose is a smaller, weaker sugar that is highly disordered. Removing hemicellulose completely changed the structure of the sponge – instead of a honeycomb, the sponge looked much more like a series of columns, a structure that's known as "laminar" . After being compressed, this new sponge sprung right back to its original height.

Oil absorption test. Researchers soaked red oil from water using the sponge, leaving only water behind.

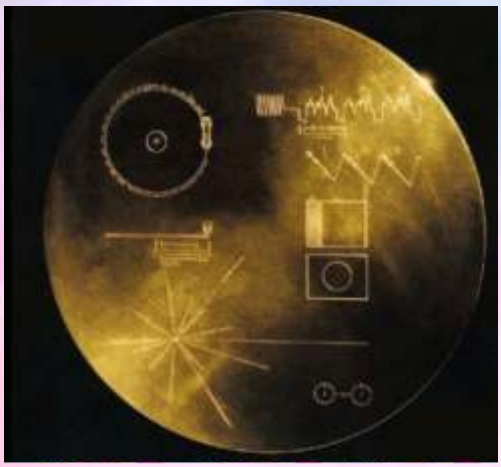
The sponge these researchers presented is promising for large-scale and small-scale use in oil clean-up. It's easy to prepare, effective, resilient, and eco-friendly. And, perhaps most importantly for the Exons and BPs of the world, balsa wood is extremely cheap. We may still live in a world where oil contaminates our waters every day, but things are looking up on the clean-up end. The sponge could endure at least 10 cycles of absorption and squeezing. The researchers incorporated the wood sponge into an oil-collecting device in the lab that continuously separated oils from the water surface.

Voyagers

-By Ajay Eklare (TYCM)

Voyager, in space exploration, either of a pair of robotic U.S. interplanetary probes launched to observe and to transmit information to Earth about the giant planets of the outer solar system and the farthest reaches of the Sun's sphere of influence.

Voyager 2 was launched first, on August 20, 1977; Voyager 1 followed some two weeks later, on September 5. The twin-spacecraft mission took advantage of a rare orbital positioning of Jupiter, Saturn, Uranus, and Neptune that permitted a multiplanet tour with relatively low fuel requirements and flight time. The alignment allowed each spacecraft, following a particular trajectory, to use its fall into a planet's gravitational field to increase its velocity and alter its direction enough to fling it to its next destination. Using this gravity-assist, or slingshot, technique, Voyager 1 swung by Jupiter on March 5, 1979, and then headed for Saturn, which it reached on November 12, 1980. It then adopted a trajectory to take it out of the solar system. Voyager 2 travelled more slowly and on a longer trajectory than its partner. It sped by Jupiter on July 9, 1979, and passed Saturn on August 25, 1981. It then flew past Uranus on January 24, 1986, and Neptune on August 25, 1989, before being hurled toward interstellar space. Voyager 2 is the only spacecraft to have visited the latter two planets.



Voyager Golden Plate

Jupiter

Saturn

Data and photographs collected by the Voyagers' cameras, magnetometers, and other instruments revealed previously unknown details about each of the giant planets and their moons. For example, close-up images from the spacecraft charted Jupiter's complex cloud forms, winds, and storm systems and discovered volcanic activity on its moon Io. Saturn's rings were found to have enigmaticbraids, kinks, and spokes and to be accompanied by myriad "ringlets." At Uranus Voyager 2 discovered a substantial magnetic field around the planet and 10 additional moons. Its flyby of Neptune uncovered three complete rings and six hitherto unknown moons as well as a planetary magnetic field and complex, widely distributed auroras.

Following are some real images that were clicked by the Voyagers:

On February 17, 1998, Voyager 1 overtook the space probe Pioneer 10 (launched 1972) to become the most distant human-made object in space. By 2004 both Voyagers were well beyond the orbit of Pluto. In 2012 the Voyagers became the longest-operating spacecraft, having functioned for 35 years and still periodically transmitting data. On August 25, 2012, Voyager 1 became the first space probe to enter interstellar space when it crossed the heliopause, the outer limit of the Sun's magnetic field and solar wind. Voyager 2 crossed the heliopause on November 5, 2018. The Voyagers were expected to remain operable through 2020. Each craft carried a greeting to any form of extraterrestrial intelligence that might eventually find it. A gold-plated copper phonograph record—accompanied by a cartridge, needle, and symbolic instructions for playing it—contained images and sounds chosen to depict the diversity of life and culture on Earth.

Artificial Intelligence (AI)

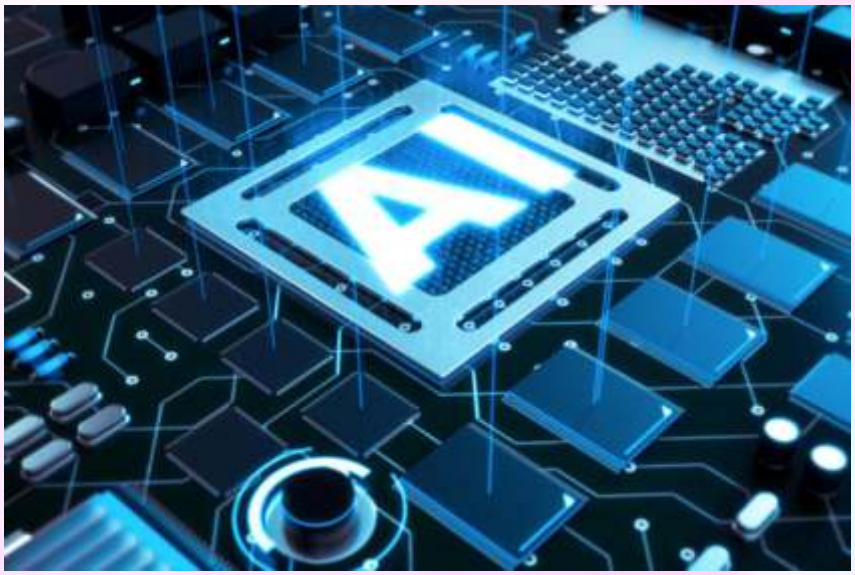
Bobade Rushikesh Hemant (SYIF)

Artificial Intelligence, or AI, has already received a lot of buzz in recent years, but it continues to be a trend to watch because its effects on how we live, work and play are only in the early stages. In addition, other branches of AI have developed, including Machine Learning, which we will go into below. AI refers to computers systems built to mimic human intelligence and perform tasks such as recognition of images, speech or patterns and decision making. AI can do these tasks faster and more accurately than humans.

AI has been around since 1956 is already widely used. In fact, five out of six Americans use AI services in one form or another every day, including navigation apps, streaming services, smartphone personal assistants, ride-sharing apps, home personal assistants, and smart home devices. In addition to consumer use, AI is used to schedule trains, assess business risk, predict maintenance, and improve energy efficiency, among many other money-saving tasks.AI has been around since 1956 is already widely used. In fact, five out of six Americans use AI services in one form or another every day, including navigation apps, streaming services, smartphone personal assistants, ride-sharing apps, home personal assistants, and smart home devices. In addition to consumer use, AI is used to schedule trains, assess business risk, predict maintenance, and improve energy efficiency, among many other money-saving tasks.

AI is one part of what we refer to broadly as automation, and automation is a hot topic because of potential job loss. Experts say automation will eliminate 73 million more jobs by 2030. However, automation is creating jobs as well as eliminating them, especially in the field of AI: Pundits predict that jobs in AI will number 23 million by 2020. Jobs will be created in development, programming, testing, support and maintenance, to name a few. Artificial Intelligence architect is one such job. Some say it will soon rival data scientist in need for skilled professionals.

To learn more about potential jobs in AI, read about building a career in AI or why you should earn an AI certification.



Quote

"A computer will do what you tell it to do, but that may be much different from what you had in mind.

"Computers are like air conditioners. They work fine until you start opening windows.

MOST DANGEROUS CHEMICAL

CYCLOPENTAINEYL NICKEL NITROSYL :-

Cyclopentadienyl nickel nitrosyl is a highly toxic organonickel chemical. In its pure form, it is a volatile liquid with a blood-red color. It was discovered by a team at The International Nickel Company. The molecular formula is (C5H5) NiNO. It can be prepared by treating nickelocene with nitric acid.

Fig. Cyclopentaineyl Nickel Nitrosyl

Brady Haran, a video journalist from the University of Nottingham, asked some team members from the University to recall the most dangerous chemical they have handled.One tells of a time earlier in his life when he was handling Cyclopentadienyl nickel nitrosyl((C5H5)NiNO), a bloodred liquid that was said to be one of the most poisonous chemicals in the world. He was holding a glass vile filled with the liquid and he dropped it on the floor. The vile broke but he was able to pick it up before any spilled out. Another man says that the element he's had to handle with the most care is tert-Butyllithium (CH3)3CLi). It's used as a reagent in synthetic chemistry. If you have a concentrated solution of tert-Butyllithium in a syringe and you squirt it, it bursts into flames once it touches the atmosphere.

Finally, a man tells about the most dangerous situation he's found himself in while handling a compound. He had a 250mL ampoule – a completely sealed, glass vile – filled with Sulfur trioxide(SO3) and he had to open the bottle by hammering off the top, and then poor the substance into a bottle that could be opened and closed. He hit off the top and as soon as the sulfur trioxide hits the air it turns into sulfuric acid, creating massive clouds to form around him while he's pouring the compound. The sulfuric acid burned through the outer layer of his gloves, and blackened the second layer. Fortunately, the bottom layer stayed in-tact.

Ethical Hacking

By: Boni Patel (SYCM)

Defination:

Ethical hacking refers to the act of locating weaknesses of computer and information systems by duplicating the intent and actions of malicious hackers. Ethical hacking is also known as penetration testing. An ethical hacker is a security professional skill for defensive purposes on behalf of information systems.

The Ethical Hacking Process:

1.Planning: Planning is essential for having a success project.There are a large number of external factors that need to plan to carry out an ethical hack. These factors include security policies, culture, laws and regulations, and industry requirements. Each of these factors play an role in the decision making process when it comes to ethical hacking.

2.Enumeration: Reconnaissance can include social engineering, hacking phones and networks.The search for information is limited only by the extremes at which the organization and ethical hacker are willing to go in order to recover the information. This can be as simple newsgroups on the Internet in search of disgruntled employees divulging secret information to trash and find receipts or letters.

3.Exploitation: A significant amount of time is spent for planning and evaluated an ethical hack.This planning must eventually lead to some form of attack. The exploitation of a system can be as easy as running a tool or as a series of complex steps that must be executed in a particular way in order to gain access.The exploitation process is broken into a set of subtasks which have many steps or a single step in performing the attack.

4.Integration: It is essential that there is some means of testing the results for productive. The deliverable is combined with materials, such as analysis, security policy, test results, and information associated with a security program to enhance mitigation and develop remedies and patches.

There are three distinguishing:

- Mitigation
- Defense:
- Incident Management

Required Skills: Ethical hacker is required to possess aarrangement of computer skills. It is not feasible for each ethical hacker to be expert is every field and ethical hacking whose members have complementing skills are created to provide a team with possessing the complete skill and set required for ethical hacker.

Ethical issues: Ethical hacking is that the wrong people may be taught very dangerous skills. Hacking skills were traditionally acquired by many hours of practice .University programs and commercial training classes are offering a new way to aspire hackers to learn the penetrate systems. Teaching students how to attack systems without providing ethical training may be teaching criminals and terrorists how to pursue their illegal activities to hack the system.

Reinforcement Learning

Lav Sharma TYCM

Reinforcement learning is used to automatically determine the ideal behavior of a machine with the help of machine learning algorithms to maximize the performance of the machine. Explicit goals are not given to the algorithm. They have to learn this optimal goal by trial and error .think of game contra in which the movement of the player which is done by clicking the buttons that decide the result of the optimal gameplay, by pressing the button the error occurs and the reward are given accordingly. A formula is used to determine the reward of the machine and according to it; the rewards are given from which the machine learns. The rewards can be positive or they can be negative and on the basis of rewards, the machine's accuracy is denoted.

Reinforcement learning is the base of artificial intelligence from which the machine learns and is inspired by psychology and it tells how the software agents take actions in an environment so as to maximize the rewards and collect it. The problem is studied in many different disciplines such as game theory, information theory, and many others algorithm. In reinforcement learning, the machine gets positive or negative rewards. In this, the machine should take positive and negative rewards. Through which the machine learns and the machine is trained accordingly. The machine should also take negative rewards and it should know what he is doing wrong. The rewards are generated through a formula. The main difference is that the classical dynamic programming methods and reinforcement learning program and algorithm are that the occurring does not assume the exact knowledge of the mathematical model of the MDP and their target is large MDPs where the exact methods are not capable of being carried out. Reinforcement learning is different from standard learning as they learn from positive and negative rewards pairs that do not show, and some sub-optimal actions are not externally corrected. Instead of sub-optimal actions, it focuses on the performance that involves finding the balance between not- territory and of current knowledge. This exploration is a trade-off that has been mostly studied and is then solved from multi-armed problems and in finite MDPS.

Components in Reinforcement Learning :

1. Agent - Agent is machine that learns from the close interaction with the environment that it senses the state in which it is in and takes the action and which causes the environment to change. There are basically three components of Agent in Reinforcement Learning:

I) Policy

ii) Value Function

iii) Model

I) Policy - Say, you are looking for a short way and you have 2 options at a particular time, left or right. Since, you don't have any idea which way to do, you will assign a random probability to each direction. This is known as Stochastic Policy as for every decision you have the probability given the current state. Over experience your agent will learn and will go for the option that gives higher probability of success. $\Pi(a|s) = P[A=a \mid S=s]$ So, it is defined as the probability of taking an action (a) on a particular current state (s). 'π' refers to the policy chosen at the time of decision. On the other hand say if you are taking the decision by doing proper procedure, you would be knowing that which direction to choose at any point of time. So, it is basically a function that tracks the state to actions. This is known as Deterministic Policy.

ii) Value Function - Value Function defines how good it is to be in a particular state. Considering the previous example. This time you have a rough idea about the two ways i.e. you now know the obstacles that will come in each way and the estimate time required in each path. So, you to calculate which path will for practical for you getting both heavy rewards and obstacles. This is known as Value Function

iii) Model - Model is the agent's representation of the environment. We again consider the example of two roads (left and right). You are standing of the crossing. You can see a little bit of the path ahead in each road. For example, the road to the left does not have proper lighting and also, the roads are not quite good. While the other road has proper lighting and the roads are also concrete road. From that point of view you will predict the road ahead and accordingly you will decide which path to go for. So, for our agent it will predict the dynamic environment with the data he has and accordingly it will choose the path. It is known as Transition model.

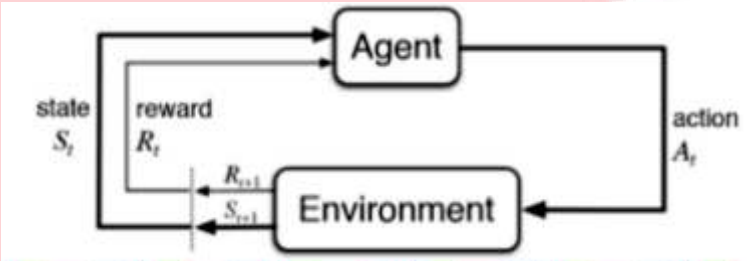
2. Environment - Environment is nothing but the surrounding in which the agent moves or perform its task i.e. it is the physical world in which the agent operates. Here the agent performs its task and gain reward. The environment is the place where we can find out whether our agent is getting positive reward of negative reward. The environment consists of number of obstacles designed for the agent to perform its task. Environment plays an important role in reinforcement learning. Without environment the reinforcement learning is incomplete.

3. Reward - The feedback sends by the environment to determine the last action. In reinforcement learning the rewards are received on the basis of the agent's behavior in the environment and the state that the agent is in. If the agent is in the state in which he should not be then it will receive a negative reward but if the agent is the state in which it should be then it will receive a positive reward. The amount of positive or negative reward a agent receives according to it the accuracy of the agent is decided. The reward is decided on the basis of the value of gamma. While the agent is in testing process gamma's value is given 0, if the agent is in perfect state the value of gamma given is 1. Even if the value we are not sure about the agent's action the gamma is kept between 0 and 1. The positive reward indicates that the agent is learning properly and the task given to agents is being done properly. If the agent has more negative reward then the positive reward then the agent is not working properly. So to make it work properly we have to make some changes in the agent's program.

