



K.L.N. College of Engineering

Department of Information Technology



## PRINCIPAL MESSAGE



It is a matter of great pride and satisfaction for K.L.N. COLLEGE OF ENGINEERING to bring out the News Letter 'I'STORM' Released from the Department of Information Technology. The College has made tremendous progress in all areas-academic, non-academics, capacity building relevant to staff and students. The College has achieved another milestone in getting NBA (National Board of Accreditation). I am confident that this issue of Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude to Dr.N.Balaji, HOD/IT under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort. With Best Wishes.

**PRINCIPAL**

**Dr.A.V. RAMPRASAD**

## THE EDITOR'S DESK



It gives me immense pleasure to note that response to this newsletter of our department I 'STORM has been overwhelming. The wide-spectrum of articles in different sections gives me a sense of pride that our students and professors possess creative potential and original thinking in ample measures. Each article is entertaining, interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them. Commendable job has also been done by the Editorial Board in planning for and producing the Newsletter. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.

**H.O.D (I.T)**

**Dr.R.ALAGESWARAN**

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## OUR COLLEGE :

### Vision

To become a Premier Institute of National Repute by Providing Quality Education, Successful Graduation, Potential Employability and Advanced Research & Development through Academic Excellence.

### Mission

To Develop and Make Students Competent Professional in the Dynamic Environment in the field of Engineering, Technology and Management by emphasizing Research, Social Concern and Ethical Values through Quality Education System.

## OUR DEPARTMENT:

### Vision

To emerge as a centre of excellence through innovative technical education and research in Information Technology.

### Mission

To produce competent information technology professionals to face the industrial and societal challenges by imparting quality education with ethical values.

## Program Educational Objectives

*The Educational Objectives of Information Technology Program represents major accomplishments that we expect from our graduates to have achieved three to five years after graduation. More specifically our graduates are expected.*

- 1. To excel in industrial or graduate work in information technology and allied fields.*
- 2. To practice their professions conforming to ethical values and environmental friendly policies.*
- 3. To be able to have an exposure in emerging cutting edge technologies and adapt to ever changing technologies.*
- 4. To work in international and multi - disciplinary environments.*

## Program Specific Outcomes

- 1. Ability to apply the fundamentals of mathematics, science, engineering, information and computing technologies to identify, analyze, design develop, test, debug and obtain solutions for complex engineering problems.*
- 2. Ability to select and apply appropriate modern tools and cutting edge technologies in the field of Information and communication to meet the industrial and societal requirements with public health and safety considerations.*
- 3. Ability to analyze the multidisciplinary problems and function effectively in various teams for developing innovative solutions with environmental concerns and apply ethical principles in their career.*
- 4. Ability to acquire leadership and communication skills to manage projects and engage in lifelong technical learning to keep in pace with the changes in technologies.*

## Program Outcome

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

## ICON OF THE MONTH

### Sachin Bansal

Born 5 August 1981 is an India software engineer and internet entrepreneur known for co-founding India's e-commerce platform Flipkart. Sachin is from Chandigarh and is an engineering graduate from Indian Institute of Technology.



#### Early life

Sachin Bansal is originally from Chandigarh, the capital city of Punjab and Haryana. He scored an All India Rank 49 in IIT JEE. His business partner, Binny Bansal is also from Chandigarh. Although they share the same last name, they are not related. They both were students of computer science engineering at Indian Institute of Technology. Before the tremendous success of Flipkart, Sachin Bansal wanted to become a professional gamer. His father has been in business and mother a homemaker, his brother runs a consumer goods company, he's married to Priya, who is a dentist and has a four-year old child.

#### Career

After completion of degree Sachin Bansal joined Techspan Company where he has served for few months. In 2006, he joined Amazon.com India as senior software engineer then he got Binny Bansal into the Amazon.com and after 6 months they both decided to leave Amazon. They initially thought of starting a comparison search engine, but realized that the market for E-commerce in India was very small. Hence, after leaving Amazon in 2007, they founded Flipkart as an E-commerce company.

