



# **E- FOCUS**

## **COMPUTER SCIENCE & ENGINEERING**

**2017-18**

**Message from the Chairman**



**Er . A. Mohamed Yunus**

**Chairman – M.I.E.T. Institutions.**

Being the current world not a hasty track, the responsibility of creating a high-quality educational institution is challenging and embellished with a host of initiatives which validate them over an extended time span. Moreover, in a world where time and space are compacted, there is a massive defy for success which necessitates knowledge, which is current, pertinent and based on real experience. In this situation, the education plays a paramount role in

moulding, shaping and preparing youngsters to face the challenges of the future world. We at M.I.E.T., motivate and empower our students to be enduring learners, critical thinkers and prolific members of an ever-changing global society.

Also, the students are encouraged to channelize their potential in the pursuit of fineness in a holistic and student-centered environment. Moreover, M.I.E.T strives hard to sensitize its students to the needs of the community and inculcate values like truthfulness, fortitude and acceptance of individual differences. I am confident that M.I.E.T will always be a bonfire of light guiding the fate of its students, while blistering kindness and compassion as it ascends high in its pursuit of academic excellence and accomplishment of our motto “Humanize, Equalize, Spiritualize”.

To ensure the same, we have an excellent portfolio of industry professionals and academicians on our faculty, who provide a holistic view of the shades of engineering and managerial operations to our students. The students are prepared to enrich their careers by endowing them with the necessary talent and critical thinking to become self-directed learners and prolific citizens contributing positively to the society.



**Dr . X . Susan Christina, M.E., Ph.D.**  
**Principal – MIET Engineering College**

### **Message from the Principal**

In a fast developing nation like ours, the technical education proves to be the backbone and stepping stone to move into the domicile of a developed nation. It is well acknowledged that Engineers are vital to augment the economy and society. Manifestly their knowledge and skills are in high demand across a range of sectors, from manufacturing to financial services. So it becomes the imperative responsibility

of the technical institutions to harvest talented engineering professionals to meet the current and future demand across the globe.

Our M.I.E.T. Engineering College has been enthusiastically contributing in the mission of transforming the rural India into developed nation by administering the institution with a high degree of innovation, creativity, human intelligence and passion towards excellence.

It gives me massive pleasure to welcome you to the M.I.E.T. Engineering College which has a wonderful green campus and is equipped with state-of-art infrastructure. It was established during the year 1998 and ever since its inception; it is promoting excellence in various disciplines of engineering education through highly qualified dedicated faculty members and magnificent infrastructure. We have well equipped laboratories, Research and development cell, Training and placement department, workshops, auditoriums, seminar halls and library to aid the students in achieving highest standards in academics, research and professional skills. It ensures the young engineers and budding managers to enhance their capacity to innovate and their problem solving skills besides helping them to develop their critical thinking, communication and soft skills those prove to be very crucial along with their sound academic knowledge. However the main focus of the Institution is to enrich our students with comprehensive overall knowledge, wisdom, practical exposure and training both at the academic level and in the highly competitive global professional market. Students are also encouraged to display their flair in co-curricular and extracurricular activities conducted both inside and out the campus. M.I.E.T. ultimately ensures that the students prove themselves to be not only well qualified engineers and managers but also very accountable and epitome citizens for the nation.

### **Message from the HOD**



**Dr.V.Chandrasekar**  
**HOD/CSE**

I am extremely happy to bring out this message for our Department magazine released for the academic year 2017 – 2018. This magazine provides a platform for students and staff to share information, spread the latest technical knowledge and cultivate right ways that will equip all of us to stay competent in our respective fields of study and research. I welcome all the students & their parents to the Department of Computer Science and Engineering. Computer Science and Engineering is an essence of today's world. We are committed to providing not only the technical education to our students but also the leadership qualities through which they can create employment to others.

Reading this magazine would definitely be an inspiration and motivation for all students and staff to contribute even more to the forthcoming issues. I hope that everyone would continue to give their full efforts to keep the momentum and continue to enhance the standards of the magazine. The outside world will come to know about the caliber of the students and the faculty through this magazine.

# EDITORIAL BOARD

## Chief Editor

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# **VISION AND MISSION OF THE INSTITUTION AND THE DEPARTMENT**

## **VISION OF THE INSTITUTION**

To be a center of excellence in Technical Education through Technical, Ethical and Professionals skills for meeting the diverse needs of the Society, in particular Muslim minority community and the Nation.