4. State - State is something that the machine it is in. For example, a car is halted at the signal. Currently the signal is red so the car will stop. Stop is the current state of the car which it is in and when the signal turns green the state is changed and the car should move now. The change of state should be done which will result in some action taken by the car.

5. Action - Action is taken when state changes. Considering the above example, when the signal turns red the state is stop and car stops. The action taken by the car is to stop and when the signal turns green the car should move and the action taken is to move. When the car moves it will receive a positive reward +1 and if doesn't it will receive a negative reward -1. This is how an agent learns from the action.

Working of reinforcement learning with the help of diagram:



$$Vp(s) = Ep[Rt + yRt+1 + y\,2Rt+2 + \ldots \mid St = s]$$

Here,'s' is our current state,'p' is the policy that we use to define our behavior. In the situation above,'p' is the behavior of being unwilling, i.e., we got to the current state by being unwilling to do a work. 'R' is the reward that we will get for travelling to a state. 'y' is the discount factor which helps us weight the impact of future rewards. So, basically the value of being in a state is the sum of the present reward we are getting for being in that state and the future rewards that we will get if we take different actions on a particular state. We are not thinking about the future award as the future rewards as we cannot predict the future rewards. Since, it is stochastic model we are not sure if we will actually get those rewards or not.

Arduino Based Women's Security System

Manoj. M. Gharge, TYCM

Nowadays women are facing many problems like rape, molestation, kidnapping etc. There are uniquely designed systems which will help to reduce crime rates against women. It has been prioritized to give security to women especially to the women in urban areas as they can face problems while travelling the system is not so expensive thus many women can benefit themselves.When women are travelling or doing any outdoor activities, and if unfortunately they go through these problems. And to avoid these crimes to be faced they pronounce or rather say speak keywords which will give a signal to android but this can also give suspicion to the criminal and then he/she will throw victim's android.

A. Challenges faced By Women: The world is becoming less safer for women as they have to deal with major problems like sexual harassment, domestic violence, rape etc. Rapists and molesters still continue to commit such crimes even though in presence of strict laws and armed forces. The crimes are increasing in India as it was 195,856 in year 2008 and went up to 244,270 in 2012. Not only India but the most developed country on Earth also faces these problems in America 232,960 women were allegedly raped or sexually assaulted in the year 2006.

B. Solution with the Help of Technology: Many apps have been developed by developers to solve these problems but dueto lack of features these problems are stillunsolved and our eyes can read the headline of newspaper saying "Rape." When women are travelling or doing any outdoor activities and if unfortunately they go through these Problems and to avoid these crimes women can use this system and reduce their problems. Ensures the safety of women as it sends the location of the woman also it does sendthe photo of the criminal. Also in India 30% of women can access the internet easily.

Block Diagram

In this system there are many components like LEDS, buzzer, shock generator etc. When a woman finds herself in a wrong situation she will instruct the machine so that it can send messages to known five people with her location and the message is immediately sent without any problems. The hardware components are maintained so that there will not be an error also there is a power supply present in it a battery of high quality has been used this system will easily help a woman out to escape from this dangerous situation as it will smartly give GPS means location of a woman and then any known ones of the woman can rush at the location and help her.

Merits

- Captured images and video act as strong evidence if they are clear enough.
- Puts mobile phone into vibration mode automatically.
- Date and time along with mobile number is extracted and noted.
- Basic information of nearby devices is extracted and can be used in healthy manner as per necessity.

Demerits

- Android smartphone must be data and GPS enabled (better internet connection is expected) throughout the process.
- If speech recognition fails, the entire system becomes helpless.
- Recipient's data connection also matters.

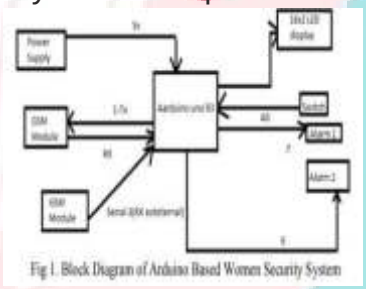


Fig 1. Block Diagram of Arduino Based Women Security System

FUTURE SCOPE

As the main aim in the world is to ensure women's security so by this model we can achieve our aim also slowly it would reach the rural areas and the women in can benefit themselves at a low price and women can leave their houses without any worries. This system can be more advanced by adding calling feature also the location can also be send to the nearest police station. Images can be clicked in the advanced system.

Internet of Things (IoT)

-Nikhil Sawant & Navin Mourya (TYCM2)

Definition

The internet of things, or IoT, is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. A thing in the internet of things can be a person with a heart monitor implant, a farm animal with a biochip transponder, an automobile that has built-in sensors to alert the driver when tire pressure is low or any other natural or man-made object that can be assigned an IP address and is able to transfer data over a network. Increasingly, organizations in a variety of industries are using IoT to operate more efficiently, better understand customers to deliver enhanced customer service, improve decision-making and increase the value of the business.

History of IoT

Kevin Ashton, co-founder of the Auto-ID Center at MIT, first mentioned the internet of things in a presentation he made to Procter & Gamble (P&G) in 1999. Wanting to bring radio frequency ID (RFID) to the attention of P&G's senior management, Ashton called his presentation "Internet of Things" to incorporate the cool new trend of 1999: the internet. MIT professor Neil Gershenfeld's book, When Things Start to think, also appearing in 1999, didn't use the exact term but provided a clear vision of where IoT was headed.IoT has evolved from the convergence of wireless technologies, micro electromechanical systems (MEMS), micro services and the internet. The convergence has helped tear down the silos between operational technologies (OT) and information technology (IT), enabling unstructured machine-generated data to be analyzed for insights to drive improvements.Although Ashton's was the first mention of the internet of things, the idea of connected devices has been around since the 1970s, under the monikers embedded internet and pervasive computing.IoT evolved from machine-to-machine (M2M) communication, i.e., machines connecting to each other via a network without human interaction. M2M refers to connecting a device to the cloud, managing it and collecting data.Taking M2M to the next level, IoT is a sensor network of billions of smart devices that connect people, systems and other applications to collect and share data. As its foundation, M2M offers the connectivity that enables IoT.

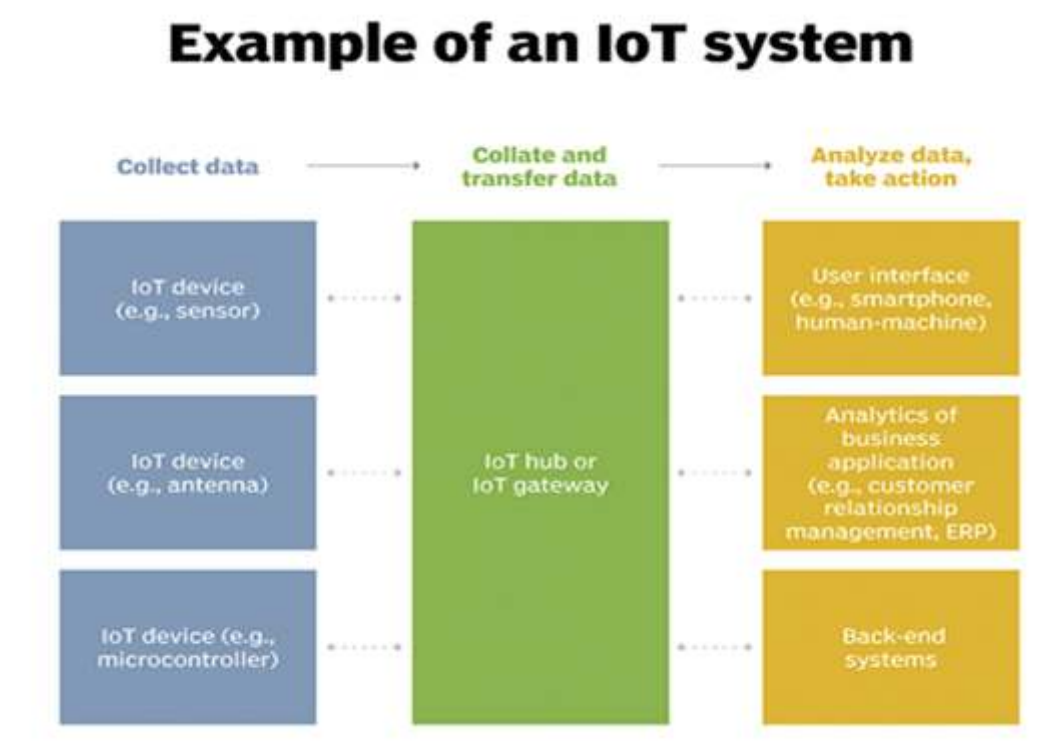
How IoT works

An IoT ecosystem consists of web-enabled smart devices that use embedded processors, sensors and communication hardware to collect, send and act on data they acquire from their environments. IoT devices share the sensor data they collect by connecting to an IoT gateway or other edge device where data is either sent to the cloud to be analyzed or analyzed locally. Sometimes, these devices communicate with other related devices and act on the information they get from one another. The devices do most of the work without human intervention, although people can interact with the devices -- for instance, to set them up,

give them instructions or access the data.The connectivity, networking and communication protocols used with these web-enabled devices largely depend on the specific IoT applications deployed.

Benefits of IoT

- monitor their overall business processes
- improve the customer experience
- save time and money
- enhance employee productivity
- integrate and adapt business models
- make better business decisions
- Generate more revenue.



The future of IoT

There is no shortage of IoT market estimations. For example:

- Bain & Company expects annual IoT revenue of hardware and software to exceed $450 billion by 2020.
- McKinsey & Company estimates IoT will have an $11.1 trillion impact by 2025.
- IHS Markit believes the number of connected IoT devices will increase 12% annually to reach 125 billion in 2030.
- Gartner assesses that 20.8 billion connected things will be in use by 2020, with total spend on IoT devices and services to reach $3.7 trillion in 2018.

Emerging Technologies: Gesture Recognition & Applications

Pranav Macha, Tanishka Pandey - TYIS

Abstract— In recent years, gesture recognition has been attracting a great deal of attention as a natural human-machine interface. By the modeling of hand shapes, this new technology enables speedy recognition of gestures using a small amount of memory. The developments to date have enabled such functions as face detection, face recognition, smile degree estimation, estimation of gaze direction, detection of the degree of mouth or eye opening, and estimation of age and gender.

Natural User Interface (NUI) let users quickly immerse in applications and master control with minimum learning in applications like autonomous drone control and in-car infotainment navigation, One key contributor to NUI is touch-less gesture recognition which allows manipulating virtual objects in a way similar to physical ones. It completely removes the dependency on any mechanical devices like a keyboard or mouse.

Key words — Hand Gesture, Facial Gestures, Image Processing, Human Computer Interaction, Gesture Recognition, Maths-based Algorithms, Cameras, Complex Computing

I. INTRODUCTION

A gesture is a form of non-verbal or non-vocal communication to convey a particular message through a visible bodily action either in place of, or in conjunction with, speech. Gestures include movement of the hands, face, or other parts of the body. Gestures are an important aspect of human interaction, both interpersonally and in the context of man-machine interfaces. For example, military air marshals use hand and body gestures to direct flight operations aboard aircraft carriers. Or a traffic policeman directs traffic with hand gestures and blowing whistle. There are many types of gestures, namely iconic, deictic/pointing, metaphoric or beat gestures.

Gesture Recognition Technology (GRT)

Gesture recognition is the ability of a device to identify and respond to the different gestures of an individual. Most gesture recognition technology can be 2D-based or 3D-based, working with the help of a camera-enabled device, which is placed in front of the individual. The camera-enabled device beams an invisible infrared light on the individual, which is reflected back to the camera and onto a gesture recognition Integrated Chip (IC). Simply put, it is interfacing with computers using gestures of the human body, typically hand movements. The primary goal of gesture recognition is to create a system which can identify specific human gestures and use them to convey information or for device control.

Touchless User Interface (TUI) is an emerging type of technology in relation to gesture control. TUI is the process of commanding the computer via body motion and gestures without touching a keyboard, mouse, or screen. There are a number of devices utilizing this type of interface such as, smartphones, laptops, games, and television. Although touchless technology is mostly seen in gaming software, interest is now spreading to other fields including, automotive and healthcare industries.

II. SYSTEMARCHITECTURE

Fundamentally, the system architecture revolves around input devices, cameras, sensors and processor to generate the desired output.

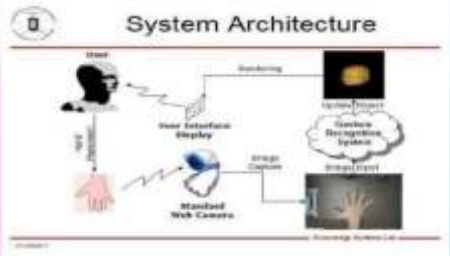


Figure 1 Gesture recognition system architecture

(Courtesy : http://techfacts25.blogspot.com)

Figure1 shows gesture recognition system architecture. Camera reads the movements of the human body and communicates the data to a computer that uses the gestures as input to control devices or applications.

III. TYPES OF GESTURE RECOGNITION TECHNOLOGY

Gesture Recognition Technology is evolving rapidly.

1. Hand Gesture Recognition Technology that allows operations of complex machines using only a series of fingers and hand movements, eliminating the need of physical contact between user and the device.

2. Facial Gesture Recognition Technology that allows creating an effective non-contact interface between user and their devices by recognizing their face. The goal of Facial Gesture Recognition is to make machine effectively understand human emotions, regardless of the countless physical differences between individuals. For example, most cameras on mobile phones detect the user's smile to automatically click a picture.

3. Sign Language Recognition Technology, where certain types of gesture recognition software can transcribe the symbols represented through sign language into text. Effective sign language recognition can help the deaf people to communicate with both other people as well as the machine.

IV. INPUT DEVICES FOR GESTURES

The ability to track a person's movements and determine what gestures they may be performing can be achieved through various tools.

1. Depth-aware cameras: Using specialized cameras such as time-of-flight cameras, one can generate a depth map of what is being seen through the camera at a short range, and use this data to approximate a 3D representation of what is being seen.

2. Stereo cameras: Using two cameras whose relations to one another are known, a 3D representation can be approximated by the output of the cameras.

3. Controller-based gestures: These controllers act as an extension of the body so that when gestures are performed, some of their motion can be conveniently captured by software.

4. Single camera: A normal camera can be used for gesture recognition where the resources/ environment would not be convenient for other forms of image-based recognition.

V. ALGORITHMS USEDIN GESTURE RECOGNITION TECHNOLOGY

1. 3D model-based algorithms: Handgesture recognition system of three phases:feature extraction, training, and recognition. However, this method is that is very computational intensive, and systems for realtime analysis are still to be developed.

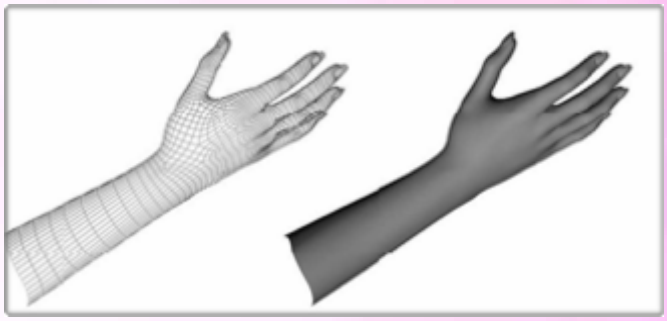


Figure 2a. Real hand interpreted as 3D mesh version

(Courtesy : https://en.wikipedia.org/wiki/Gesture_recognition)

2. Skeletal-based algorithms: This algorithm uses a simplified version of joint angle parameters along with segment lengths instead of intensive processing 3D models. The analysis here is done using the position and orientation of these segments and the relation between each one of them.

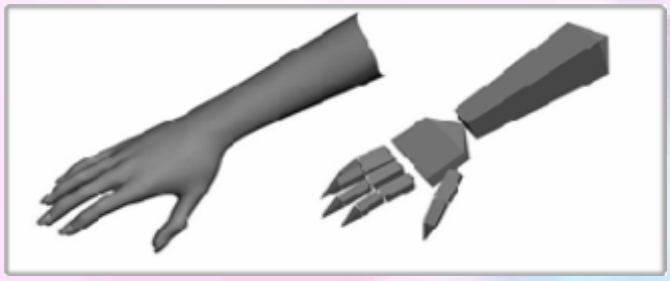


Fig2b. Skeletal version (right) effectively modelling the hand (left).