Sachin Bansal and his business partner Binny Bansal launched Flipkart from an apartment in Bangalore with 400,000 rupees (\$6,500) cash. In 2007 during the early days of Flipkart Sachin

Bansal and his business partner Binny Bansal used to deliver books across Bengaluru on their scooters and in October 2015 they showed up at the doorsteps of some customers, personally delivering goods in order to gain insights from the online buyers. He was removed as a CEO of Flipkart based on performance ground in August 2016.

#### Awards and recognition

In November 2015, Sachin Bansal along with the co-founder of Flipkart, Binny Bansal, was named the 86th richest person in India with a net worth of \$1.3 billion by Forbes India Rich List.

Entrepreneur of the year – ET Awards (2012– 2013).

Indian Today magazine ranked him #26th along with Binny Bansal in India's 50 most powerful people of 2017 list.

-JANANI PRASEENA (2<sup>ND</sup> YEAR)

## ROBOTICS

### Samsung SGR A1



#### Development and origin

The Samsung SGR-A1 project started with an initial investment by the South Korean government in 2003 and was developed by four institutions led primarily by Hanwha Techwin and Korea University. With prototypes produced in 2006, the system was designed to replace human-oriented guarding along the DMZ and to provide the

"perfect guard operation" The primary goal of the project, as quoted by Shin Hyun-don from the South Korean defense ministry "is to transform the current guard and observation mission on fronts conducted by soldiers into a robot system," Unlike the Mexico-united states border or the Borders of isreal the entirety of the 250 kilometer (160 mile) Koren demiltrized gun is heavily patrolled and is touted as the most militarized border in the world, despite its name.

### Features

Many of the Samsung SGR-A1's features resemble the standard sentry gun and similar automated stationary weapons like the Super aEgis2.

The system, costing approximately \$200,000 dollars (227 million won), includes an uncooled infrared thermographic camera for detection, a weapons interface that allows for mounted weapons, and a combination of an IR illuminator and a laser rangefinder to track and follow targets. It also includes a digital video recorder which captures footage for up to 60 days and three other cameras used separately for surveillance, tracking and zoom<sup>[2]</sup>



A thermal image of a human hand produced by a thermographic camera

The Samsung SGR-A1 presumes any persons entering the DMZ as an enemy and, upon detecting a foe, will attempt to identify the target through voice recognition. If a proper access code is not provided within a short amount of time, the system can choose between sounding an alarm, firing rubber bullets or engaging the target with its mounted weapons

### "Human in/on the loop" controversy

A Human in the loop (HITL) system, if applied to the Samsung SGR-A1, would mean the weapon must wait for commands from a human operator before acting upon its targets after target identification. This contrasts with a human on the loop (HOTL) system, which would allow the Samsung SGR-A1 to autonomously engage targets while allowing for human intervention to stop it.

-N.R.C.SANTHOSH (2 ND YEAR)

### MOBILE COMPUTING



### Apple Rumored to be Working on a Crazy iPhone Design Change We Thought We'd Never See

Apple this year will launch two new iPhone models, Including the iPhone 6s and iPhone 6s plus which should be generally similar to its predecessors when it comes to over all design But a new report says that Apple is already working on technology that might help it pull off the most radical redesign of the iPhone yet with the iPhone 7 in 2016.Apple is developing touch and display driver integration (TDDI) single-chip solutions for its iPhones. However, Apple kept its iconic Home button around, making it even more indispensable on the device by having it double as a fingerprint scanner.



That might change thanks to TDDI tech, *Digitimes* suggests, as Apple might remove the Home button in the future. The TDDI single-chip solutions would come with integrated fingerprint sensors and would let Apple increase the display of future iPhone models. *Digitimes* also notes Apple might be working on iPhones with ultra-thin and ultra-narrow displays “and with a whole plane design eliminating the Home button. “Apple has perhaps made the first step required to eliminate the Home button by creating Force Touch technology and adapting it for mobile devices. It’s practically a given that iOS 9 will come with Force Touch support this year, and the iPhone 6s and iPhone 6s Plus will be the first devices to incorporate such pressure-sensing displays.