## **MISSION OF THE INSTITUTION**

- To impart Quality Education, Training and Research in the fields of Engineering and Technology.
- To provide a conducive learning environment that enables the students to achieve professional and personal growth.
- To expose the contemporary issues of society, ethical practices and to create environmental awareness.
- To provide the required infrastructural facilities for developing the professional and innovative skills.

## **VISION OF THE DEPARTMENT**

To attain excellence in Computer Science and Engineering field so as to address societal problems through active research, maintaining ethical standards.

## **MISSION OF THE DEPARTMENT**

- M1. To empower with technical skills to solve the real time problems through interdisciplinary approach.
- M2. Expose to international ethical practices.
- M3. Provide personality development for an effective leader and individual member of a team.

# DEPARTMENT EVENTS

## WORKSHOP ON MOBILE APP DEVELOPMENT

Workshop on “**Mobile App Development**” aims to impart technical and practical knowledge to students and future engineers. This workshop was an initiative of Department of Computer & Engineering, M.I.E.T Engineering College, under the Guidance of **Dr.D.Yuvraj**, Head of the Department, to impart knowledge to the students regarding app development in Android.

**Er. A. Mohamed Yunus, Chairman**, M.I.E.T Institutions presided over the function. **Dr.S.Gugaraja, Principal**, M.I.E.T. Engineering College, Trichy and Dr.D.Yuvraj, Head of the Department, CSE felicitated the gathering.

Mrs.R.Senthamil selvi Associate professor started by addressing the students and faculties by giving them an insight about the Department and course and why they were conducting such events for the students, what benefit students will gain by such events and many more advantages of students. Why Workshop on “Mobile App Development” was carried out for students.

It was an interactive workshop conduct by **Mr. Manohar**. He started the workshop with the Current trends of Android development and its advantages and disadvantages. He explained them the benefits and changes it will bring to day-to-day activities and how it can benefit them irrespective of their branch. He discussed the importance, usefulness and impact of apps in today’s digital world. He briefed the students about the types of validation, basic hardware and software requirements for android development.

He provided insights about Android development. He explained them app architecture, app components and app resources. He not only explained it analytically but also demonstrated by creating an app with the students. Even the students got a chance to experiment with their coding skills on Android Studio. To enhance their skills an app development competition was declared. In this workshop the students can able to design the user interface of the app.

After the workshop, the students asked him the questions and he answered them appropriately.

## **WEB DEVELOPMENT TECHNIQUES**

A one day seminar was organized by the Department of CSE on 19-08-17 at 10.00 am in M.I.E.T Engineering College.

**Er.A.Mohamed Yunus, Chairman, M.I.E.T. Institutions** felicitated the function and delivered the special address to the students.

The Chief Guest **Ms P.Mahalakshmi, Senior Software Engineer,Green Soft Technologies, Trichy** delivered a Lecture on “**WEB DEVELOPMENT TECHNIQUES**” . During the program she emphasized about the importance of Servlet ,Invoking servlet from HTML & Applet,Session Tracking,Lock Servlet and other applications used by servlets. **Dr.X.Susan Christina, Principal(i/c), M.I.E.T. Institution** introduced and honoured the Chief Guest. The program was arranged by **Dr.D.Yuvaraj, Prof &HOD / Department of CSE.**

The program started with the welcome address delivered by **Dr.K.Geetha Prof/CSE** and the vote of thanks was proposed by Mrs.S.Shanmuga Priya, Assistant Professor / Department of CSE.

## **I/O SYSTEMS AND MEMORY TECHNOLOGY**

Department of Computer Science and Engineering has organized a one day Seminar on “**I/O Systems and Memory Technology**” on **11-09-2017 (Monday)** at college campus.

**Er. A. Mohamed Yunus, Chairman, M.I.E.T. Educational Institutions** preside over the function and delivered the special address. In his speech he asked to make use of the Guest Lecture.

The Chief Guest **Dr.P.Sudhakaran, Professor/Head of IT, Oxford Engineering College, Trichy** delivered a Lecture on “**I/O Systems and Memory Technology**”. During the program he emphasized about recent memory technologies, I/O systems and the recent problems faced in memory storage.



**Dr. X. Susan Christina, Principal, M.I.E.T. Engineering College** introduced and honoured the Chief Guest. The program was arranged by **Dr.D.Yuvaraj, HOD/Department of the CSE & IT.**

The program started with the welcome address delivered by Ms.A.K.Ayesha Shereen of II year BE CSE and Vote of Thanks was proposed by Mr.V.Prasana of II Year B.E CSE.