(Courtesy : https://en.wikipedia.org/wiki/Gesture_recognition)

3. Appearance-based models: These models derive the parameters directly from the images or videos using a template database. Such template-based models depend on interpolation of average shape from point sets and point variability parameters. Appearance-based models are mostly used for hand-tracking.

Figure2c.Binary silhouette (or) contour images

(Courtesy:https://en.wikipedia.org/wiki/Gesture_recognition)

VI. APPLICATIONS OFGESTURE RECOGNITION TECHNOLOGY

Fundamentally, the system architecture revolves around input devices, cameras, sensors and processor to generate the desired output.

1. Virtual Controllers

For systems where the act of finding a physical controller could require too much time, gestures can be used as an alternative control mechanism.

2. Remote Controllers

Through the use of gesture recognition, remote control with the movement of hand of various devices is possible

3. Immersive Game Technology

Video game consoles such as Microsoft X-box use kinect sensors, often the user are the controller and have to perform physical movements that they desire to command their character in the game.

4. Aid to Physically Challenged

Machine based wheelchairs are coming with gesture based system. The movement of the hand will act as a controller for direction and speed.

VII. LATEST INNOVATIONSIN GESTURE TECHNOLOGIES

Fundamentally, the system architecture revolves around input devices, cameras, sensors and processor to generate the desired output.

A. THE SIXTHSENSE TECHNOLOGY

1. The SixthSense prototype comprises a pocket projector, a mirror and a camera contained in a pendant like, wearable device. Both the projector and the camera are connected to a mobile computing device in the user's pocket.

2. The projector projects visual information enabling surfaces, walls and physical objects around us to be used as interfaces; while the camera recognizes and tracks user's hand gestures and physical objects using computer-vision based techniques.

3. The software program processes the video stream data captured by the camera and tracks the locations of the colored markers at the tips of the user's fingers. Figure 3 shows the basic working of sixth sense technology.

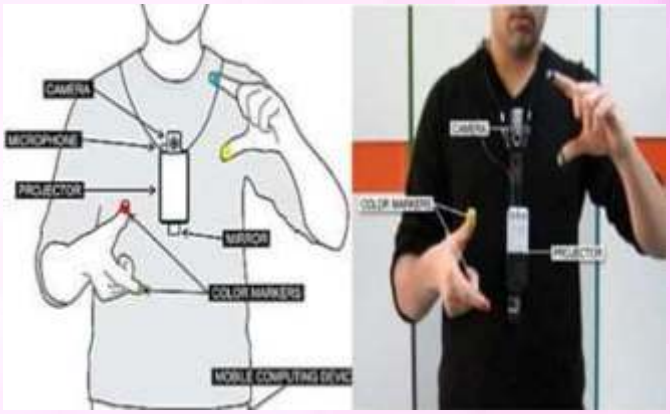


Figure 3. Sixth sense technology

(Courtesy : http://www.quikrpost.com/4598/sixth-sense-technology)

Potential Applications of Sixth sense Technology

1. A map application that lets the user navigate a map displayed on a nearby surface using hand gestures to zoom and pan

2. The drawing application lets the user draw on any surface by tracking the fingertip movements of the user's index finger.

3. Sixth Sense also implements Augmented reality; projecting information onto objects the

user interacts with. The system recognizes a user's freehand gestures as well as icons/symbols drawn in the air with the index finger.

4. Drawing a magnifying glass symbol takes the user to the map application while an '@' symbol lets the user check his mail. § The gesture of drawing a circle on the user's wrist projects an analog watch

B. INTEL'S GESTURE TECHNOLOGY

Gesture Recognition Technology from Intel labs allows users to interact with and control devices using simple hand gestures. Whether it gesture like turning an "air knob" to turn up the volume on the TV or waving hand would answer a phone that's in your pocket. These gestures and interface technology can control gaming and entertainment. It could also reduce the need for specialized DSPs and GPUs.

C. MICROSOFT'S GESTURE TECHNOLOGY

Elliptic Labs software suite delivers gesture and proximity functions by re-using the existing earpiece and microphone to send ultrasound signals through the air from speakers integrated in smartphones. These signals bounce against a hand/object/head and are recorded by microphones. In this way, GRT recognizes the hand gestures and uses them to move objects on a screen, similarly to the way bats use echolocation to navigate. Figure 4 shows Intel's depth aware camera, which offers accurate depth perception when the object is moving or the device is in motion, covering more field of view with minimum blind spots.

Figure 4.Microsoft's Depth –aware camera.

(Courtesy:image-sensors-world.blogspot.com/2012/09/)

D. ELLIPTIC LABS' GESTURE TECHNOLOGY

The company aim to explore the use of touchless interaction within surgical settings, allowing images to be viewed, controlled and manipulated without contact through the use of camera-based gesture recognition technology.

There are several companies working on touchless technologies such as allowing messages and texts to be written in the air or allowing navigating of a screen without physically touching the device via eye-movement or sensing motion. Figure 5 shows the basic working of Elliptic labs' gesture technology using ultrasound waves. The speaker transmits a sound wave and a microphone receives an echo.

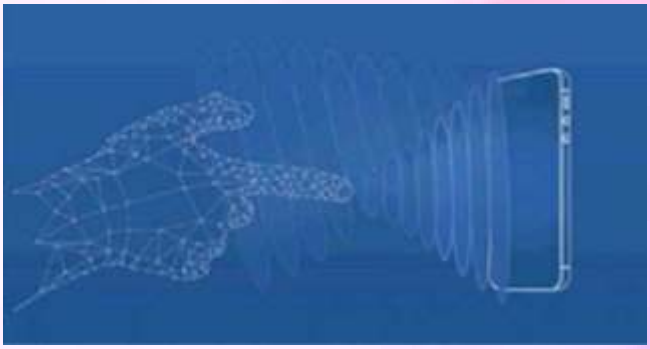


Figure 5. Working of Elliptic Labs' gesture Technology

(Courtesy:https://medium.com/@Nordic_AI/)

5G - Future of Telecommunication

Prayag Patil (TYCM2) & Rahul Patil (TYCM2)

5G preparation. Though tech timelines rarely play out the way we think, it's possible that we could have a 5G network in place—with 5G phones—by the end of 2019. 5G internet has the potential to be almost 10 times faster than 4G, making it even better than most home internet services. Accordingly, it has the potential to revolutionize how consumers use internet and how developers think about apps and streaming content. 2019, then, is going to be a year of massive preparation for engineers, developers, and consumers, as they gear up for a new generation of internet.

Fifth-generation cellular networks, or 5G for short, is a set of technical ground rules which define the workings of a cellular network. This includes the radio frequency used and how things like computer chips and antennas handle radio signals and exchange data.Engineers from various companies have been meeting to agree on new specifications for cell networks since the first cellphones were demonstrated in the 1970s.

But it will not affect your smartphones at first. Other devices like industrial robots, security cameras, drones and cars that send traffic data to one another will all see the impact of 5G first. It's safe to say 5G will be noticeably faster than our current 4G, but just how fast will that be?Qualcomm, the wireless chip maker, told the New York Times it had shown peak 5G download speeds of 4.5 gigabits, but expect initial median speeds of about 1.4 gigabits. That is about 20 times faster than the current 4G experience.Users will especially notice the 5G speeds in higher-quality streaming video.Qualcomm says downloading a standard movie at the median speed will take 17 seconds with 5G, as opposed to six minutes to download for 4G.It is exiciting news considering 4G was considerably more faster than 3G technology .

But what about 5G in India?Is India 5g ready yet?There talks of the country moving towards 5G network by 2020, efforts of companies trying to monetise their assets to strengthen their balance sheets and fulfilling their debt obligations also made headlines during the year.

Considering all the hype surrounding 5g technology it is important to discuss the affects it will have on our daily lives. It certainly has the potential to change not just the telecommunications environment, but every aspect of our daily lives.An article In the "Guardian " newspaper stated and qoute" "it will create waves of innovation that disrupt every industry".

However this doesn't mean that we need to eagerly wait until then to start to enjoy the improved network performance. The network infrastructure is already being improved. Massive MIMO and Active Antennae technology and new standards have been released for 4G LTE Pro (release 13 &14). It is projected that by 2019 4G LTE Pro will show very similar performance to 5G's capabilities.The view of the telecommunication industry is that ahead of deployment in 2019, it is now the time for organisations to begin to investigate how 5G could improve existing operational models, so businesses are '5G Ready' and ready to benefit from the new and exciting things that are possible.

File Fragmentation and Dual Homomorphism Encryption Technique For Security Public Cloud

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BVIT,Navi Mumbai.

Abstract: Outsourcing data which deploy over public cloud to an untouchable definitive control, as is done in circulated processing, offers climb to security concerns. The data exchange off might happen because of attacks by various customers and center points within the cloud. Thus, high endeavors to set up wellbeing are required to secure data within the cloud. Then again, the used security strategy ought to in like manner consider the headway of the data recuperation time. Proposed system performs fragmentation and replication of input data and loads it at each randomly selected data center. Each of the centers stores only a unitary part of a data record that ensures that even in the case of a productive strike, no imperative information is revealed to the attacker. Peer-to-Peer computing, highly available storage services, this P2P storage cloud storage can be formed to offer lowering the economic cost by increases as well as decreases the storage space of when participating users. Must been two cloud severs and users have trusted outside domain of data owners, P2P storage cloud brings becomes new challenges for data security and access control mechanism when that time data owners store sensitive information for sharing in the trusted domain. Moreover, there are number mechanisms for access control in P2P storage cloud. To this issue, we design a dual cipher text-policy attribute-based homomorphism encryption (ABHE) scheme.

Keywords: P2P, Cloud, DROPS, Nodes

1. INTRODUCTION

Cloud computing and Peer-to-Peer (P2P) computing there are two of the node of internet peer to peer both of which are a form of distributed systems. Cloud computing is historically storage data computer parameter is needed and provided as services over the Internet by cloud service providers. The multiple resources could be software, hardware, data storage, access with broadband internet access, users are able to acquire these services for application. Huge of data centers' consisting thousands of server application cloud computing processing and resources are centralized in data-canter. P2P computing is a highly does not centralized decentralized cloud computing paradigm application. That resources of large number participating users to support efficient data according to the does not captained centralized application.

There are important differences between the two paradigms: the cloud sends multiple accesses the resources. In where P2P resources are free when that time cost was reduces. Indicates multiple related topics and needed projects term have proposed P2P storage cloud systems. To combine the application that of both term, multiple access resources services based on the cloud while lowering the cost by pooling the storage space of all participating users to provide a substantially storage. This applications include backup and storage systems content distribution music or video streaming and online gaming In recent years, there are several actually, this times using pair connected computer in cloud system. Companies such as security issues have been the top concerns in cloud computing. The advantages cloud data can be efficiently shared among a large number of users and the public verifier is able to handle the large number of auditing tasks simultaneously and efficiently. When users store important data in the cloud, maintaining confidentiality and privacy of the data to create one challenge Furthermore, users (i.e. data owners) publish data in the cloud and need terms of which users (i.e.

data consumers) have the access privilege to which types of data. To achieve secure and flexible data sharing among a large number of users in P2P storage cloud, the security requirements are usually more complex. One more advantageIt follows protocol and does not pollute data integrity actively as a malicious adversary. The data owners need to keep data confidential against cloud servers and all the users two computers connected in peer that is big space create cloud in peer. For example, in a real-world application scenario, the data owners can be individual users and organization they may be publish their various articles, books and magazines online through P2P cloud.

A cloud must ensure throughput, enduring quality, and security. A key component choosing the throughput of a cloud that stores data is the data recuperation time. In broad scale structures, the issues of data immovable quality, data availability, and response time are overseen data replication systems. In any case, putting duplicates data over different center points constructs the attack surface for that data. For example, securing m duplicates of an archive in a cloud as opposed to one generation constructs the probability of a center point Holding record to be picked as ambush loss, from 1 n to m n, where n is the total number of centers. From the above talk, we can find that both security and execution are fundamental for the forefront limitless scale structures, for instance, fogs. Thusly, in this paper, we all things considered methodology the issue of security and execution as a sheltered data replication issue. We present Division and Replication of Data in the Cloud for Optimal Performance and Security (DROPS) that judicially parts customer records into pieces and rehashes them at fundamental zones within the cloud. The division of an archive into parts is performed considering a given customer criteria such that the individual segments don't contain any imperative information.

Each of the cloud center points (we use the term center point to identify with handling, stockpiling, physical, and virtual machines) contains an unmistakable segment to assemble the data security. A productive attack on a single center must not reveal the territories of various pieces within the cloud. To keep an attacker unverifiable about the ranges of the record parts and to empower upgrade the security, we select the centers in a way that they are not adjacent and are at certain detachment from each other. The center point segment is ensured by the strategy for the T-shading. To improve data recuperation time, the center points are picked in light of the centrality measures that ensure an upgraded access time. To support improve the recuperation time, we judicially rehash parts over the centers that make the most vital read/form requests. The decision of the center points is performed in two stages. In the first stage, the center points are decided for the beginning circumstance of the segments considering the centrality measures. In the second stage, the center points are decided for replication.

3. PROPOSED SYSTEM

Above figure shows proposed system architecture, in which data owner upload data to cloud server, the cloud server performs data fragmentation, replication and data encryption and for dual encryption the re-encryption server is included which perform 2-level of encryption. When user first time registered as authorized user then key is generated which is used in encryption process. After data upload and fragmentation and encryption the data loaded to randomly selected note and replicated nodes.

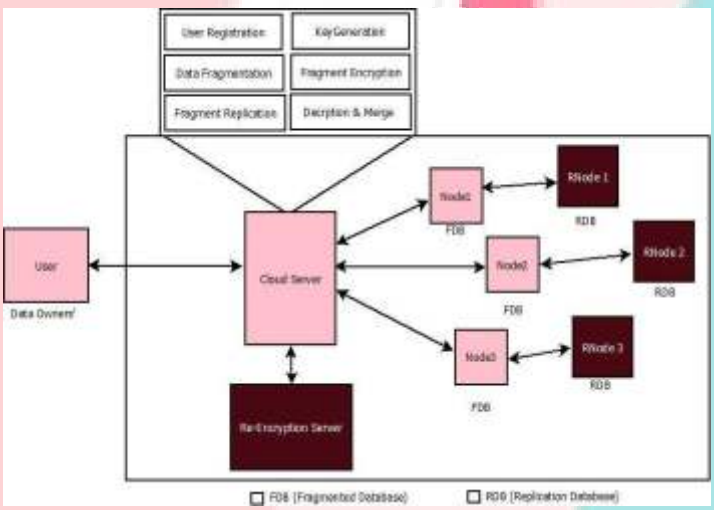


Figure 1: System Architecture

5G Device Ecosystem Likely to Mature by 2020 in Indian

Rutik Kalu - TY IF 1079

The lack of availability of affordable 5G ready handsets is one of the major reasons why some telcos wanted spectrum auctions to be pushed back.

The 5G device ecosystem in India would possibly mature in 2020, a time frame which will coincide with the rollout of the first commercial networks on the next generation technology in the country, a top Reliance JioInfocomm official said.“The device ecosystem is critical to ensure that operators aren’t sitting on spectrum waiting for affordable devices to show up in the market,” Reliance Jio president Mathew Oommen told ET, adding that the 3.5 GHz spectrum could be leveraged smartly by telcos to accommodate both 4G and 5G.He said the device ecosystem would continue to mature and possibly 2020 would be the inflection point, by when the Indian ecosystem would begin to see significant growth. The lack of availability of affordable 5G ready handsets is one of the major reasons why some telcos wanted spectrum auctions to be pushed back. The government has said it will hold 5G airwaves in the second half of 2019.

The Mobile Association (TMA) that represents handset makers feels a majority of players were waiting for low-cost chipset vendors to successfully demonstrate capabilities in the price-conscious Indian market. TMA president BhawnaKumari said more than 20 vendors were seriously considering launch of 5G-capable devices. She added that Samsung and Apple are likely to be the first to roll out 5G smartphones, followed by Chinese brands such as Xiaomi, Vivo and OnePlus, and then Indian brands.