The next major iPhone redesign is likely coming next year, but there’s nothing yet to suggest the iPhone 7 will be the first iPhone model to ditch the Home button – that’s assuming *Digitimes’* report about Apple’s TDDI chip integration plans and the imminent removal of the physical Home button is accurate.

-P.LAKSHMIPRABHA (2<sup>nd</sup> YEAR)

## NETWORKS

This is the beginning of a complete reshaping of the industry at work. Everybody's doing SDN and NFV these days. Anybody who's in the appliance business these days is just as happy to sell you a "virtual appliance" (implemented in software rather than on a standalone box full of hardware) as they are to sell you a physical product..

What does this mean for network professionals? A lot, actually, according to Corno. Here's a quick summary of some key takeaways from that piece:

IT job functions are shifting from working on devices and their configurations, toward secure, policy-based services built around and driven by analytics

Modern networking services are outcome-focused, enabled by controller-based architectures that support abstraction and automation of networking functions and management IT professionals need to adopt SDN, enhanced security, flexible access methods and controls, and virtualization, all within the context of the cloud. "Enterprise digitization requires the ability to securely connect people, processes, data, and things (think IoT).

Networking pros must understand how to design, build, implement and maintain secure infrastructures, and to detect and respond to cyber security threats and attacks. Using SDN and NFV effectively requires skills in automation and programming, which will lead to a new set of training and certifications to make sure IT pros understand these things, and know how to practice them properly and safely. It's no surprise to hear this admonition, either: "The smart ... [organizations] look for IT professionals who get the relationship between technology and business.

The parts of IT most relevant to business cannot be automated, however. They require creativity, vision, and architectural savvy."Corno makes some specific prescriptions for skills development along these lines.

Start with basic scripting "because it forms the basis of automating and tasks." Full-fledged programming is also a good idea, with Python recommended because of its ability to support flipping between object-oriented and procedural programming models. She even recommends learning to work with APIs (which are poised to become to foundation for network monitoring, management, incident response, and yes, automation, too).

Network engineers need to understand infrastructure programming, including automation protocols such as the Network Configuration Protocol (NETCONF), representational state transfer (REST), and their relationships to YANG data models.

M.MANIKA JOTHI (2<sup>nd</sup> YEAR)

## DATA MINING

There is a great deal of overlap between data mining and statistics. In fact most of the techniques used in data mining can be placed in a statistical framework. However, data mining techniques are not the same as traditional statistical techniques.

Traditional statistical methods, in general, require a great deal of user interaction in order to validate the correctness of a model. As a result, statistical methods can be difficult to automate. Moreover, statistical methods typically do not scale well to very large data sets. Statistical methods rely on testing hypotheses or finding correlations based on smaller, representative samples of a larger population.

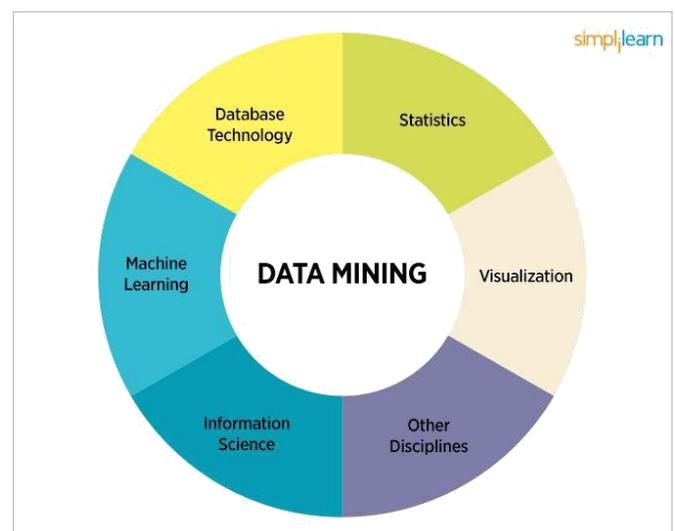
## Data Mining vs. Statistics - How Are They Different?