### **BULKY STORAGE AND TRIGGERING**

**Department of Computer Science and Engineering** has organized a one day workshop on “**Bulky Storage and Triggering**” on **25-09-2017 (Monday)** at college campus.

**Er. A. Mohamed Yunus, Chairman, M.I.E.T. Educational Institutions** preside over the function and delivered the special address. In his speech he asked to make use of the Guest Lecture.

The Chief Guest **Dr.E.Sivasankar, AP, Department. of CSE, NIT, Trichy** delivered a Lecture on “Workshop on Database Design Using Normalization”. During the program he emphasized about the application of databases with Normalization, overview of Data Mining. The Lecture was highly constructive, informative and obliging for the students.

**Dr. X. Susan Christina, Principal, M.I.E.T. Engineering College** introduced and honoured the Chief Guest. The program was arranged by **Dr.D.Yuvaraj, HOD/Department of the CSE & IT.**

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### **PYTHON PROGRAMMING**

Value added course on Python Programming was conducted in Computer Science and Engineering Department for III year students. The course started on 16<sup>th</sup> May 2018 and end up with 20<sup>th</sup> May 2018. The course was handled by Mr. M.Shanmuganathan, Managing Director, Vedha Technology. The students learnt concepts of Python interpreter and interactive mode;

values and types: int, float, boolean, string, and list; variables, expressions, statements, precedence of operators, comments, Control Flow, Functions, Strings, Lists , Tuples, Dictionaries, Files and exception: text files, reading and writing files, format operator errors and exceptions, handling exceptions, modules, packages, etc.. Students felt that the value added session on Python Programming was very much handy for them and they got the basic idea of the Programming.

## **HARDWARE AND NETWORKING**

Value added course on Hardware and Networking was conducted in Computer Science and Engineering Department for IV year students. The course started on 5<sup>th</sup> July 2017 and end up with 20<sup>th</sup> July 2017(5.00 pm to 6.30 pm). The course was handled by Mr. Vivek, CEO, Ozone Cyber Security. In this Value added course students learnt Networking History and Evolution, Network Architecture and Design, Network components design and functions, Types of Networks Personal Area Networks (PANs) Local Area Networks (LANs), Campus Area Networks (CANs) Metropolitan Area Networks (MANs), Wide Area Networks (WANs), Cabling and Trouble shooting, Open Systems Interconnection (OSI) Reference Model, etc.. Students felt that the value added session on Hardware and Networking was very much handy for them and they got the basic idea of the Networking. It has been planned to extend this value added training in the next semester with some medium level of application development.

## **TISCA'18 (Triggering Innovation in Significant Computing Advancement)**

The Department of Computer Science and Engineering & Information Technology, MIET Engineering College has conducted a “**National Level Technical Symposium – “TISCA'18”** on **24-02-2018 (Saturday)**).

**Er. A. Mohamed Yunus**, Chairman, M.I.E.T Educational Institution presided over the function. **Dr. X. Susan Christina**, Principal, M.I.E.T. Engineering College, Trichy felicitated the Gathering and **Dr.V.Chandrasekar**, Head of the Department, CSE presented the annual report. The Newsletter TISCA'18 was released in the grand occasion.

**Dr.N.Kulasekharan, M.E.,Ph.D., Assistant General Manger, FIAT Chrysler Automobiles India Private Limited, Chennai** delivered the Inaugural address. He specified other than the regular academic activities the students have to concentrate and improve their soft skills. Many events were organized throughout the day in which the students from various Engineering colleges participated actively. Models related with current era were created by the students of our College displayed in this symposium.

In connection with TISCA'18, for **paper presentation**, totally 40 papers were received from various engineering colleges. After scrutinizing the papers by the event coordinators and HOD ten papers were selected for final presentation. Guest speaker Dr.G.Geetharamani, M.Sc., M.Phil., PGDCA., M.E (CSE)., Ph.D., Associate Professor, Head of the Department, Department of Mathematics, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli,, and Dr.K.Geetha, Asso.Prof/CSE are the juries for the paper presentation session.

**Bug Buster (Debugging) Event-** In first round, only 27 teams were allowed. 5 programs were given in order to identify the errors for each team. Allotted 25 marks for each team. Out of 27 teams 15 teams were selected for round2 according to their marks. In second round, the online debugging programs were given.

**Mind Sweeper Event-** In first round, only 30 teams were allowed. 20 different set of questions were given for each team. Out of 30 teams 15 teams were selected for round2 according to their marks. In second round, 20 questions were asked for each team. Out of this, 7 teams were selected. In third round, team members are asked to choose a particular domain. The questions are asked in the selected domain and final winners were selected based on the score.