The 5G standard is still several years from being ratified but wireless industry visionaries are already painting a picture of what new capabilities 5G will offer.Envision a world where all machines are wirelessly connected and mission-critical apps are prioritized over less critical communications. Wireless network speeds are blazing at 20 Gigabits per second or higher and network latency is mere milliseconds.This vision sounds appealing but it’s still very unclear how today,s 4G networks will morph into tomorrow’s 5G vision. That’s why so many companies are investing in R&D to work on 5G development. In fact, Research and Markets predicts that 5G investments and R&D will account for nearly $5 billion by 2020.

Virtualization of the network will play a key role in laying the groundwork for 5G. Operators will need to to leverage software-defined networking (SDN) to create a network topology that includes multiple hierarchies. The different hierarchies will contain RAN radios of different sizes.Perhaps the biggest unknown about 5G is how it will be monetized. Operators will not be able to keep charging consumers more and more for data. Instead, they are already investigating new business models that will allow them to recoup their investments from partners – whether those partners are providing video content that they want consumers to watch on their wireless devices or car makers that want to differentiate their latest cars from the competition by sending automobile diagnostic info over the 5G network.

5G NR (new radio) is the new standard for 5G wireless technology capable of much faster, efficient and scalable network. 5G NR technology will enable us to connect with many things in the surrounding with low latency and lighting speed.Since the third generation of mobile network has been launched, we are able to send and receive data via mobile network. Current 4G technology offers faster data rate than its previous generations but it has limitation due to its bandwidth, scalability and number of users under individual cells.

Social Problems of Women Education in India

Sakshi Koli & Shweta M.Sawant - TYCM

The girls are very useful at home for carrying out domestic duties and so mothers are reluctant to send them to school. A large number of children in the rural areas are undernourished. They hardly have a square meal a day. Unless the parents are given some kind of economic relief, it will be impossible to achieve the targets. In India, the vast majority of the population is poor. It is believed that the sons will side with the father in old age and on the other hand after some time the girl will get married. She will go to some other family. Therefore, do not care much for women education.

Domestic Duty - Many societies and a vast population in India still believes that proper place for women is to remain at home, serve the husband and his family and give birth to the children. This function can be performed irrespective of the fact whether the girl is educated or not. Especially in a poor section of the society they are required in bring potable water, take food to fields for parents engaged in work and look after their young siblings, besides some are required to work as paid and unpaid workers.

Social Factors - The marriage of girls is a determining factor in women education. Particularly early marriage in UP, MP, Bihar, Rajasthan and Gujarat has been responsible for depriving girls from attending classes. Millions of literate girls are given a way in marriage even before they are in their teens. Today, however, early marriage is not so common and women education has been encouraged by its increasing demand in their marriage markets especially among the upper and middle classes. Thus due to socio-economical reasons, women in India are still not coming in as much in number in the educational institution. The task ahead is difficult. The very fact is also that education among women education in urban India is widespread and more and more number of women is going to school and colleges.

Conservation Mentality - In India, women education has been linked with employment. In other words, the children are educated simply because they are to get some employment. Those people who are not in favour of sending their daughter for employment do not feel the necessity of educating them.

Social Adult Women Education - The problems of women enrolment is very closely connected with the problem of social women education of adult women. In fact, the success of women education depends in a very large measure on the successful implementation of social women education programmes for adult women, especially in rural areas. The percentage of literacy for women in India is 65.46%. The figure for women's literacy in rural areas is much less. The ignorance of women and the lack of communication create mental barriers and shunt out a very large percentage of adult women from the outside world.

Child Labour - The term girls' child labour is often used synonymously with 'employed girls child' or 'working girls child'. In this sense, it is co-extensive with any work done by a child for a gainful purpose. Children are engaged in various forms of activities ranging for help in domestic work; work in a household enterprise to wage work. It is necessary to draw a line between child labour one hand and activities considered as a part of the socialisation process on the other, where children could combine other child hood activities with the limited work roles assigned to them.

Many other problems are there in our present time like the distance of school and college from house, illiterate family members, child marriage and different social barriers, the problem of co-education, lack of social awareness, social discrimination, lack of trained teachers, examination system defective, monitoring methodology and attitude of young man.

Plastic hazards!

Sakshi Patil - TYCM

Plastic is widely used in our day to day life. Starting from a pen to a polythene bag in which we carry fruits and books are forms of plastic. Though convenient in our day to day use, it has posed an alarming threat to the environment.

Non biodegradable:

Plastic is non-biodegradable and do not decay by biological actions of microbes. They remain in the same state as we throw them. So, dumps or garbages are created making our cities and soil polluted.

Harmful Chemical:

To destroy plastics, we can either recycle or burn them. If we burn plastic, they emit harmful chemical gases like carbon dioxide ($CO_,$), carbon monoxide (CO), nitrous oxide (NO), methane (CH_4), sulphur dioxides (SO_2), etc. These gases pollute our environment, though in negligible content, they add to green house effect and endanger our environment.

Damage Sanitary System:

The wastes of plastic block pipes and sanitary lines so that dirty water came out on roads. This cause fear of malaria, cholera and other diseases.

Ocean Pollution:

The wastes of plastic bags, bottles, etc. are drawn to a sea or an ocean by rivers and they are deposited in them. They pollute and disturb the eco-system of the sea or the ocean.

Ecosystem Imbalance:

Due to wide scale use of plastic, water, soil and air pollutions are caused. These polluted components of environment lead to imbalance of various ecosystem of the Earth.

Only solution to this plastic hazard is to take preventive measures and for that,

a. To reduce use of plastic wherever possible
b. To use recyclable bags and things
c. To recycle the used plastic
d. Not to throw used plastic here and there
e. To collect the used plastic by the Government and then to recycle them
f. Only recyclable plastics should be allowed to use
g. Some legal norms should be declared.

Live Water Level Indicator with SMS and Voice Call Alerts using Arduino and Ultrasonic Sensor

Mohan Mali, Sandeep Shinde, Satish Kale

Abstract:

The project is designed to give an alert and level information of water in a tank and control a pump motor as required. The reading given is in the scale of 0 to 9. A priority encoder is interfaced to a decoder to get the display of water level on monitor displays and send SMS or voice call. This is the circuit designed for overhead tank digital water level indicator. It is built around priority encoder, raspberry pi, serial connection and a few discrete components. The Arduino Uno board used to measure water level with the help of ultrasonic sensors. Fundamental key of ultrasonic separation estimation depends on ECHO. At the point when sound waves are transmitted in condition then they come back to the starting point as ECHO in the wake of striking on any snag. Thus, we should just figure its voyaging time of the two sounds implies active time and returning time to beginning in the wake of striking on any snag. What's more, after some figuring we can get an outcome that is the separation. This idea is utilized as a part of our water controller venture where the water engine pump is naturally turned on when water level in the tank turns out to be low and demonstrate level to client where it is low or high.

Introduction :

As per the ebb and flow situation, a considerable measure of water is squandered each day from neighborhoods, workplaces and doctor's facilities. Water is basic in different ways and such a gigantic measure of water wastage can prompt its shortage in future. These days everyone has overhead tank at their homes. Our Objective is utilized to quantify and show the level of water in a holder and maintain a strategic distance from flood of water. The thought can be verifiably used to discover and control the level of water in overhead tanks and counteract wastage.

In this Arduino based programmed water level indicator and controller venture the water level is being estimated by utilizing ultrasonic sensors [1]. Working of proposed system is extremely straightforward. At first consider that tank is empty, when control supply is on all the contribution of Arduino is high. The sensor used to measure water level is ultrasonic sensors which is connected to Arduino. The ultrasonic sensor works on ECHO mechanism. The Ultrasonic Sensor conveys a high-recurrence sound heartbeat and after that circumstances to what extent it takes for the reverberate of the sound to reflect. The sensor has 2 openings on its front. One opening transmits ultrasonic waves, (like a small speaker), alternate gets them, (like a minor amplifier). The speed of sound is around 341 meters (1100 feet) every second in air. The ultrasonic sensor utilizes this data alongside the time distinction amongst sending and getting the sound heartbeat to decide the separation to a question. It utilizes the accompanying numerical condition: Separation = Time x Speed of Sound partitioned by 2

Time = the time between when a ultrasonic wave is transmitted and when it is gotten You isolate this number by 2 claiming the sound wave needs to movement to the protest and back. At the point when sound waves are transmitted in condition then they return to the cause as ECHO in the wake of striking on any impediment. So, its voyaging time of the two sounds implies active time and returning time to starting point after striking on any obstruction is being computed. What's more, after some estimation an outcome is acquired that is the separation. This idea is utilized as a part of our water controller venture where the water engine pump is naturally turned on when water level in the tank turns out to be low. As water in tank fills we will get numeric 3, 4 ….9 to be show. The circuit consequently turns the engine OFF when the tank is full. The water level is shown, and ready message send to the client.

Problem Statement

Water is an asset in numerous parts of the world and numerous individuals depend on water tanks to supplement their water supply by putting away gathered water or water pumped from a well or bore. Be that as it may, how would you quantify how full a tank is? Tanks are developed of hazy material to forestall green growth development and are frequently kept shut to avert mosquito perversion or access by rodents, so it's badly arranged to physically peer inside. Furthermore, having an approach to gauge tank profundity electronically opens a universe of conceivable outcomes, for example, programmed control of pumps to fill tanks when they get low.

LITERATURE SURVEY

In present days, there are many parts on earth which face scarcity of water, calamities like draught etc. Energy production is laborious and cannot be misused [2]. The water tank floods as the tallness of water in the tank can't be haphazardly speculated. This prompts additional vitality utilization, which is a high worry in the present period. Individuals likewise need to pause and quit doing their different exercises until the point that the tank is full. Henceforth, here is a thought which faculties and shows the water level so the pump can be turned off on proper time and spare water, power and time also.

PROPOSED SYSTEM

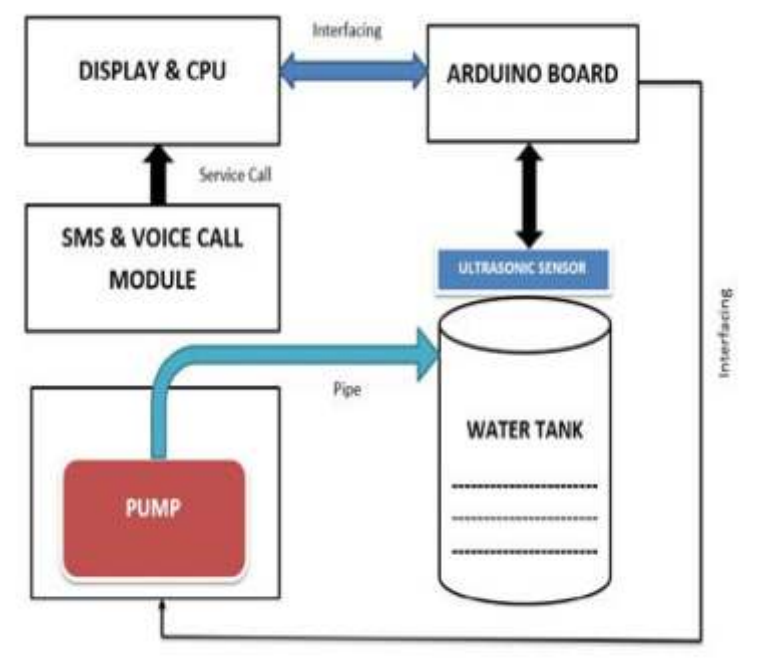


Figure 1: System Architecture

Above figure shows the system architecture of proposed system, here ultrasonic sensor which is placed at top of the water tank is connected to the Arduino board, the ultrasonic sensor works on echo mechanism to measure the distance of water surface from top of the tank, the program written in Arduino measure or calculate the distance, from which we calculate the amount of water present in tank. Depends upon the threshold we set the motor or pump start if water level is below 5%. The SMS or voice call module work as same as pump module woks if tank is empty then notification send via SMS as well as by voice call using SMS API.

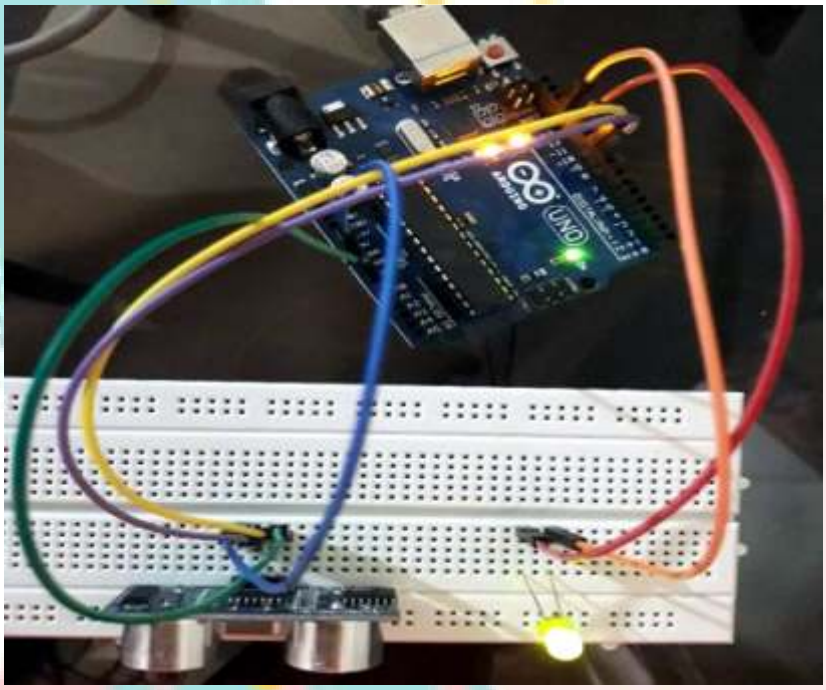


Figure 2: Arduino Connection

Figure 2 shows Arduino connection with ultrasonic sensor and LED as pump, the pin no 9 and 10 from Arduino connected to trigger and echo respectively and digital pi 12 used to connect LED.

RESULT

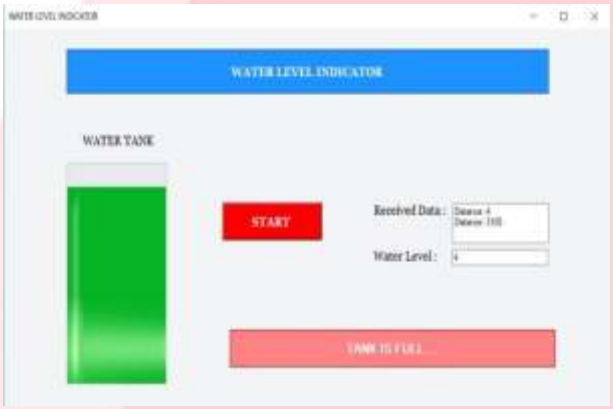


Figure 3: Tank full

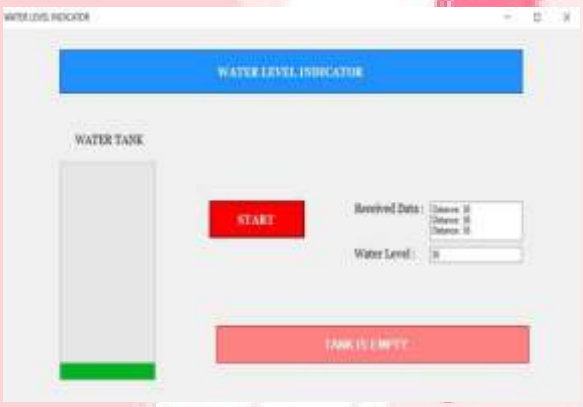


Figure 4: Tank Empty

Above figure 3 shows : in which live water level indication shows actual water present in the tank, when user click on start button then system get input from Arduino which is reading of water level from ultrasonic sensor connected to Arduino. The case 1 shows the Tank is full and send SMS and generate voice call to user.

Figure 4 shows Case 2 indicate Tank is Empty, for indicating water level either full/ empty we define certain threshold which may modify according to the tank size, here case 2 defined for Empty tank.