Statistics form the core portion of Data Mining. The activities of data mining cover the entire process of data analysis, and statistics help in identifying patterns that further help identify differences between random noise and significant findings. It provides a theory for estimating probabilities of predictions and more.

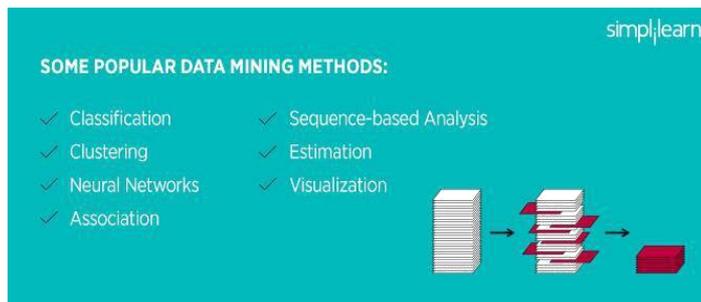
### What is Data Mining?

“Data Mining is the process of extracting previously unknown, comprehensible, and actionable information from large databases and using it to make crucial business decisions”, Data mining is the “automated extraction of hidden predictive information from databases”.



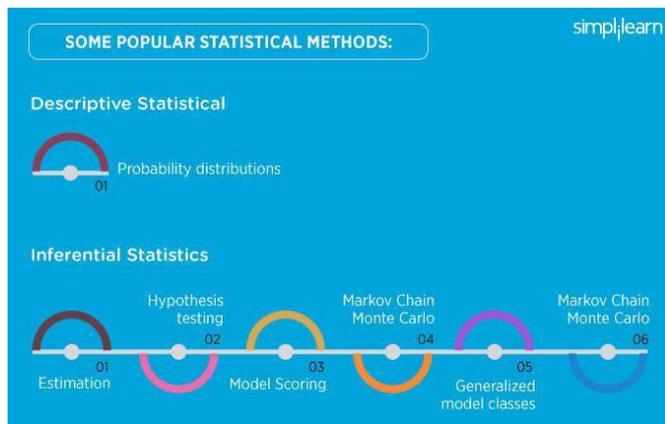
## What is Statistics?

Statistics is a component of data mining that provides the tools and analytics techniques for dealing with large amounts of data. It is the science of learning from data and includes everything from collecting and organizing to analyzing and presenting data. It is concerned with probabilistic models, specifically inference, using data.



## Some Methods of Statistical Analysis

The two types of statistics prevalent are descriptive and inferential. Descriptive statistics organize and summarize the data for the sample. The methodology of using these summaries to draw conclusions from entire data sets, is called inferential statistics.



## Applications of Data Mining

Data mining is essentially available as number of commercial systems. It is widely used in:

- Financial Data Analysis
- Retail Industry
- Telecommunication Industry

## Biological Data Analysis

- Certain Scientific Applications
- Intrusion Detection

Financial data analysis is usually systematic as the data is highly reliable. Typical cases of financial data analysis include: loan payment prediction, customer credit policy analysis, classification and clustering of customers for targeted marketing, detection of money laundering, and other financial crimes.

Data mining has also made significant contribution to biological data analysis like – genomics, proteomics, functional Genomics and biomedical research. It helps in analysis by: semantic integration of heterogeneous, distributed genomic and proteomic databases; association and path analysis, visualization tools in genetic data analysis and more.

Data mining has also found its enormous application in detecting intrusion and threats that attack network resources. It thus plays a major role in network administration. Areas in which data mining may be applied in intrusion detection are: development of data mining algorithm for intrusion detection, association and correlation analysis

## Trends in Data Mining

Some trends in the evolving concept of data mining are:

### Application Exploration

- Scalable and interactive data mining methods
- Visual data mining
- New methods of mining complex types of data
- Biological data mining
- Data mining and software engineering
- Web mining, real-time data mining
- Distributed data mining
- Real time data mining
- Multi database data mining
- Privacy protection and information security in data mining.