**Meme Creation** - In the first round Terror template, 19 students had participated and it had been conducted for 30 minutes from 2.30 p.m to 3 p.m then the participants for the first round was shortlisted to 8 by the co-ordinators from 3 p.m to 3.20 p.m. Meanwhile fun game like dumb charades had been conducted and surprise gifts had been given to the winners. During Second round an Invisible Logo had been designed Among 8 pupils, winner and runner was selected based on the creativity.

Selvan.M.Mohammed Abbas (IV/CSE) student chairman welcomed the gathering in evening session. The winners were honoured with prizes and certificates. Dr.G.Geetharamani, M.Sc., M.Phil., PGDCA., M.E (CSE)., Ph.D., Associate Professor, Head of the Department, Department of Mathematics, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli,, and Dr.V.Chandrasekar HOD/CSE were gave their felicitation and distributed the prizes and Selvi.Rachel Debby (IV/CSE) proposed the vote of thanks.

## **BEST PROJECT**

**The following projects were selected as a best project for the academic year 2017-2018.**

- 1. M.Imran and S.H.Mohamed Farhan have done their project entitled “Secure Balloting machine using fingerprint and aadhar verification “under the guidance of Dr.K.Geetha.**
- 2. F.Rachel Debby and M.Abinaya have done their project entitled “Image seclution trespassing in OSN using water marking techniques” under the guidance of S. Manikandan**
- 3. G.Sivanesan and Z.Mohamed Gani have done their project entitled “BORDER-ALERTROID: Mobile Application for boarder alert and automatic mode conversion in Mobile Cloud Environments” under the guidance of G.Megala**
- 4. A.Mohamed Anas,S.Mohamed Rafeek and S.Sathick Batcha have done their project entitled “Authority Identification and cashless fine system” under the guidance of M.K.Mohamed Faizal.**
- 5. M.Abdul Kuthoose and M.Ahamed Basha have done their project entitled “Application based human tracking using global position system” under the guidance of A.Joshua Issac.**
- 6. A.Francis Santhanaraj and N.Kanagaraj have done their project entitled “Implementation of sensing and control of an irrigation system on agriculture” under the guidance of R.Venkatesan.**

# **ABSTRACT**

## **SECURE BALLOTING MACHINE USING FINGERPRINT AND AADHAR VERIFICATION**

**Imran. M, Mohamed Farhan.S.H**

Voting schemes have evolved from counting hands in early days to systems that include paper, punch card, mechanical lever and optical-scan machines. An electronic voting system which is used nowadays provide some characteristic difference from the traditional voting technique, and also it provides improved features of voting system over traditional voting system such as accuracy, convenience, flexibility, privacy, verifiability and mobility. But Electronic voting systems suffers from various drawbacks such as time consuming, consumes large volume of paper work, no direct role for the higher officials, damage of machines due to lack of attention, mass update doesn't allows users to update and edit many item simultaneously etc. These drawbacks can overcome by E- Voting with finger print scanner system. This is a voting system by which any voter can use his/her voting rights from anywhere in the country. The system ensures authentication of an individual by matching fingerprints and eligibility is checked by calculating the user identity of the voter thus making the existing voting cards redundant. Voter can cast their votes from anywhere in the country in highly secured way. That makes voting a fearless of violence and that increases the percentage of voting. And also extend the approach to extract aadhar card details automatically. Finally reports are generated with overall voting results with secure manner.

## **IMAGE SECLUSION TRESPASSING IN OSN USING WATERMARKING TECHNIQUES**

**Rachel Debby. F , Abinaya. M**

Image in a social network is transferred or transmitted between servers and mobile users. Privacy of that data is very important as it may belong to a person's sensitive information. If the image gets hacked by the hacker then there is a possibility that it can be used to defame a person's social data. In the existing system, text based encryption can be implemented in mobile cloud computing. There are many different approaches of storing data securely over the cloud,

using mobile computing techniques such as end-to-end encrypted data transmission, dynamic credential generation only for text data. This project introduces a novel watermarking scheme with a wavelet algorithm, named as discrete wavelet transform, in real time social network application similar to Facebook. This scheme uses images and stores them in a server in a secure format. Also the project is extended by categorizing the picture as sensitive or normal. If it is sensitive then copyrights algorithm is performed on it. By doing so, permission must be granted at the receiver end to download the images in secure manner. Experimental result can be shown that in real time mobile cloud environments using C#.NET as front end and SQL SERVER as back end and comparative study of existing algorithms based on computational time and privacy rate.