Vacuum Membrane Distillation

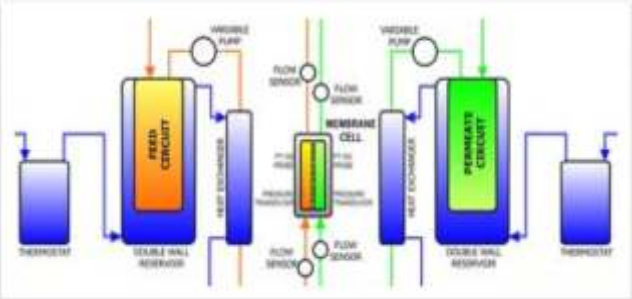
Sufiyan Khan (Chemical Department)

Membrane Distillation is a promising technology for desalting highly saline waters. Membrane distillation is a thermally-driven separation (microfiltration) process, in which only vapor molecules are able to pass through a porous hydrophobic membrane. This separation process is driven by the vapor pressure difference existing between the porous hydrophobic membrane surfaces. Using membrane distillation has many attractive features, such as low operating temperatures in comparison to those encountered in conventional process; the solution (mainly water) is not necessarily heated up to the boiling point. Moreover, the hydrostatic pressure encountered in membrane distillation is lower than that used in pressure-driven membrane processes like reverse osmosis reverse osmosis. Therefore, membrane distillation is expected to be a cost effective process, which requires less demanding of membrane characteristics too. In this respect, less expensive material can be involved in it such as plastic, for example, thus alleviating corrosion problems.

According to the principle of vapor–liquid equilibrium, the membrane distillation process has a high rejection factor. As a matter of fact, theoretically, complete separation takes place. In addition, the membrane pore size required for membrane distillation is relatively larger than those for other membrane separation processes, such as reverse osmosis. The membrane distillation process, therefore, suffers less fouling. The membrane distillation system has the feasibility to be combined with other separation processes to create an integrated separation system, such as ultra filtration or with a reverse osmosis unit. Furthermore, membrane distillation has the ability to utilize alternative energy sources, such as solar energy. The membrane distillation process is competitive for desalination of brackish water and sea water. It is also an effective process for removing organic and heavy metals from aqueous solution, from waste water

Different membrane configuration that are used are

1. Direct Contact Membrane Distillation (DCMD)
2. Air Gap Membrane Distillation (AGMD)
3. Sweeping Gas Membrane Distillation (SGMD)
4. Vacuum Membrane Distillation (VMD)



Vacuum membrane distillation (VMD) is another variant of MD. In this configuration low pressure or vacuum is applied on the permeate side of the membrane module by means of vacuum pumps. The applied permeate pressure is lower than the saturation pressure of volatile molecules to be separated from the feed solution and condensation takes place outside the membrane module at temperatures much lower than the ambient temperature. Normally, at laboratory scale, nitrogen liquid filled condensers are used. The above figure shows schematics of heat and mass transfer through a porous hydrophobic membrane and a typical laboratoryVacuum membrane distillation system with a tangential flow cell. A Vacuum membrane distillation cell with a magnetic stirrer is shown in the above figure. In the latter cell the feed aqueous solution is stirred inside a containerby a magnetic stirrer, while vacuum is applied on the permeate side of the membrane held horizontally. This type of cell is only used for laboratory scale studies to characterize the membranes. For the system with tangential flow cell, single or arrays of flat sheet, capillaries or hollow fiber membrane modules can be used. InVacuum membrane distillation, because of the hydrophobic nature of the used membranes, the feed cannot penetrate inside dried membrane pores unless transmembrane hydrostatic pressure exceeds the ‘liquid entry pressure of water which is characteristic to each membrane. This conditionresults in the formation of liquid/vaporinterfaces at the entrances of the membranepores and, because of the applied low pressureon the permeate side, molecules evaporatefrom the feed side of the membrane, cross thepores in vapor phase, and condense outsidethe membrane module by means of externalcondensers.

EZ Billing System

Mrs. Suwarna Nimkarde

ABSTRACT

In business of IT, billing software refers to programs that handle the tracking of billable products and services delivered to a customer or set of customers. Some billing software also tracks work hours for billing purposes. These types of programs automate much of what used to be a time-consuming process of preparing invoices ,bills and other documentation. The Invoicing & Billing capabilities of EZ BILLING Accounting Software automatically generates customer invoices. Customer invoices for lump sum, cost plus, time and material or unit price contracts, or any combination of contract items for a single job. User-defined schedule of values facilitate detail invoice layouts, as well as summary invoices when a detail breakdown is not required.

Keyword : - E-Learning , Deforestation, Database, Online Examination, Medical etc.

1. INTRODUCTION

In business IT, billing software refers to programs that handle the tracking of billable products and services delivered to a customer or set of customers. These types of programs automate much of what used to be a time- consuming process of preparing invoices or other documentation.The modern digital structures provided by billing software services and products are part of what has propelled businesses into the new digital era, allowing for more productivity and greater ease of business administration in general.The emergence of spreadsheets and other simple tools made billing much easier for many businesses. Features like auto-sum and table-type data handling resources allowed for the quick input and calculation of a large number of customer accounts. Within different industries, billing software services have developed to allow for the many special details of billing within a particular field or market.One of the best examples is in EZ Billing System, where in addition to dollar amounts and customer (patient) identification, other kinds of identifiers are necessary, such as codes representing diagnosis and procedures performed according to the diagnosis. Many billing software products include these kinds of industry extras.Many of them are also compatible with a greater IT architecture to allow for remote access. This helps to promote better management and easier compliance with audits and tax requirements.The Invoicing & Billing capabilities of EZ Billing Accounting Software automatically generate customer invoices for lump sum, cost plus, time and material or unit price contracts, or any combination of contract items for a single job. User-defined schedule of values facilitate detail invoice layouts, as well as summary invoices when a detail breakdown is not required.The Invoicing & Billing capabilities of EZ Billing Accounting Software automatically generate customer invoices for lump sum, cost plus, time and material or unit price contracts, or any combination of contract items for a single job. User-defined schedule of values facilitate detail invoice layouts, as well as summary invoices when a detail breakdown is not requiredEZ Billing is very popular practice management solution. It receives faster reimbursements by electronic claim processing, tracks insurance payments and billing information, HIPPA-compliant for patient security and completes system integration with EZ EHR.EZ Billing (EZ Healthcare) is a simple system to use. It's user friendly.

Artificial Intelligence in Biomedical Engineering – Yay or Nay

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Biomedical engineering is a multidisciplinary stream that combines biology, healthcare, medicine and engineering. It strives to achieve a delicate balance amongst these fields by the application of engineering principles and design concepts to them. It includes provision of advanced health care treatment services like diagnosis, monitoring and therapy; maintenance of equipment as per latest industry standards at hospitals; procurement, routine testing and preventative maintenance.

Much of the work in biomedical engineering consists of research and development, spanning a broad array of subfields (like medical imaging, implants, biomedical optics, genetic engineering etc). Prominent biomedical engineering applications include the development of biocompatible prostheses, various diagnostic and therapeutic medical devices ranging from clinical equipment to micro-implants, common imaging equipment such as MRIs and EKG/ECGs, regenerative tissue growth, pharmaceutical drugs and therapeutic biologicals.

Artificial Intelligence or AI, on the other hand, can be defined as the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. It has widespread application in Biomedical Engineering too and can re-design and improve healthcare in multiple ways. For e.g. it can assist medical professionals in designing treatment plans and finding the most suitable treatment method that is the best for a specific patient.

It can help in carrying out tasks that are monotonous such as data analysing in the areas of cardiology, and radiology so that physicians can concentrate on their core jobs. Not just this, today robots help doctors with repetitive work like conducting X Rays, CT Scans, analyzing tests and data entry.

The impact AI has had in the area of data mining is massive. It transforms searching from “find anything that might possibly be of interest” to “find what is actually relevant”. The first step towards revolutionizing the existing

healthcare systems is to collect data, store it, normalize it and trace its lineage for future reference of doctors and medical practitioners.

There are some expert modules of AI which function like the decision-making ability of a human expert and help in the early detection of high-risk diseases like cancer. In fact, one of the most potent uses of AI in the medical field is in imaging, where they are being made capable to detect problems like tumorous growth at a very early stage, thus enabling the practitioner to start corrective action at the right time. The future is full of possibilities – there might come a time in the coming years when a robot might perform highly precise surgeries to perfection at the nearest hospital.

Even with big advancements of AI in healthcare over the recent years, it is unlikely that technology will replace the role of physicians. It, however, is now sophisticated enough to take over certain laborious tasks performed by them. With professionals exploring its application in areas like insurance verification, skin cancer diagnosis, medical record data analysis etc. - we are just beginning to realize the true depth of health-tech innovation that can be unlocked with AI technology.

Hence, to conclude, it can be safely agreed that” Yay! AI is here to stay in the field of Biomedical Engineering.”

Cyber Crime and Security

Vivek Sanjay Pandey &
Shaikh Saad Shahid Husain

Abstract:-

In this paper, we give detailed information regarding cybercrime and how can we prevent crime and its internal security, types of crime, internal security challenges, and cases of internal security. When we hear about “Cyber crime” Our focus is gone on “cyber Security”. Today people use computer for many different reasons depending on their level of skills and their needs. A good example is china, which has close to three hundred million computer users.With the high number of computer and cyber users,it is accurate to say that computer crime and cybercrime alsoincreases by the day .The first cyber crime occurred in 1820. With increasing use of information technology (IT) enabled services such as e-governance, online business and electronic transactions protection of personal and sensitive data have assumed paramount importance. The economic growth of any nation and its internal security depends on how well is its cyberspace secured and protected.

Introduction:-

Crime is not a new to the world. Before computer age also there were crimes done in different ways. Right from the information theft to child pornography, everything was taking place. The crimes that are done with the help of computer and internet are known as cyber crime.Cyber crimes may target a person as a victim or computer system or network.Though the word cyber mainly means internet,cyber crime is also called as computer crime. These crimes are difficult to find.Also there is no simple solution to reduce or stop the cyber crimes. The media that are used for attacking is generally internet.The usage of internet has increased tremendously and information exchange over internet has become our day to day need. Many times in cyber crimes, computer or network is targeted. The intention behind these crimes is always malicious. Cyber criminal may attack individual or group of people or machines. Cyber crimes do not have limit as they can cross the border of spread of internet all over the world. Crime is not a new to the world. Before computer age also there were crimes done in different ways. Right from the information theft to child pornography, everything was taking place. The crimes that are done with the help of computer and internet are known as cyber crime.Fraud involves illegally taking money from individuals through tricking The types of cyber attacks are as follows:-

? Identity theft: -

Identity theft is another form of computer crime. It involves the use of another person's identity illegally. This aspect means that the individual has no knowledge of the use of his character. It usually has a devastating ending, because the fraudster could conduct some activities using a person's sensitive information, without their knowledge. The stolen details could include the name of an individual, the social security number, their international passport or their credit cards. An example is where one uses the details of an individual to create and collect loans which eventually affect the person.

? Phishing Scams: -

Phishing is another type of computer and cyber crime which involves the sending of millions of messages to different people. The recipients in most cases fall for the trick and believe that the messages have a genuine source.The hackers use the messages to look for information and extort money from the people.

? Hacking: -

Hacking is the process of modification of the features of the system for achieving the goal of a person who is outside the system. This process is done by that outsider person.Hacking is a different kind of computer crime that involves breaking into a computer system without the consent of the owner. Hacking is done to destroy the individuals systems or company's system. Hacking includes stealing personal information, credit card numbers and debit card numbers. The main intention of hacking the system is to destroying individual system or company's system.

? Cracking: -

The cracking is nothing but breaking into computer system or network of an organisation in unauthorized manner with malicious intention. The cracker is capable of cracking the various accounts. For example user's accounts, bank accounts, etc. He can do lot of malicious activates as follows:

? Entering into computer or network in unauthorized manner.

? Steal the information.

? Destroy the important files of organisation.

? Pharming: -

Pharming is another way that people use the internet to trick people. Unlike phishing, this technique involves the change of the IP address of a website. When an individual types a website, they end up on a fake internet 5 site. The hackers use the same Domain name but a different IP address. In this situation, an individual would end up filling a fake page with his sensitive information.

? Denial of service: -

Denial of service is also called as a DOS attacks. Denial of service attack refers to a situation where an organization or intended users lack access to any computer resources. In most cases this kind of attack results in no loss of information or other security losses. However, this attack reduces the functionality of the inter sites and services.

? Spyware: -

In most of the cases the victim has no idea that there is a program recording all his interactions. Spyware programs have the capacity of storing personal information. The program further has the capacity of redirecting web browser activities which end up causing harm on the computer. Spyware causes other problems to the computer like slowing down the internet and other programs.

? Logic Bombs: -

Logic bombs are programs that run on particular dates or times to produce unwanted function. They affect data and software and cause severe damage to the system. The logic bombs enter the system as hidden content or installed by someone in the organization that has evil intentions. A good example is where a bad employee plants a logic bomb that activates one month after he quits his job. At the specified date and time, the logic bomb goes off and crashes the whole system. The tricky part about the logic bombs is that they are very hard to detect until 6 hour after they cause the damage. A solution to this issue includes various anti-virus software that have the capability of detecting known logic bombs.

? Mail Bombs: -

Mail Bombs are the activity in which the hacker sends the unwanted emails to the individuals or any particular person of the company to destroy their systems.

? Pornography:-

Pornography is also informally known as a porn or porno. Pornography is the presentation of sexual subject matter with the aim of sexual arousal.The pornography involves adult pornography as well as child pornography. There are millions of users who are visiting these websites every day. Child pornography is mentioned in the cyber law.

Causes of cyber crime:-

? Different types of people all over the world have come together on network.

? Most of the people are using internet for hours together.

? So internet dependency of human being has increased a lot.

? Financial transactions are taking place on internet on huge scale.

? Government is the biggest entity who are using internet and have a lot of secret data on their servers.

? Private and limited sectors are also participants in internet usage.

? E-Commerce is increasing with good speed.

? E-Banking has become the part of our day to day banking.

Feature of Cyber Crimes: -

Cyber crime has an unpredictable future judging from the trends where the culprits always end up a step ahead of the authorities. Cyber criminals always come up with a new way of committing the crimes. Authorities have to increase the skill levels if they hope to catch up with cyber crime committers. Cyber criminals seem always to find a new way of defrauding people and scamming them for their money. People Depending on current laws and technical protection is no longer enough protection against cyber and computer crimes. There have to be better protection measures in place to protect people against cyber crimes. People have to be more aware on where and when they can carry out online banking, credit cards, debit cards, etc. A lot of individuals lack awareness on the advancements of cyber crimes.

Effects of Cyber Crimes: -

Many insurance companies around the world try to provide protection against cyber crime. Computer and cyber crimes cause businesses to suffer losses in a scenario where hackers steal valuable and confidential information from a company. In a different scenario, the company ends up wasting so much time handling the harmful incidents caused by computer crimes. The wasted time reduces the productivity of the enterprise. Many companies also spend a lot of time creating preventive measures. The energy put in investing in this preventive measure is also a derailleur and is one of the impacts of cybercrime. Cyber crime could cause people to lose confidence in a company. For instance, people would not feel safe banking or involve themselves with a hacked organization. They would feel insecure about sharing their confidential information with such an organization.

Prevention of Cyber Crimes: -

People could prevent cyber crime in various ways such as an excellent way to the creation of robust passwords those are hard to compromise. Another good idea on the issue of passwords is the use of random passwords. Constantly changing the password also helps the person stay ahead of any hackers. On the issue of malware, individuals have to ensure that they use the lasts anti-viruses and anti-spy software that prevent and kill off any malware. In the case of misplaced gadgets, the person should make sure they have passwords securing their systems. Knowing the location of all the software that a person uses would reduce the cases of software vulnerability and its usability. In other cases, people try to learn to people's passwords through observation. In this case, people have to be aware of their surroundings, type fast and ensure that people do not have the chance of observing their passwords. Another good prevention method is ensuring that the firewall remains on at all times. An upgrade or replacement would provide even better security. Installation of windows updates would reduce any Windows vulnerability. In a case of weak configurations, the individual could get professionals.