-M.K.HARI HARA BHARATH (2<sup>nd</sup> year)

## WEB DESIGNING



### 9 Current Web Development Trends to Look Out For In 2017

In the recent years, the worldwide web has become an integral part of life for many. People use it for almost everything including reading news, banking, and shopping just to name a few.

#### 1. Internet of Things (IoT)

Internet of Things has taken web development, and according to Technavio its expected growth between 2015 and 2019 is 31.72%. IoT allows for the exchange of data in a manner that was never possible before by linking smart objects to the internet. Web developers will come up with solutions that are upgraded and which will allow users to control as well as communicate with their daily equipment and gadgets.

#### 2. Material Design

Material design is a conceptual design philosophy by Google that outlines how an app should perform and look on wireless devices. It deconstructs everything ranging from style and animation to layouts. Moreover, the material design provides guidance on patterns, components, and usability. It has become a leading visual philosophy that will come in handy for developers in the coming year particularly when layered interfaces are involved.

#### 3. Static Website Generators

These create websites from the plain text that are stored in files rather than databases. Static website generators allow for benefits such as

handling of traffic surges, ease of deployment, security as well as increased speed, many developers are confident that this area is one of the latest web development trends to watch in 2017.

#### 4. One Page Websites

Gone are the days when websites had several pages and tabs for users to get confused over. One page websites have become the preferred choice for many companies as they look great on handheld devices like tablets and smartphones. Many web development companies use the one-page design to develop sites for single services.

#### 5. Yarn Package Manager

Package managers are a very popular tool, more so in JavaScript communities. They make it so easy to configure, update, install as well as uninstall code modules within applications. This is achieved through communication and management of various dependencies of code modules. Bower and NPM are the most popular JavaScript package managers.

#### 6. Videos, Animation and Motion UI Instead Of Static Images

Over the past few years, the popularity of static images in website development has decreased considerably while that of Motion UI, video and animation has increased.

Many developers prefer it for creating animations and CSS transitions as it allows for richness and smoothness with pre-defined motion. The latest version Motion UI comes with flexible CSS patterns that work great on all JavaScript animation libraries, an animation queuing system and more options that allow for robust transition

#### 7. Angular 2 And Beyond

This year saw the release of Angular 2, which came with plenty of changes. Such include Google's JavaScript framework that was redesigned completely.



process such data more effectively. IoT is one of the platforms of today's Smart City, and Smart Energy Management Systems

The term "the Internet of Things" was coined by Kevin Ashton of Procter & Gamble, later MIT's Auto-ID Center, in 1999.

### **Building and home automation**

IoT devices can be used to monitor and control the mechanical, electrical and electronic systems used in various types of buildings (e.g., public and private, industrial, institutions, or residential) in home automation and building automation systems.

The IoT refers to the connection of devices (other than typical fare such as computers and smartphones) to the Internet. Cars, kitchen appliances, and even heart monitors can all be connected through the IoT. And as the Internet of Things grows in the next few years, more devices will join that list.

### Terms and Basic Definitions

**Internet of Things:** A network of internet-connected objects able to collect and exchange data using embedded sensors.

**Internet of Things device:** Any stand-alone internet-connected device that can be monitored and/or controlled from a remote location.

**Internet of Things ecosystem:** All the components that enable businesses, governments, and consumers to connect to their IoT devices, including remotes, dashboards, networks, gateways, analytics, data storage, and security.

**Entity:** Includes businesses, governments, and consumers.

**Physical layer:** The hardware that makes an IoT device, including sensors and networking gear.

**Network layer:** Responsible for transmitting the data collected by the physical layer to different devices.

**Application layer:** This includes the protocols and interfaces that devices use to identify and communicate with each other.

**Remotes:** Enable entities that utilize IoT devices to connect with and control them using a dashboard, such as a mobile application. They include smartphones, tablets, PCs, smart watches, connected TVs, and nontraditional remotes.

**Dashboard:** Displays information about the IoT ecosystem to users and enables them to control their IoT ecosystem. It is generally housed on a remote.