## **BORDER-ALERTROID:MOBILE APPLICATION FOR BORDER ALERT AND AUTOMATIC MODE CONVERSION IN MOBILE CLOUD ENVIRONMENT**

**Mohamed Gani.Z , Sivanesan.G**

Navigation in transportation is one of the most important applications mostly used by peoples. Global Positioning system (GPS) provides a wide range of navigation and timing services. An Android application named as “BORDERALERTROID” is implemented to track the GPS locations of users. The latitude and longitude values are set as default. The alert that can sent if the user is 2 kilometers before of default values. After reaching border, GSM mode is used to send SMS alert to parents and also users. The notification will be sent to the border security forces which act as the server to all other devices that are operated by people in ships. This can act as an incident management application to avoid conflicts at varying situations. This is processed mainly for fishermen’s who are employed in the borders. The automatic alarming system is implemented along with this device which alerts in case any sort of issues. An unique identifier International Mobile Equipment Identity (IMEI) number which will be sent along with the latitude and longitude coordinates. The application operates based on device tracking. This provides ease to operate even for illiterate people. Profile Change application is also implemented which runs on Android platform. User can set predefined WIFI locations. A WIFI



unit is a device, normally carried by moving phones, that uses the WIFI locations to determine and track its precise location. Based on this WIFI tracking system, android phone automatically read the location details and matched with pre-defined information. If WIFI details are found means, automatically mobile convert the normal mode to silent mode and vice-versa. After user leave from the WIFI locations, mobile phone automatically changed to previous mode. This application can be overcome the existing Jammer Systems and message based mode conversion system. Experimental results show that, proposed system can be implementing in real time android applications.

### **AUTHORITY IDENTIFICATION AND CASHLESS FINE SYSTEM**

**A.Mohamed Anas, S.Mohamed Rafeek, S.Sathick Batcha**

Regional transport office (RTO) is the organization of Indian government responsible for maintaining a database of vehicles for Pan India. The RTO issues driving licenses and maintain the collection of vehicle excise duty and sells personalized registrations. It is mandatory that all drivers must and should produce the DL, insurance, RC copy failing which they should pay penalty in case caught by traffic police. An approach to solve such problems by storing all the information like Aadhar details, driver details and vehicle details kind of details stored in cloud. In this system, traffic police have to scan QR code or Aadhar number through the smart phone and system verifies driving license. If the driver's verification is not successful then the person has to pay the fine through online transaction. Experimental evidence shows that this technique is easier and faster than the other methods.

### **APPLICATION BASED HUMAN TRACKING USING GLOBAL POSITION SYSTEM**

**M.Abdul Kuthoose, M.Ahamedbasha**

This project presents an alert system for PROB detection using common commercially available electronic devices to both detect the PROB and alert authorities. I PROB is a very powerful software especially developed for the safety of girls, when ever somebody is in trouble they don't have to sit and find contacts or find ways to send sms, or message the near ones. They might not have so much time... all that they have to do is shake the smart phone above the

threshold value, vigorously ., immediately our application timer on automatically and get current location and send alert message to predefined two contacts, message contains “I am in problem location, latitude = value, longitude = value ”. Continuously their location is monitor in case of any changes made in previous location once again send location change information will send to predefined contacts. That process made until manually stops the application.

## **IMPLEMENTATION OF SENSING AND CONTROL OF AN IRRIGATION SYSTEM ON AGRICULTURE**

**A.Francis Santhana Raj, N.Kanagaraj**

Farmers usually work on large portions of land to grow different types of crops. It is not always possible for one person to be able to keep track of the entire farmland all the time. Sometimes it may happen that a given patch of land receives more water leading to water-logging, or it might receive far less or no water at all leading to dry soil. So in order to solve this problem, an “IOT Irrigation Monitoring and Control Project” has been proposed. This is a very useful project wherein, the user can monitor and control the supply of water from a remote location. This system makes use of a concept called IOT (Internet of Things). Here our system is connected to the internet using a Wi-Fi module. A Micro controller has been used to send the control signals and to connect to the desired website Motor status and Moisture level circuit keeps checking the moisture content of the soil by means of a moisture sensor, and updates the “Moisture level” on the website. The user can then check the current moisture level from a remote location and control the water supply. For this, the circuit only has to toggle the “Motor status” from ‘ON-OFF’ or ‘OFF-ON’; and the “water pump” will be ‘turned ON’ or ‘turned OFF’ accordingly. Thus the ‘soil-moisture’ gets monitored and the ‘water supply’ can be controlled just by the toggling the “Motor status”. So the user doesn’t have to worry about his crops or plants getting damaged due to ‘water-logging’ or ‘drought’. This system can also be useful for people having small gardens, while it may not be possible for a person to be continuously present at his/her garden but one can use this project to keep a track of ‘soil-moisture’ and ensure proper water supply even from a distance.