Cyber Security:-

Cyber Security is the protection of Internet connected systems, including hardware, software and data from cyber attacks. The laws that govern the cyberspace are called as the cyber laws. So whatever transactions are happening in the cyberspace, they are under observation of the cyber law.Cyber law can be defined as the law that deals with the legal issues pertaining to computer, network, internet and information. It included payments and trading business via internet.The Cyber laws include the following laws related to:

? Cyber crimes

? Electronic and digital signatures

? Intellectual property

? Data protection privacy

But in India, IT Act 2000 and its amendment of IT ACT 2008 are known as cyber law. It describes the details related to the cyber crimes, punishment and different definitions. IT Act 2000 was passed in the parliament in the year 2000. Other persons who are not Indians can also be punished by this law if the crime is done by them in India.

Advantages of IT Act:-

? Since IT Act provides protection to the E-Commerce, E-Commerce is promoted.

? Email is recognized as a legal and valid communication.

? Digital signature is recognized by the law.

Disadvantages of law:-

? This law do not mention the Infringement of copyright.

? Protection of domain names is not included in this act.

? Act does not include power of attorney, trusts and will.

Ge Force 20 series

- Yash Patil & Harshal Koli (TYCM2)

The Ge Force RTX 20 Series is a family of graphics processing units developed by Nvidia, and was announced at Gamescom on August 20, 2018. It is the successor to the GeForce 10 series, and started shipping on September 20, 2018.

The RTX 20 series is based on the Turing microarchitecture and features real-time ray tracing. The cards are manufactured on an optimized 16nm node from TSMC, named 12nm FinFET NVIDIA (FFN).This real-time ray tracing is accelerated by the use of new RT cores, which are designed to process quadtrees and spherical hierarchies, and speed up collision tests with individual triangles.

The ray tracing performed by the RT cores can be used to produce reflections, refractions and shadows, replacing traditional raster techniques such as cube maps and depth maps. Instead of replacing rasterization entirely, however, the information gathered from ray tracing can be used to augment the shading with information that is much more photo-realistic, especially in regards to off-camera action. This can only be utilized on games that support ray-tracing, which led to some controversy at launch because few games supported the feature at the time.

The second-generation Tensor cores (succeeding Volta's) work in cooperation with the RT cores, and are used to fill in the blanks in a partially ray traced image, a technique known as de-noising. Another of the applications of the Tensor cores is a new method to replace anti-aliasing called DLSS (deep learning super-sampling). The Tensor cores perform the result of deep learning on supercomputers to codify how to, for example, increase the resolution of images. In the Tensor cores' primary usage, a problem to be solved is analyzed on a supercomputer, which is taught by example what results are desired, and the supercomputer determines a method to use to achieve those results, which is then done with the consumer's Tensor cores. These methods are delivered "over the air" to consumers.

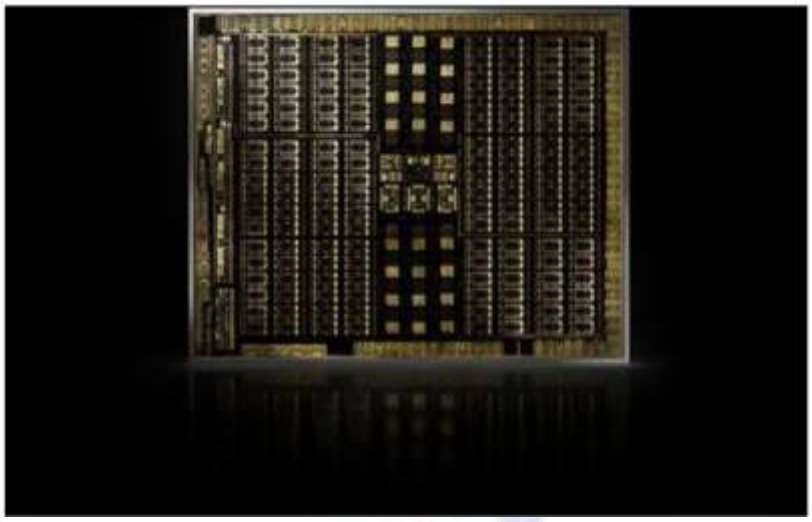
New Features in Turing :

- CUDA Compute Capability 7.5
- Ray tracing (RT) cores – bounding volume hierarchy acceleration
- Tensor (AI) cores – neural net artificial intelligence – large matrix operations

- New memory controller with GDDR6 support
- DisplayPort 1.4a with Display Stream Compression (DSC) 1.2
- PureVideo Feature Set J hardware video decoding
- GPU Boost 4
- NVLink Bridge
- VirtualLink VR
- Improved NVENC codec

Nvidia segregates the GPU dies for Turing into A and non-A variants, which is appended or excluded on the hundreds part of the GPU code name. Non-A variants are not allowed to be factory overclocked, whilst A variants are.

Nvidia RTX is the development platform introduced with the GeForce 20 series. RTX uses Microsoft's DXR, Nvidia's OptiX, and Vulkan for access to ray tracing. The ray tracing technology used in the RTX Turing GPUs was in development at Nvidia for 10 years.



Nvidia Turing :

GeForce RTX™ graphics cards are powered by the Turing GPU architecture and the all-new RTX platform. This gives you up to 6X the performance of previous-generation graphics cards and brings the power of real-time ray tracing and AI to games.

Artificial intelligence is driving the greatest technology advancement in history, and Turing is bringing it to computer graphics. Armed with Tensor Cores that deliver AI computing horsepower, Turing GPUs can run powerful AI algorithms in real time to create crisp, clear, lifelike images and special effects that were never before possible.

Programmable shaders defined modern graphics. Turing GPUs feature new advanced shading technologies that are more powerful, flexible, and efficient than ever before. Combined with GDDR6—the world's fastest memory—this performance lets you tear through games with maxed-out settings and incredibly high frame rates.

We Win....

Best Lab Award

Heat and Mass Transfer Lab of Chemical Department of BVIT was presented with the “Best Lab Award” for the year 2016-17 on 15th February 2019. It was received by Principal, Mr. P. N. Tandon from the hands of Hon’ble Shri VInod Tawade, Minister of Technical and Higher Education, in a function organized by MSBTE. The award carried a cash prize of Rs. 50,000/- and a certificate. This programme was attended by Mr. Saurabh Vijay, Chief Secretary of Technical Education, Dr. Abhay Wagh, Director DTE., Dr. Vinod Mohitkar, Director MSBTE and Principals of various Institutes.

Best Lab Award is instituted by MSBTE to appreciate and encourage the development of Labs of Polytechnic to keep up with the latest technology and enhance teaching learning process

लोकमत

विनोद तावडे यांच्या हस्ते सन्मान : ठाणे, नवी मुंबईसह ११ तंत्रनिकेतन संस्थांचा समावेश

मुंबईतील दोन शैक्षणिक संस्थांच्या प्रयोगशाळा ठरल्या ‘सर्वोत्तम’!

लोकमत न्यूज नेटवर्क

मुंबई : महाराष्ट्र राज्य तंत्र शिक्षण मंडळातर्फे राज्यातील तंत्रनिकेतन संस्थांना सर्वोत्तम प्रयोगशाळा पुरस्काराने सन्मानित करण्यात येते. त्यानुसार २०१५-१६ व २०१६-१७ या दोन वर्षांचे पुरस्कार माहिम येथील सेंट झेवियर्स टेक्निकल इन्स्टिट्यूट, कांदिवलीतील ठाकूर पॉलिटेक्निक या मुंबईतील शैक्षणिक संस्थांसह ठाणे, नवी मुंबई, पुणे अशा एकूण ११ शैक्षणिक संस्थांना घोषित झाले. शुक्रवारी उच्च व तंत्रशिक्षणमंत्री विनोद तावडे यांच्या हस्ते या पुरस्कारांचे वितरण करण्यात आले.

महाराष्ट्र राज्य तंत्र शिक्षण मंडळातर्फे विद्यार्थ्यांच्या सर्वांगीण विकासासाठी अद्ययावत अभ्यासक्रम तयार करणे व राबविणे त्याचप्रमाणे संस्थेमध्ये उपलब्ध असलेल्या सोईसुविधा, चंचसामग्री व मनुष्यबळ यांचा सदुपयोग व दर्जा उंचावण्याकरिता अनेक कार्यक्रम राबविण्यात येतात. या उपक्रमांतर्गत महाराष्ट्र राज्य तंत्र शिक्षण मंडळातर्फे प्रयोगशाळांची गुणवत्ता सर्वोत्कृष्ट असावी व त्यांचे प्रोत्साहन वाढविण्यासाठी २०१४-१५ पासून सर्वोत्तम प्रयोगशाळा पुरस्कार देण्यात येतात. ५० हजार रुपये रोख व प्रमाणपत्र असे या पुरस्काराचे स्वरूप आहे.

सर्वोत्तम प्रयोगशाळा निवडण्याकरिता प्राथमिक ऑनलाइन फेरीमध्ये संस्थांकडून अर्ज मागविण्यात येतात. प्राथमिक चाचणीनंतर पुढील फेरीस पात्र संस्थांच्या प्रयोगशाळांना तज्ज्ञ समिती अचानक भेट देऊन प्रत्यक्ष तपासणी करते. समितीच्या अहवालानुसार अंतिम पात्र संस्थांची निवड होते. पुरस्काराची रक्कम संस्थेकडून त्या प्रयोगशाळेचा दर्जा उंचावण्यासाठी वापरण्यात येते.

शुक्रवारी आयोजित पुरस्कार वितरण सोहळ्यात उच्च व तंत्रशिक्षणमंत्री विनोद तावडे यांच्यासह उच्च व तंत्रशिक्षण विभागाचे प्रधान सचिव सौरभ विजय, महाराष्ट्र तंत्रशिक्षण मंडळाचे संचालक डॉ. विनोद मोहितकर, तंत्रशिक्षण संचालक डॉ. अभय वाघ आदी उपस्थित होते.

सर्वोत्तम प्रयोगशाळा पुरस्कारप्राप्त संस्था, वर्ष तसेच पुरस्कार स्वीकारलेल्या प्राचार्य / विभागप्रमुखांची नावे पुढीलप्रमाणे (ठाणे, नवी मुंबई, मुंबई) :

संस्थेचे नाव	शैक्षणिक वर्ष	प्राचार्य / विभाग प्रमुखांचे नाव
विद्या प्रसारक मंडळाचे पॉलिटेक्निक, ठाणे	२०१५-१६	डी. के. नायक, प्राचार्य
भारती विद्यापीठ इन्स्टिट्यूट ऑफ टेक्नोलॉजी, नवी मुंबई	२०१६-१७	पी. एन. टंडन, प्राचार्य
ठाकूर पॉलिटेक्निक, कांदिवली (पू.), मुंबई	२०१६-१७	डॉ. एस. एम. गणेधारी, प्राचार्य
सेंट झेवियर्स पॉलिटेक्निक इन्स्टिट्यूट, माहिम, मुंबई	२०१५-१६	एस. बी. घुग्राड, प्राचार्य

Mumbai Main
Page No. 2 Feb 16, 2019
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We Win....

State Level Technical Quiz Competition "TECHNOCRATZ 2018"

Mr. Vijayaraj Achalkar and Mr. Chandrasai B Rayudu, studying in the third year of Instrumentation Department of Bharati Vidyapeeth Institute of Technology Navi Mumbai, have secured FIRST PRIZE in the State Level Technical Quiz Competition "TECHNOCRATZ 2018" in Electronics stream conducted at Agnel Polytechnic Vashi, under ISTE chapter.

Electronics and Telecommunication Group Quiz Competition

Mr. Vijayraj Achalkar and Mr. Chandrasai Rayudu won the Second Prize in State Level Technical Quiz for Electronics and Telecommunication Group conducted by Pravin Patil College of Diploma Engineering and Technology under ISTE Chapter on 18th February 2019.

We Win....

Quiz Competition

State Level Students MSBTE Quiz Competition for Computer Engg. group was conducted by BharatiVidyapeeth Institute of Technology (0027), Navi Mumbai on 15/2/2019.The chief guest for inaugural function was Dr. Shaikh M.Z., Principal Bharati Vidyapeeth College of Engg., Navi Mumbai. The team who conducted this competition successfully is as follows:-

1. Mr. Tandon P.N. - Chief Coordinator
2. Mr. Mithun Mhatre. - Program Coordinator
3. Mrs. Vijaya Chavan - Coordinator

The total entries for this competition were 30 from all over the Maharashtra. Out of which 20 teams were short-listed through a written test. Four Preliminary rounds were conducted each round comprising of five teams. Then a final round was conducted. The winners of the competition are as follows:-

First Prize:-Bharati Vidyapeeth Institute of Technology, Navi Mumbai (1079)

Second Prize:-Pravin Patil College of Diploma Engg., Bhayandar(1643)

Consolation Prize:-MIT, Polytechnic., Pune(1086)

Chemical Engineering Department of Bharati Vidyapeeth Institute of Technology, Navi Mumbai has organized State Level Quiz Competition for Chemical Engineering students in association with The Institution of Engineers (India), Belapur Local Center on 22nd February 2019. Total 18 teams from all over Maharashtra had participated in quiz. Mr. Santosh Bajaj, was the quiz master and Mr. R. K. Modi, Past Chairman IEI, BLC was the jury for competition. First Prize won by the students of BVIT, Navi Mumbai while second prize by VPM, Thane. Consolation prizes to GP Pen and BVJNIOT, Pune. Prizes were distributed by Mr. V. C. Kamble , Past Chairman, IEI, BLC.

We Win....

Micro project Exhibition

We Mechanical department organized micro project exhibition on 15 march 2019. To enhance the knowledge, idea and motivate the students. Micro project is the compulsory part MSBTE curriculum. For these competition students of S. Y. Mechanical both shifts are actively participated. We declared three winners from the group.

Inter Engineering Diploma Students Sports Association Maharashtra. Zonal Tournament

Ashish Prabnunath Yadav, Vining-

Zonal Tournament

Held At Pillai Hoc College Of Engineering & Technology, Rasayani

EVENT

400m Running-1st Prize and Selected For Inter State Tournament

Inter-state Tournament

Held At Tatya Saheb Kore Institute Of Technology (polytechnic), varnanagar(kolhapur). 400m Running - 3rd Prize

Annual Sports (college)

100m Running -2nd Prize

200m Running-1st Prize

400m Running-1st Prize

Long Jump -1st Prize

Achievements

Faculty Development Training Programme (FDTP)

We Mechanical engineering department organized Faculty Development Training Programme(FDTP) on 18 march 2019 to 20 march 2019. FDTP is IEI approved training programme. To encourage and upgrade the knowdge of industry.Aiming at the successful implementation of I Scheme, the program includes expert lectures, hands on practice and interactive sessions in the subject of Solid Modeling.Introduction to Solid Modeling covers the following topics

- Creating, Managing and defining Assembly models.
- Interface detection and weight Calculation
- Plotting various views, Exploded Views and BOM
- Dimensioning, Section details, and Auxiliary Views.
- Annotation, Symbols, and Datum.
- Sheet Metal, and Extra Features like Import Export and file management.

Institute Level Curriculum Implementation Unit

First Meeting of ICIU for academic year 2018-19 was held on 26/11/2018 at 12.00 pm in BVIT, Navi Mumbai. Industry expert Mr. Parag Bane (Birla Carbon, Raigad) explained in plant training procedure adopted in his organization and agreed to help BVIT students for training in his organization. He also agreed to request PRIYA (Patalganaga Rasayani Industrial Association to organize industrial training for our students. He also gave his word to conduct training on Important Safety Measures for students and Staff of BVIT. One of the parents, Mr. Balaramkrishna Rayudu also highlighted importance of industrial training of diploma students and agreed to place few students for training in his industry.

Achievements

VENTURA 2019

(The State Level project Exhibition for the polytechnics)

VENTURA 2019, a state level project exhibition for Diploma level students was organized by Bharati Vidyapeeth Institute of Technology, Navi Mumbai on 15/3/2019. The idea of Ventura was conceived and initiated by us in year 1999 with an objective to provide a common platform for diploma students of various disciplines from all over the Maharashtra to exhibit their technical skills. It has grown leaps and bounds since then. The number of participating groups with their projects with entries from various Polytechnics.. The panel of judges comprised of Technical experts from industry and academics.