**Analytics:** Software systems that analyze the data generated by IoT devices. The analysis can be used for a variety of scenarios, such as predictive maintenance.

**Data storage:** Where data from IoT devices is stored.

**Networks:** The internet communication layer that enables the entity to communicate with their device, and sometimes enables devices to communicate with each other.

### IoT Predictions, Trends, and Market

BI intelligence, Business Insider's premium research service, expects there will be more than 24 billion IoT devices on Earth by 2020. That's approximately four devices for every human being on the planet.

And as we approach that point, \$6 billion will flow into IoT solutions, including application development, device hardware, system integration, data storage, security, and connectivity. But that will be money well spent, as those investments will generate \$13 trillion by 2025.

IoT Industries

Several environments within the three groups of consumers, governments, and ecosystems will benefit from the IOT. These include:

Manufacturing	Transportation	Defense	Agriculture
Infrastructure	Retail	Logistics	Banks
Oil, gas, and mining	Insurance	Connected Home	Food Services
Utilities	Hospitality	Healthcare	Smart Buildings

IoT Companies

There are literally hundreds of companies linked to the Internet of Things, and the list should only expand in the coming years. Here are some of the major players that have stood out in the IoT to this point:

IoT Platforms

One IoT device connects to another to transmit information using Internet transfer protocols. *IOT PLATFORMS* serve as the bridge between the devices' sensors and the data networks.

The following are some of the top IoT platforms on the market today:

Amazon Web Services

Microsoft Azure

ThingWorx IoT Platform

IBM's Watson

Cisco IoT Cloud Connect

Salesforce IoT Cloud

Oracle Integrated Cloud

GE Predix

IoT Security & Privacy

As devices become more connected thanks to the IOT security and privacy have become the primary concern among consumers and businesses. In fact, the protection of sensitive data ranked as the top concern (at 36% of those polled) among enterprises, according to the 2016 Vormetric Data Threat Report.

Cyber-attacks are also a growing threat as more connected devices pop up around the globe. Hackers could penetrate connected cars, critical infrastructure, and even people's homes. As a result, several tech companies are focusing on cyber security in order to secure the privacy and safety of all this data.



-N.K.K.KRISHNA CHAND (2<sup>ND</sup> YEAR)

## TIMELINE

On 15.07.17, our department students were awarded for securing ranks in the Anna university semester exams. Cash prizes were given to winners.



## Guest lecture on EDX:

A Guest lecture on EDX was conducted for final year students on 06.07.17. The resource person was Dr.N.Balaji.



## IOT awareness program:

On 15.07.17, an awareness program on the topic “INTERNET OF THINGS” was conducted for second year students. The resource person was Dr.SUBATHRA from “Kamarajar College of Engineering”.



## TFSD {VIII}

On 05.07.17, “TRAINING FOR SOFTWARE DEVELOPMENT” program was organized by Mr. S.ILANKUMARAN SIR, Mr.L.R.KARTHIKEYAN SIR. It is 30-day training program on web technology for second year students.



## TIPS FOR PLACEMENT

### Clamp the Opportunities

An aspirant must know about the companies visiting the campus. What type of company, role of the job, the selection process.

### Back To the Roots

A lot of candidates tend to ignore this, but the most important thing in your selection process is going to be your knowledge of engineering topics - that you've studied over the last 2-3 years.

### Be Confident

In the current economic environment, where knowledge gets obsolete at a rapid pace, it is imperative for students to possess the right learning attitude. In fact, this factor is given the highest priority by the recruiters also as they expect their employees to be able to cope with fast changing business scenarios.