# ARTICLES

## 5G

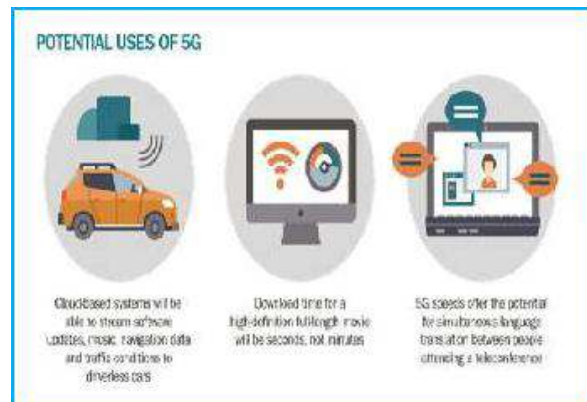
London will be ready to host the fifth generation of mobile telecoms technology by 2020, according to Boris Johnson, the capital's mayor. 5G technology promises mobile data speeds that far outstrip the fastest home broadband network currently available in the UK.

With speeds of up to 100 gigabits per second, 5G will be as much as 1,000 times faster than 4G, the latest iteration of mobile data technology.

Whose employees are often on the move.

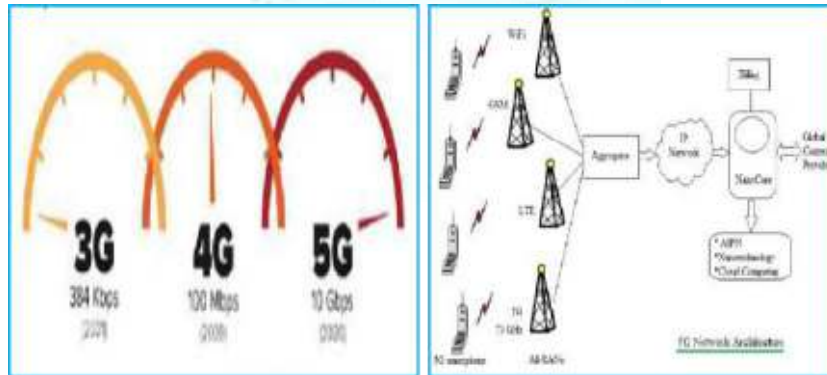
3G does not have the capacity to cope with modern mobile working demands. Workers in urban centers often feel the effects the most, with slow and sometimes non-existent mobile connections common in peak hours. Because 4G networks have higher base speeds, they experience less of this peak-hour strain. There is more than enough capacity to share for core services, such as e-mail and web browsing.

5G will make communications so fast they become almost real-time, putting mobile internet services on a par with office services



On top of this, 4G provides an additional speed boost for increasingly important business services, such as mobile video conferencing and cloud computing. 4G also allows for cost-effective, stable international calls on data calling services, such as Skype, even at peak times.

It will provide greater network stability to ensure that business-critical mobile functions do not go offline and the speed necessary to give employees a fully equipped virtual office almost anywhere. If broadband services do not experience significant uplifts in speed, 5G might even prove to be a cost-effective alternative to fixed-line services in ten years' time.



Mobile data could prove to be the answer for businesses that operate outside the reach of broadband networks or suffer from slow fixed-line service. Because the cost of putting up mobile data masts is far lower than installing fiber optic cables, operators may well decide that 5G is speedy enough to be used to reach rural areas as an alternative to fixed lines.

by

**B.Bazeer Ahamed (AP/CSE)**

### **ALL LIFE IS AN EXPERIMENT**

“All life is an experiment. The more experiments you make the better” “Beauty is not in the face; beauty is a light in the heart “

“So it turns out that being an adult is mostly just googling how to do stuff” “Hope - hold on pains ends”

“Sometimes, when i say” I’m okay. I want someone to look me in the tight and say, i know you’re not“

“Don’t spends time beating on a will, hoping to transform it into a door” “Nothing is impossible.

*The word itself says, “I’m possible”*

By

**P.Manikandan (AP/CSE)**

## LEARNING CULTURE

In every part of our life there is an opportunity to learn. To make our learning enjoyable and very clear, try to follow the below points.