Extra Activities

SPORTS

Badminton Zonals A-1 2018-19(RUNNER UP) held at Vashi sports association Suraj More & Sourabh Sonawale (TYEJ)

Harsh Shinde participated in Badminton competition organized by IEDSSA ,Maharashtra State and secured second position in that particular event.

Extra Activities

Blood Donation

- Students of Instrumentation department actively participated in Blood Donation Camp arranged by Apollo charitable trust , Apollo hospital blood bank at their premises on 8/1/19.

Instrumentation dept. students in Blood Donation Camp

- Students of Instrumentation department actively participated in Blood Donation Camp arranged by Navi Mumbai blood bank Kharghar at BVCOE premises on 8/1/19.

Extra Activities

Independence Day Celebration

Entrepreneurship Awareness Camp

Extra Activities

Stationary Donation By Alumni Association

Swacch Bharat

Extra Activities

Teachers Day Celebration

Tree Plantation

Extra Activities

International Yoga Day Celebration

The fourth “International Yoga Day” was celebrated at Bharati Vidyapeeth’s Navi Mumbai complex, Belpada on 21st June 2018. Experts from Shri Ambika Yoga Kutir, Thane stressed the importance of Yoga as a means for healthy mind and body. Around 50 participants comprising of Principals and faculty of various Institutes later performed Yoga exercises under their guidance. The session lasted for one and half hours and concluded around 11 am.

Extra Activities

Anti Narcotics Event

An Anti Narcotics Event was organised by Navi Mumbai Police at Bharati Vidyapeeth Institute of Technology, Navi Mumbai on Monday, 1st October 2018. The inaugural ceremony was graced with DCP, ACPs and SPs of the city along with our Director Dr. V. J. Kadam, Principal Mr. P. N. Tandon, Principal BVCOE Dr. M. Z. Shaikh, & HODs. The zeal and sincerity of Navi Mumbai

Police to awaken youth was well endorsed in all the events. All the five events ie. Rangoli, Poster making, Slogan Writing, Solo Speech and Group Dance Competitions were organised. It was a great platform for our students to showcase their talents and creativity through beautiful rangolis, reflective posters, thoughtful slogans colourful dances and ruminative speeches. Big Thanks to all organizers, management, judges and far most - our volunteers team of 14 students

Extra Activities

Industrial Visits

Computer Technology and Electronics and Telecommunication department visited industry on 8th and 9th of march 2019. The industries visited were “Parle-G”, “ Bombay Rayon Fashions Ltd

Chemical Department visited Birla Carbon Black, Patalganga industry on 24/12/2018

Industrial visit was arranged for TYME students to NMMT Work shop, Turbhe, Navi Mumbai 0n 4/9/2018

Instrumentation department arranged a two days educational tour to Parle G, Silvasa on 1/3/19 & 2/3/19.

Butterfly garden, Silvasa

Extra Activities

VISIT TO EXPO-2018

Visit to EXPO-2018, Mumbai, was arranged to SYME student's on1/9/2018

One Day Visit to RCF on 21st Sept. 2018 by instrumentation department students

Preplacement Training for final year students completed on 2nd Feb. 2019.

Extra Activities

Students Activities

Kumar Raheel and Nadkar Qais from Computer Technology Department participated in State Level Technical Quiz competition which was held at D. Y. Patil Polytechnic college in nerul and secured Third position in that particular event.

Pratiksha Joglekar, Pooja Salunkhe, Varsha Patil, Neha Bhalghare, Sanchita Mhetre, Neha Malghe participated in dance competition event organized by Navi Mumbai police department as a part of their Anti Narcotics Awarness Program and secured second position in that particular event.

Prayag Patil and Nikhil Sawant participated in regional level tech quiz competition organized by D. Y. Patil Polytechnic college in nerul and secured second position in that particular event.

Evansraj Jagateesan participated in boxing competition organized by Wilson College at chowpati and secured second position in that particular event.

Extra Activities

Students Activities

Shreyas Desai and Mayuresh Kamane from Information Technology Department participated in State Level Technical Quiz competition (MSBTE) held at Bharati Vidyapeeth Institute Of Technology, CBD, Navi Mumbai and secured FIRST position in that particular event.

Seminar by Mr. RajendraShinde, Business Manager, Rolta India Ltd on Practical Application of theoretical knowledge on 29/09/2018

Principal and course experts during “Work Shop for Development Sample Question Papers of Chemical Engineering” Sponsored by MSBTE and organized by BVIT on 27/02/2019.

Faculty Development Program, Concept by MSBTE was conducted on “Emerging Trends in embedded System” from Aug 27- Aug 31 2018 in Bharti Vidyapeeth Institute of Technology

Extra Activities

Students Activities

Expert lecture on PN sequence in Digital communication conducted on 1st September 2018 by Mr. Pratik Tawade from Vidyalankar Polytechnic, Expert lecture on Simulation using PROTEUS conducted on 17th January 2019 by Mr. Santosh Kambale, head R & D department, Saitronics respectively

Institutional training program on Energy conservation conducted on 27th February 2019 by Petroleum Conservation Research Association (PCRA)

Expert Lectures were arranged by the Information Technology Department by Preeti Sahay, SICT, Kharghar on Computer Network., Venkat Rao, General Manager, IIHT vashi on Python, Abhijit Pasi, Shah & Anchor Poly, on Animation Teechniques and Sambhaji Kadam, PCRA, Western Region Mumbai on Energy respectively

Expert Lectures were arranged by the Computer Technology Department by Darshan Komu Sr. S/w Engg., Appdid S/w development company on Android Development

Extra Activities

Students Activities

Expert lecture was conducted for TYME students by Mr. Sohel Mominof Surajpuri Brothers Ltd, Navi Mumbai on 7/9/2018 on topic “Different kinds of soft wares used in Chemical and Petrochemical Industries”

Expert lecture was conducted for SY & TYME students by Radm Shekhar Mital, MD & CEO, Centre for Excellence in Maritime and Shipping, Mumbai on 11/01/2019 on topic “Seminar on Internship Training Program in Maritime and Shipping”

Expert lecture was conducted for TYME students by Dr. Shrikant Charhate, Professor & Director, Amity School of Engineering & Technology, Mumbai on 25/02/2019 on topic “Natural Disaster ”

Expert lecture was conducted for SYME students by Dr. Tele & Mr. Nikam, Professors BVCO, Navi Mumbai on24/1/2019 & 25/01/2019 on topic “Mechatronics ”

Paintings

Prajyot Talkar - TYME

Prajyot Talkar - TYME

Omkar Prabhu - SYCM

Prajyot Talkar - TYME

Paintings

Priyanka More - SYCM

Prajyot Talkar - TYME

Shravani Sadamte - TYME

Abhishek Mhatre - TYCM

List of Toppers

List of Toppers SUMMER-2018 (0027)

Name of Student Depatment Aggregate %	: : :	PRAJAKTA GAVANE Chemical Engineering 86.91	
Name of Student Depatment Aggregate %	: : :	SHINGARE SAILEE PRAKASH Computer Technology 90.76	
Name of Student Depatment Aggregate %	: : :	TORVI SUJAY MUKUND Information Technology 92.29	
Name of Student Depatment Aggregate %	: : :	AISHWARYA MOHAN Electronics and Telecommunication 87.71	
Name of Student Depatment Aggregate %	: : :	POOJA ANIRUDDHA KULKARNI Instrumentation Department 91.59	
Name of Student Depatment Aggregate %	: : :	KUTE BALKRISHNA Mechanical Engineering 86.94	

List of Toppers SUMMER-2018 (1079)

Name of Student Depatment Aggregate %	: : :	REETU SHARMA Computer Technology 89.06	
Name of Student Depatment Aggregate %	: : :	AJIT KUMAR Information Technology 83.59	
Name of Student Depatment Aggregate %	: : :	YOGESH GUNJAL Electronics and Telecommunication 89.29	
Name of Student Depatment Aggregate %	: : :	MORE SHUBHAM Mechanical Engineering 82.05	

Prose Section

My Mother

Dhiraj Nair

My mother is very beautiful,
Like a bright full moon.
But I will tell you something,
That she is not like others.
I am the only child in my home,
But I never feel alone.
What if I don't have a sister or brother?
I have my dear mother!
She does all the household work,
But I never does my homework.
Because she wants me to be
Hardworking like her.
So this was about my mother,
And guess who is the best?
For you it might be somebody else,
For me, my mother is the best!!!
Thank you God!
For giving me such a nice mother!

Be Proud Of Who You Are

-By Pooja Shukla,
TYCM(II Shift)

I come with no wrapping or pretty pink bows.
I am who I am, from my head to my toes.
I tend to get loud when speaking my mind.
Even a little crazy some of the time.
I'm not a size 5 and don't care to be.
You can be you and I can be me.
I try to stay strong when pain knocks me down.
And the times that I cry are when no one's around.
To error is human or so that's what they say.
Well, tell me who's perfect anyway.

Follow your dreams

Rajput Vaishnavi Prakash (SYIF)

Follow your dreams.
Take one steps at a time and don't
Settle for less,
Just continue to climb
Follow your dream.
If you stumble, don't stop and lose
Sight of your goal
Press to the top.
For only on top can we see the whole?
View;
Can we see what we've done and
What we can do;
Can we then have the vision to seek
Something new,
Press on.
Follow your dreams.

WHY NOT A GIRL ?

Sanmesh JagadishT andel (SYME–B)

People pray for a boy,
Not for a girl.
Every good wishes for a boy,
Not for a girl.
Every one wasn't male,
Not female.
People pray to Goddes Laxmi,
For success and courage.
People pray to Goddes Saraswati,
For education.
People pray to Goddes Durga,
For graceful life
Then why not a girl.....

Prose Section

Beautiful Nature

By- ShubhamKotawadekar

When we take the time to examine the beauty of the world around us, we are able to see parallels within our own lives. One who in tune with nature is in tune with the practice of living. Nature moves in a spiral as do our personal lives. It is important to spend time in nature because in this way we can become aware of its wisdom. If we ignore the beauty of nature and spend all our time in an urban jungle, our stress levels go up and we begin to feel as if we are made out of the concrete that we see all around us.

Lesson of Life

-By Sweta Chavan

The art of learning,
Starts every morning,
You will love the fun of subjects,
Where each one is different from the next.
Maths is easy,
But the calculations make everyone busy.
The chemistry & history,
Where everything remains a mystery.
The concept of physics,
Are like English lyrics.
The list of botanists is very large,
Who collect sample of plant in a barge.
You have to remember a no. of logy,
If you want to study zoology.
You can only understand computer,
When you have a good tutor.
If you want to excel,
You cannot afford to miss physical.
So take interest in every subject,
They will make you the best.

INSTRUMENTATION ROCKS!!!

Mrs.S.Vani
HOD Instrumentation Dept
BVIT

Let me tell you today a story,

That stretches to now from history,

Designing and controlling many an instrument,

with man's progress, has been co incident...

From big factories to day to day life, Instruments help our lives to jive But how indeed are they programmed? What helps their circuits not get jammed? A washing machine adjusting to a program It's not magic, without any qualm, A heater heating to a pre-determined degree, Control systems provide you with the key...

In hospitals where one saves lives, Preventing one from joining the archives, Equipment need to be of the highest order, Biomedical Instrumentation helps in solving any disorder...

In the industry with large scale processes, Process control systems reduce stresses, Where man can't go, machines are needed, Industrial automation has expectations exceeded...

To fill in the gaps like color on paper, To make all this appear more dapper, Electrical and Electronics play a key role, Letting us not slip into the age of coal...

Hence, to conclude this journey, Like a bear attracted to honey, Instrumentation engineering rocks, Just look at the complexity of your clocks!!!

Prose Section

आजचा पाऊस

Jatin.Vijay.kadu

आजचा पाऊस कोणासाठी तरी खास
सगळीकडे पसरलेला मातीचा सुवास

आजचा पाऊस कोणासाठी तरी खास
जुन्या आठ वणी काढून करणार उदास

आजचा पाऊस कोणासाठी तरी खास
एका च छत्रीत भिजण्याची आस

आजचा पाऊस कोणासाठी तरी खास
ऑ फिसला जायचा वाचला त्रा स

आजचा पाऊस कोणासाठी तरी खास
शेतांमधील चैतन्याने घेतला नवा श्वास

पण पाउस नेहमीच भेटतो असा
हरवलेला जुना सवंगडी जसा

आयुष्य

Sanmesh Jagadish Tandel (SYME–B)

आयुष्य हे विधात्याच्या वाहितलं पान असतं
राहील तर रिकामं
लिहील तर छान असतं

रिकामं यायचं असतं
रिकामंच जायच असतं
मग हे आयुष्य तरी का जगायचं असतं ?

याच प्रशनाचे ऊत्तर शोधण्यासाठीच
जन्माला यायचं असतं.

नशीब कधी चांगल नसतं कधी वाईट नसतं
आपल नशीब आपणच लिहायचं असतं
सुंदर नशीब लिहिण्यासाठीच
जीवन प्रेमाने जगायचं असतं.

आहेत मित्र हसवायला
म्हणूनच मला आवडते रडायला.

आहेत मित्र सावरायला
म्हणूनच मला आवडते पडायला.
मित्रांमुळे अर्थ आला माझ्या आयुष्याला
म्हणूनच मला आवडते आयुष्य जगायला.

माय माझी एकटीच का रडायची

Harsh.Rajendra.Patil

किळतच नव्हत मला माय माझी एकटीच का रडायची
तच्या ताटातली अर्धी भाकर रोजच मला का वाढायची
मा
ाय पहात झ्या आधीच हात धुवून रोजच दूर अंधारात बघायची
क होती कुणास ठाऊक पण पदराखाली मला घट्ट धरून बसायची
प
ाऊस नव्हता तरी सुद्धा माझ्या अंगावर थेंब पाडायची
मांडीवर मला थोपटताना तिची का झोप उडायची

काहीच नव्हते घरात तरी ती घराला फार जपायची
एकच होत लुगडं तिला तेच ती धुवून रोज नेसायची
सण
जा ावाराच्या दिवशी मात्र माझ्यावर करडी नजर ठेवायची
वू नये कुणाच्या घरी मला घरातच लाडीगोडी लावायची
र
गालाव ोजच सकाळी हात जोडून देवाला काहीतरी मागायची
र हात फिरवून माझ्या बोटे तिच्याच डोक्यावरती मोडायची

मातीच्याच होत्या भिंती पांढऱ्या मातीनेच लिंपायची
अंगणात टाकायची सडा नि घर शेणाने सुंदर सारवायची

सकाळीही रोजच मला घासून अंघोळ घालायची
चुलीवरल्या भाकरीचा घास तिच्या हातानेच भरवायची

शाळेत मला धाडताना स्वप्ने मोठमोठी बघायची
सांजच्याला टाकायचा चेहरा तिचा तरी माझ्याकडे पाहून हसायची

कळतच नव्हतं मला माय माझी एकटीच का रडायची
तिच्या ताटातली अर्धी भाकर रोजच मला का वाढायची

मैत्री

Sanmesh Jagadish Tandel (SYME–B)

आयुष्यभर क्षणाक्षणाची संगत म्हणजे मैत्री.....
सुख -दु:खात एकत्र भिजलेली नाती म्हणजे मैत्री .....
ठेचळून पडताना सावरणारा हात म्हणजे मैत्री.....
जन्मांतरीच्या साथीचे आश्वासन म्हणजे मैत्री.....
निखळ, निरलस, निरपेक्ष, निराकार मैत्री .....
आदीपासून अंतापर्यंत शब्दनिर्बंध अशी फक्त मैत्री .....

Prose Section

भूल गए तुम उसे।

महेश जोशी (TYCM)

दुनिया मैं तुम्हारे आने के बाद ..वो सबसे पहले रोइ...
आंसू थे खुशी के .. बाजू में सुलाकर तुम्हे पल भर चैन की नींद वो सोइ...

देख के तुम्हारा पहला कदम दुगनी खुशी उसकीं हुई...
पहला शब्द उसका नाम सुन कर फिर खुशी के मारे वो रोइ...

स्कूल का था वो पहले दिन जब तुमसे जुदा पहली बार वो हुई..
रो रहे थे तुम पर कामियाबी की ओर जाते तुम्हे देख पहली बार वो तुमसे हस के जुदा हुई...