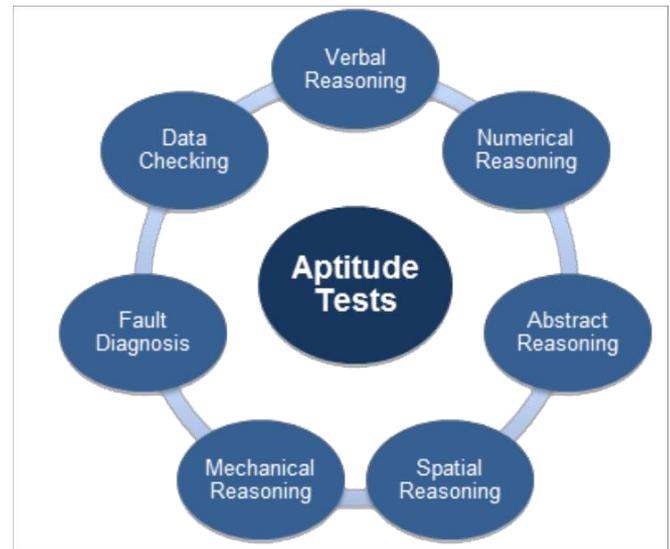
### Group Discussion

You could surf the Internet for some good tips on GDs for the ground rules. Then form a GD practice group along with some fellow students.



GDs can be tricky affairs, because you need to walk a fine line between being too aggressive and too meek. You can't hog all the limelight, yet you can't hide in the background. You can't be too loud or too soft.

### Aptitude Test



It is the most common round for the companies to select the candidates for further rounds. Most of the students are nervous about aptitude test.

It is very easy to take, all it needs is practice.

Don't expect to master the aptitude skills in just a week or two. At least 1.5-2 months of practice is required.

## INTERVIEW DETAILS

### Technical Interview

Firms will conduct technical interview session to test the candidate's depth of knowledge.

In this round, recruiters will ask questions on your interest of domain areas.

Interviewers make their job easier by asking you for your favorite engineering subject.

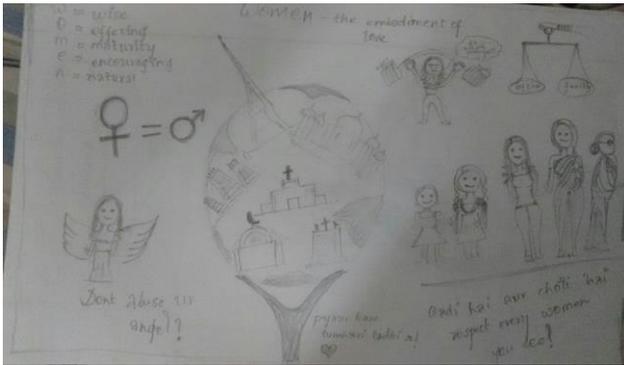
### HR Interview

It is the last and most important round.

Candidate has to be confident and not agitated during an HR interview. Keeping cool, calm and collected is the key to clear the HR rounds.

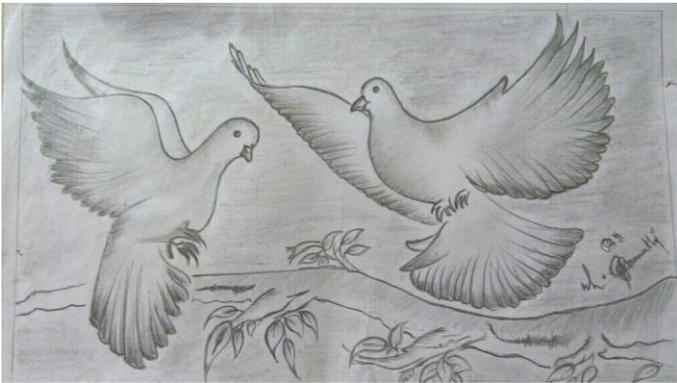
## OUT OF THE BOX

### WOMEN THE EMBODIMENT OF LOVE



-ABIGAIL PEARLIN RAJKUMARI (2<sup>ND</sup> YEAR)

### CARE, PURITY, DEVOTIONAL, PEACE



-N.H.SARUMATHI (2<sup>ND</sup> YEAR)

### CARTOON ART



-R.THENDRAL (2<sup>ND</sup> YEAR)

## LIFE OF FARMERS

The farmer is one of the most useful people of since the beginning of civilization. We all depend upon agriculture to meet our requirement of food. We get our food because the farmer grows crops and carries the agricultural activities. Though, they feed the entire humanity, their life conditions are far from satisfactory.