- Choose what you want to learn (simply Choose the topic)
- Go through the description (theory) until you understand (mostly in text books)
- Try to relate the theory with practical application or real time application
- If not able to relate the theory with practical try googling (Search in Internet)
- You will get video links (YouTube)
- Other forums (same will be explained with different forms)

### Conclusion/Summary:

- Practical learning allows creativity.
- Brain will hold the concepts for longer time.
- Better knowledge and deep learning can be achieved.

By

A.Barveen (AP/CSE)

## QUANTUM COMPUTER ARE ABOUT TO GET REAL

### What is Quantum Computer?

A quantum computer is any device for computer that makes direct use of distinctively quantum mechanical phenomena, such as super position and entanglement, to perform operations on data.

In a classical computer, Information is stored in as bits; in a quantum computer, It is stored as qbits (quantum bits).

### Why the need of Quantum Computer?

In a world where we are relying increasingly on computing, to share our information and store our most precious data, the idea of living without computers might baffle most people. But if we continue to follow the trend that has been in place since computers were introduced, by 2040 we will not have the capability to power all of the machines around the globe, To prevent this, the industry is focused on finding ways to make computing more energy efficient, but

classical computers are limited by the minimum amount of energy it takes them to perform for one operation.

Now let's go into the main stream of our title

Google, IBM and others are developing quantum computers. IBM has made its five - qubit computer accessible online for free, and the company is planning a 50-qubit computer for commercial use.

In 2013, Google and NASA bought a quantum computer, names as “**D-WAVE**”,

**“The D-WAVE took about a hundredth of a second; with a classical computer it ‘take about 100 days”**

The team of computer scientists behind the D-WAVE at NASA and Google released a scientific paper on a recent test of the machine. They found that it could crunch a highly specialized computing problem roughly a hundred million times faster than conventional computer could do. (That's Quantum Speed)

#### **D-WAVE:**

In person, the room-sized D-wave two gurgles and rumbles a low tone, almost like a refrigerator working overtime.

To harness the quantum effects on the super conducting material that makes up the machines 1,097 qubits, the D-wave guts are kept at almost absolute-zero, about 150 times colder than deep space.

**“A succeeding each other. A quantum computation is like a symphony-many lines of tones interfering with one another.”**

**Classical computation is like a solo voice—one line of pure tones**

**Advances at Google, Intel, and several research groups indicate that computers with previously unimaginable power are finally within reach...**

by

**S.Amrutam Sunil**

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# **MACHINE LEARNING**

## **INTRODUCTION**

Machine learning is field of Computer Science that gives computers the ability to learn without being explicitly programmed. MACHINE LEARNING is closely related to computational statics, which also focuses on prediction making through the use of computers.

Arthur Samuel an American pioneer in the field of computer gaming and artificial recognition and computational learning theory in artificial intelligence.

Machine learning is way easier than it looks it's easy to believe that machine learning is hard. A arcane craft known only to a select few academics. After all conclusions about the world.

## **MACHINE LEARNING LANGUAGE**

PYTHON is a class-leading machine learning system that gives user direct access to predictive analytics, therefore proving itself to be the world's foremost data science languages.

## **USES OF MACHINE LEARNING**

Machine learning is a core sub-area of artificial intelligence; it enables computer to get into a mode of self-learning without being explicitly programmed, When exposed to new data these computer programs are enable to learn, grow, change and develop by themselves.

The interactive aspects of machine learning are important. Because as models are exposed to new data, they are able to independently adapt. They learn from previous computations to produce reliable, repeatable decisions and results.

## **CONCLUSION:**

With the rapidly increasing scope of machine learning, businesses and researches often need to consult machine learning experts for help with writing algorithms and developing effective AI solutions. Machine learning has become a powerful tool and promises to grow well into the future.

**By**  
**Vasanth**  
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## INTERNET OF THINGS

### **Nest smart Thermostat**

The Nest learns your family's routines and will automatically adjust the temperature based on when you're home or away, awake or asleep, hot or cold, to make your house more efficient and help you save on heating and cooling bills. The mobile app allows you to edit schedules, change the temperature when you're away from home, and even receive alerts when it looks like something has gone wrong with your heating or cooling system.

### **We MO smart plug**

We MO connected home devices in the Switch, a smart plug. It plugs into a regular outlet, accepts the power cord from any device, and can be used to turn it on and off on a set schedule or when you hit a button on your smart phone. Another model of smart plug, the Insight switch, also monitors how much energy your devices are using, helping you make your home more energy-efficient. You can see when the plugs are on, how much power they're using, and set schedules for operation right from the mobile app.