वुक़्त बीतने लगा होने लगे तुम बड़े..
पर उसके लिय तो तम वही थे नन्हे बच्चे..

होजाते जब बीमार तुम..सेवा तुम्हारी वो करती...
तुम्हारे सिरहाने बैठ के रात भर वो जगती..

तैयारी जब इम्तिहान की करते तुम रात भर जग के...
तुम्हारे साथ वो जगती ताकि मिलजाए अगर कुछ ना मिले ढूंढते ढूंढ़ते...

सुबह जल्दी आज भी वो उठती है जब लग गई नौकरी तुम्हारी...
ताकि तुम्हे घर का खाना मिलै और दूर रहे तुमसे बीमारी...

जाने क्यों वक़्त ऐसा बदल गया..
उसे स्मार्ट फोन सिखाते सिखाते तुम्हारा गुस्सा बढ़ गया..

प्यार से अगर तुम उसे वो फ़ोन सिखाते ..
तो वो होजाती ट्रेंडिंग ट्विटर पे ही ..
A B C D उसने सिखाई भूल गए तुम वो भी ..

वक़्त बीतता गया तुम्हे लगने लगी वो बोझ...
वृद्राश्रम की खिड़की से आज भी उसकी आँखें करती है तुमारी खोज ...

भूल गए तुम उसे जब कामियाबी कदम चुम्म रही थी तुम्हारा..
फिर भी सुबह उठ कर करती है वो तुम्हारे लिये प्रार्थना...

बदल गया है उसके तरफ बर्ताव तुम्हारा...
फिर भी तुम्हे नादान समझ कर माफ करती है ...
वो होती है माँ...वो होती है माँ...वो होती है माँ...।

साथ तुझी.....

प्रा.विनोद शंकर वाघमारे

येता डोळ्यामध्ये पाणी
ते पुसनारे कोणी पाहिजे,
सर्वचजण विरोधात जाता
तुम्हीच बरोबर म्हणनारे पाहिजे....

जीवनातले सर्व रंग अनुभवावे
स्वप्न ही केवळ स्वप्नच नसावी,
तर उघड्या डोळ्यांनीही दिसावी
अशी ती वस्तुस्थिती असावी...

घेवुनी मांडीवरती ड़ोके
थोपटनारे हाथ पाहिजेत,
विश्वाचा विसर पडावा
अशी आता साथ पहिजे...

आपणच आपल्याशी हसायचं
अन् कधी-कधी एकांतात रडायचं,
शेवटी सांत्वन आपणच करायचं
कुठपर्यन्त हे असच चालायच?

परवड जीवाची ही खूप झाली
विसाव्याची आता ओढ़ लागली,
ठिकाण जिथे कोणी बोलणार नाही
तिथे जाण्याची मज घाई झाली....

जीव थकला अन् पायही थांबले
चालायच तर किती अन् कुठपर्यंत,
घरी घेवून जाणारी ती ओढ़ पाहिजे
असा फक्त एक थाबा पाहिजे.

Prose Section

जीवनप्रवास

प्रा.विनोद शंकर वाघमारे

जीवनाच्या या वाटेवरती
प्रवाशी मिळतील अनेक
आपलं म्हणून पुसणारा
मिळणार नाही एक
प्रवाशी तो प्रवाशी
त्याची सोबत किती क्षणांची
क्षणभर थांबुनी पूढे जाणारा
वळनी मागे कधी न पाहणारा
आज आहे तर उद्या नाही
जीवनाचे कोडे कुणाला उलगडले नाही
रुळावरून गाडी घसरेल केव्हा
नेम त्याचा लागायचा नाही
जीवन एकट्या जगायचे आहे
हिम्मत हारुनी चालायचे नाही
प्रत्येक क्षण आहे मोलाचा
थांबूनी तुला चालायचे नाही
प्रत्येक क्षण आहे मोलाचा
विचार कर तू उद्याचा
विचार करुनी उद्याचा
पाऊल टाक पुढे तू मूला
जगाच्या कल्याणा
देह झिजव जरा
केलेस जर कल्याण जगाचे
सार्थक होईल तुझ्या जन्माचे.

School Memories

Arnav Jaiswal FYME

Rasta manzil ka dikhnae wala,
Ek woh khoobsurat safar tha.
Koi aur naam mat dena usey,
Woh dosra mera ghar tah.
Kya time tha woh jab ek lunch me 8-10 hat huwa karte the,
Kyn naaa hoo hum dost saree saat huwa karte the.
Lecture kee bich me masti too common hoti thi,
Hum sab washroom hoo ate the jab kisi ekk koo lagti thi.
Teacher kii ek hee kahani thi ,
Internal marks see phasana tha
Phir bhi haat me paper plane hoti thi,
Uss waqt haar mossom suhana tha.
Birthday pee wishes see jada birthday bomb milte the,\
Treat lene kee naam pee naye – naye chare dikte the.
eek choti pen see hum life kii memories create kar lete the.
ID card compulsory hote the ,Phir bhi hum nahi phente the.
Udhar kee rule hee itne strict thee ki unko thodne ke maze hee alag thee.
Ghar me ek bottle nahi bhar pate the ,
School me 5-5 log kii bhar lete the .
Class photo woo akhri time tha jisme saab sat dikhe the .
Puri school life humne handwriting sudharne mee gujar dii ,
Tabhi kya pata tha zindagi keybord pee kategi .
Aab mehsoos hota hai wooh aaj kee subhah see , aaj ki subhah see kitne jada achi thi.
Dosto see milne ki adat sii pad gayi thi , woo yade kuch iss tarah dil see guu gayi thi.

List of Teaching Staff

Sr.No.	NAME OF STAFF	Qualification with field of specialisation UG	DESIGN
1	Mr. P. N. Tandon	M. Tech (Civil)	PRINCIPAL
2	Patil Ashok Chavdas	M.SC.(MATHS)	VICE-PRINCIPAL
	Chemical Engineering		
3	Cissy Shaji	M.E. (CHEM)	H.O.D
4	Deepa Nair P.	B.TECH(CHEM)	LECTURER
5	Nimkar Samir C.	Ph.d., M.E. (CHEM)	LECTURER
	Computer Technology		
6	Patil Swati Bhushan (Bhosale)	B.E. (Computer Science Engg.)	LECTURER
7	Mhatre Mithun Vishnu	M.E. (Comp)	LECTURER
8	Jadhav Vijaya Shankar	M.E.(Computer)	LECTURER
9	Wankhade Suvarna Laxman	B.E. (Computer Science Engg.)	LECTURER
10	Gaikwad Shobhana Avinash	B.E. (Computer Science Engg.)	LECTURER
11	Mali Mohan K.	M.Tech (Computer)	LECTURER
12	Swapnil R. Patil	B.E. (Computer Technology)	LECTURER
13	Lad Pournima Suresh	B.E. (Computer Technology)	LECTURER
14	Rahul Uttamrao Patil	M.Tech., (Comp)	LECTURER
15	Rajput Punam Udaysintgh	M.E.,(Soft. Engg.) B.E. (Computer)	LECTURER
16	Rathod Vinod Motiram	M.Tech., (Computer)	LECTURER
17	Sujata Shankar Gawade	B.E. (Computer Technology)	LECTURER
	Electronics & Telecommunication Engg.		
18	Sutar Shahaji Sambhaji	B.E. (E & T.)	LECTURER
19	Patil Yamini Mahdva	M.E.	LECTURER
20	Mulla Aphasana Shahanvaj	M.E.	LECTURER
21	Suryasevak Singh Ramdhani	M.E.	LECTURER
22	Inampudi Shrilaksmi	M.E.	LECTURER
23	Deshmukh Shital Shashikant	M.E.	LECTURER
24	Yadav Suhas Kakaso	M.E.	LECTURER
25	Deshmukh Wrushali Dinkar	B.E.[ET)	LECTURER
26	Kakade Kavita Ravindra	B. E. (ET)	LECTURER
27	Gaur Lovely Maheshchandra	B. E. (E. T.)	LECTURER
28	Tabhane Sukheshini Shivshankar	M.E.,	LECTURER
29	Ghorpade Rajendra Prakash	B.E. (ET)	LECTURER
	Industrial Electronics		
30	Ukil Madhumita	M.SC.[PHY & ELECTRONICS]	LECTURER
31	Patil Amit Madhukar	M. E.	LECTURER

List of Teaching Staff

Sr.No.	NAME OF STAFF	Qualification with field of specialisation UG	DESIGN
		Information Technology	
32	Pawar Ranjeet Ramesh	M.E.,(Computer)	LECTURER
33	Kale Satish D.	M.E., B.E. (IT)	LECTURER
34	Shinde Sandeep Arvind	M.E.	LECTURER
35	Jagtap Asmita Ankushrao	B. E. (I. T.)	LECTURER
36	Samir Vilas Mulik	B.E. (IT)	LECTURER
37	Kamble Priyanka Uttam	B.E. (IT)	LECTURER
38	Tambewagh Pratibha Amol	M.E.(Computer)	LECTURER
		Instrumentation	
39	Vani S.	B.E.[ELECTRICAL]	H.O.D (IS)
40	Rajitha T.B.	M.E.B.TECH]	LECTURER
41	Arrora Ajitsing Anupsing	M.E.	LECTURER
42	Sawarkar Mohan Vinayak	B.E. (Electrical)	LECTURER
		Mechanical Engg. (1st Shift)	
43	Patil Jaypal K.	M.E. (Prod.)	LECTURER
44	Choure Satchidanand Sudamrao	M.E.[MECH]	LECTURER
45	Kadam Santosh Vithal	M.E., . (Prouduction)	LECTURER
46	Chavan Shreya Sandesh	M.E. B.E.[MECH]	LECTURER
47	Raut Padmakar Tukaram	M.E., . (Mech)	LECTURER
48	Mane Uvaraj Vilasrao	M.E., (Mechanical Engg.)	LECTURER
49	Wankhade Prashant Rambhau	M.E. (CAD - CAM)	LECTURER
50	Patil Amit Janardan	B.E. (Mechanical Engg.)	LECTURER
51	Sanap Sarika Bhagwan	B.E. (Mechanical Engg.)	LECTURER
52	Kantute Sharadchandra Vijayrao	M.E., (Mechanical Engg.)	LECTURER
		Civil Engineering	
53	Minu T. Babu	M. Tech (Civil)	LECTURER
54	Patil Sayali / Lokare Savita	M.E. (Civil)	LECTURER
		Science - Chemistry	
55	Dongare Ramesh Bhalchandra	M.SC.[CHEM],D.H.E.	LECTURER
56	Adsul Baba Govinda	M.SC.[CHEM],D.H.E.	LECTURER
57	Mohite Pandurang Tukaram	M.SC (CHEM) B.ed	LECTURER
58	Kadam Sachin Shivaji	M. Sc (Chemistry)	LECTURER
		Science - English	
59	Mr. Waghmare Vinod Shankar	M.A.[ENGLISH], B.Ed)	LECTURER
60	Patil Milind B.	M.A.,B.Ed.	LECTURER
61	Smt. Salve Maya Sitaram	M.A.B.Ed.(English)	LECTURER
62	Kirdat Pandurang Ananda	M.A. m. Phil.	LECTURER
		Science - Maths	
63	Mehrotra Vinai	M.SC.[MATH]	LECTURER
64	Bade Anagha.	M.SC (MATHS)	LECTURER
		Science - Physics	
65	Kolhe Ravindra S.	M.Sc. (Phy.) B.Ed,	LECTURER
66	Puranik Charuta	M.Sc(Phy), M.Phil., B.ed.	LECTURER
67	Patil Ujwala Kishor	M. Sc(Physics)	LECTURER

List of Non Teaching Staff

Sr.No.	NAME OF STAFF	Qualification with field of specialisation UG	DESIGN
1	Mr. Pawar Uttam Dhondiram	S.S.C.MS-CIT	Sr.Clerk
2	Mr. Patil Maruti Hari	S.S.C.I.T.I.	Smithy Instructure
3	Mr. Yadav Ravikiran Dinkar	Diploma In Civil Engg	Sr.Clerk
4	Mr. Khamkar avinash P	S.S.C.	Jr.Clerk
5	Mr. Patil Bibishan Hariba	M.Com	Accountant
6	Mr. Harblas Ratan R	S.Y.B.A.	Laboratory Assistant
7	Mr. More Jagannath Nivrutti	S.S.C.I.T.I.	Lab Assistant
8	Mr. Shinde Jayvant Bhimrao	B.Sc	lab Assistant
9	Mr. Kandhare Sanjay Dattatray	S.S.C.I.T.I.NVTVT	Electrician
10	Mr. Pawar Rajendra Krushna	H.S.C.I.T.I.NCVT	lab Assistant
11	Mr. Mane Sanjay Shankar	H.S.C.	Typist Cum Clerk
12	Mr. Mohite Mahadev A	H.S.C.I.T.I	Lab Assitant
13	Mr. Chavan Chhagan Kashinath	B.Sc.Chem	Lab Assistant
14	Mr. Mahadik Dilip Ganpat	B.Com Typing (Eng)	Jr.Clerk
15	Mr. Zambre Arun Shankar	D.C.T.L.	Assistant Technical
16	Mr. Mane Pradeep B	B.Sc.G.D.C.A	Lab Assistant
17	Mr. Jadhav Sambhaji Madan	B.A. MS CIT	Jr.Clerk
18	Mr. Kulkarni Pradip Jagannath	B.Com	Jr.Clerk
19	Mr. Hajare Mahendra bhiku	B.Com	Jr.Clerk
20	Mr. Torne Pradip Shamrao	B.A.	Jt.Clerk
21	Mr. Londhe Shivaji Tanaji	B.A.	Jr.Clerk
22	Mr. Lavangare Vijay Parshuram	B.A.	Jr.Clerk
23	Mr. Tambewagh Sachin Laxman	B.A. MS CIT	Jr.Clerk
24	Mr. Surywanshi hanmant Balaso	B.Com MSCIT	Jr.Clerk
25	Mr. Gaikwad Sadanand S	B.Com	Jr.Clerk
26	Mr. Dafale Sandip Dilipsingh	B.A.	Jr.Clerk
27	Mr. Nangre Pravin Sahebrao	H.S.C	Lab Attendance
28	Mr. Mahadik Ajit Dinkar	B.A.MSCIT	Jr.Clerk
29	Shrimati Shikalgar S. Ramjan	S.S.C	Lab Attendance
30	Miss Shirguppikar Jyoti Manohar	B.A.MS CIT	Jr.Clerk
31	Mr. Bodare Amol Dhondiram	B.Com	Jr.Clerk
32	Mr. Mohite Shashikant Santram	B.A.B.Ed	jr.Clerk
33	Mr. Yadav Dashrath Nivrutti	B.A.	Jr.Clerk

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36	Mr. Patil Amol Ashok	B.A.	Jr.Clerk
37	Mr. Yadav Amol Rangrao	B.A.	Jr.Clerk
38	Mr. Uthale Sandip Yashwant	B.A.	Jr.Clerk
39	Miss Patil Nitisha Sambhaji	B.Sc	Lab Assistant
40	Mr. Mandale Sunil Rajaram	B.A. M.Lib	Jr.Labriran assistant
41	Mr. Metkari Dhanaji Dadaso	B.A.	Jr.Clerk
42	Mr. Gavli Amit Shivaji	B.a.	Jr.Clerk
43	Mr. Dhane Kiran bapusaheb	B.A.	Lab Attendance
44	Mr. Pawar Gajanan R.	B.A.	Lab Attendance
45	Mr. Pawar Rahul shamrao	M.A.	Jr.Clerk
46	Mr. Pol Suhas bhagvat	B.A.	Lab Attendance
47	Mr. Jadhav Dattatray Rangrao	7th	Peon
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56	Mr. Dhane Sachin Ananda	H.S.C	Peon
57	Mr. Shinde Vishal Subrao	12th	Peon
58	Mr. Kumbhar Shamrao Prakash	12th Pass	Peon
59	Mr. Shinde Sukhdev Govind	S.S.C	Peon
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Hon'ble Dr. PATANGRAO KADAM M.A., LL.B., Ph.D.

- Founder, Bharati Vidyapeeth
- Chancellor, Bharati Vidyapeeth Deemed University
- Minister for Revenue, Maharashtra State

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