**Tough life:** The life of a farmer is very tough. He works very hard day and night in all seasons. During summer, he works under the heat of the sun. During winter season, he gets wet while ploughing the field. During winter, he carries on his hard work in spite of the dull and cold weather.

**Dependent upon nature:** The life of a farmer is much dependent upon forces of nature. For agriculture, adequate monsoon is required. If the rainfall is adequate, the agricultural output would be good.

However, inadequate rainfall and long-spell of scarcity of water may result into drought situation. As a result, agriculture may get negative affected and there may be acute shortage of food leading to famines.

**Economic factors:** The farmer earns money by selling his crops. He remains happy if the crops are good. But, if the crops fail, then his life becomes miserable.



A farmer suffers even if there is abnormal increase in production homogeneously at all places. In such cases, the selling price of the crops goes down and the excess crops get wasted. Most farmers have no knowledge of the fact that drinking impure water may lead to health issues. Also, there is inadequate sewage disposal system in

our villages. There is less than adequate medical facilities or trained nurses and doctors in rural areas. Also read: Poor Condition of Farmers in India

Conclusion: Most of the farmers are simple, hard-working, sincere and honest people. They always remain at the mercy of nature and God.

The Government has introduced several schemes for the benefit of the farmers. Let's hope that these benefits will actually reach the farmers

- DEEPAK KUMAR(2<sup>ND</sup> YEAR)

### FRIENDSHIP

I'm not your heart

But I miss you,

I'm not your family

But I care for you,

I'm not your blood

But I'm ready to share your pain because

I'm your stupid friend"...!

-M.LOGA MEENAKSHI (2<sup>ND</sup> YEAR)

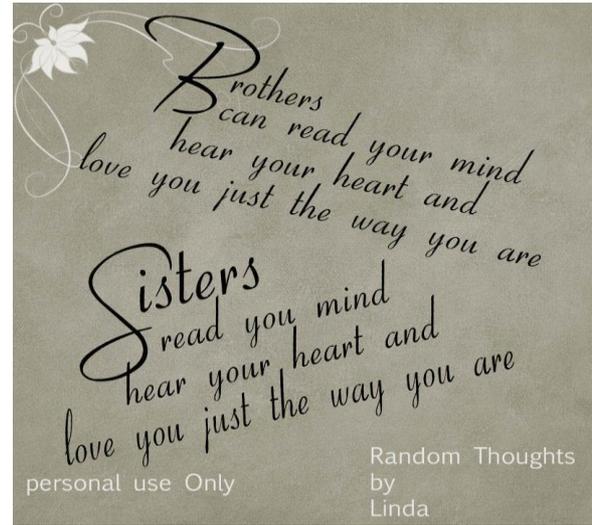
### BROTHERS AND SISTERS

brothers & sisters

Although it is somewhat difficult to achieve, siblings are capable of and should aspire to being friends. There exist siblings who are friends but

there also exist siblings who are separated by rivalry, fights, and animosity. There are people who share more affectionate relationships with friends than with their own siblings.

The possibility of developing friendship among siblings is great. In addition to these factors, which are true of all siblings, there exist two other necessary ones, found only in families



Aristotle maintains that "the friendship that exists between siblings is similar to that which exists amongst peers." It appears that between siblings there is greater resistance to confiding in one another than among friends.

As a result, the relationship among siblings is reduced to that of acquaintances; lacking in the indispensable condition of friendship "baring one's to the other, communicating intimate thoughts.

In conclusion, Brotherly love will be enhanced with a new ingredient: friendship. It is not a matter of forgetting blood ties in order to become friends, but rather of loving one another better and more profoundly.

- S.FAROOK (2<sup>ND</sup> YEAR)

Suggestions and Feedback Contact:  
[klnceitsig@gmail.com](mailto:klnceitsig@gmail.com)