### **Philips Hue light Bulb**

It can change colors—the Philips Hue lights can change to any color you choose; they'll even match the tones in a photo that you upload via the app. They can also be turned on and off on a schedule or from your smart phone, and the Hue bulbs can even be synced with your music for an awesome sound-and-light party. Other companies are starting to release smart bulbs as well, making this a more competitive niche.

### **August Smart lock:**

With this smart lock, you'll never need keys again—it unlocks automatically when you get home, and locks behind you when you close the door. You can grant guest keys to friends or the dog sitter, and have them expire when you no longer want to give that person access to your house. An optional keypad means you can set a code to open your door in case you don't have your phone with you (like if you're out for a run). You can even view the activity log and grant access from your smart phone remotely.



## Health patch health monitor

It can be used for out-patient care by healthcare providers, letting them get ECG, heart rate, respiratory rate, skin temperature, body posture, fall detection, and activity readings remotely. This can alert doctors to potential health problems before they arise, or give them additional insights into which treatments will be most effective for their patients, even when their patients aren't in the office.

by  
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## BRAIN GAME

### Did you know???

“ **1089** “is an Magical number.

Write down the three digit number whose digits are in decreasing.

For example, **532**

Then reverse the taken digits to create new number.

(i.e.) **235**

Subtracts this reversed number from original number.

**532**

(-) **235**

**297**

With the resulting number, reverse it.

(i.e.) **792**

Add the resulting number with its reverse number.

(i.e.) **297**

**792**

**1089**

So we started with three digit number and following simple steps, we end up with **1089!!!**

That's why "**1089**" is an Magical number.

Now you select any three digit numbers and follow the steps.

You'll always end up with Magical number "**1089**".

by

**J.S. Nataraj**

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### **CHILD LABOUR**

Not all children in India are lucky to enjoy their childhood. Many of them are forced to work under inhuman conditions where their miseries know no end. Though there are laws banning child labor, still children continue to be exploited as cheap labor. It is because the authorities are unable to implement the laws meant to protect children from being engaged as laborers.

Due to high poverty and poor schooling opportunities, child labor is quite prevalent in India. Child labor is found in rural as well as urban areas. The 2001 census found an increase in number of child laborers from 11.28 million in 1991 to 12.59 million.

The conclusion for this is, the government should bring down the incidence of child labor through reform and investment in education. Homeless children should be provided housing through the Sarva Shiksha Abiyan boarding schools, and laws banning child labor should be more strictly enforced.

### **TEACHERS**

God understood our thirst for knowledge;  
And our need to be led by someone wiser;  
He needed a heart of compassion,  
Encouragement and patience;  
Someone who would  
Accept the challenge regardless of the opposition;

Someone who could Zee potential  
And believe in the best in others;  
So he made teachers..

by  
**G.Durkadevi**  
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### **NATURE**

The sight of the hills is a beauty The bright moon is the sign of purity  
The flow of the river is murmuring music  
The act of the sun is so philanthropic  
The rain of the clouds is very refreshing  
The blowing of the wind is so smoothing  
The roaring of the ocean has its own reason  
How charming is the changing of the season!

### **DREAMS**

Hold fast to dreams, for if dreams die  
Life is a broken-winged birds, that cannot fly.  
Hold fast to dreams for when dreams go,  
Life is a barren field frozen with snow.

### **SECRET OF SUCCESS**

Man needs life,  
Life needs ambition,  
Ambition needs discipline,  
Discipline needs self-control,  
Self-control needs self-respect,  
Self-respect needs honesty,

Honesty needs great attempts,  
Great attempts needs enthusiasm,  
Enthusiasm needs achievement,  
Achievement needs self-confidence,  
Self-confidence is the **secret of success.**

**EDUCATION IS POWER**

A wonderful art master it,  
A colourful dream enjoy it,  
A sweet fruit eat it,  
A melodies music hear it,  
A everlasting power to shine in the future,  
A bird cannot fly without broken wings,  
A kangaroo cannot jump without legs,  
A gun is worthless when it has no bullet,  
Like that man is worthless and powerless without **EDUCATION.**

**by**  
**R.Iswarya**  
**III CSE**

# GALLERY



**Paper presentation in TISCA-18**



**Students attending workshop**



**TISCA-'18 Valedictory function**



**Industrial visit at Purple Pro**



**Resource person addressing the students**



**Industrial Visit at Elysium Technologies**



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