

**K.S.Rangasamy College of Arts and Science  
(Autonomous)**

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**INFORMATIX**

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# **informatIx**

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## Editorial

We would like to wholeheartedly thank our honorable Chairman, Vice Chairman, Executive Director and Principal for their continuous encouragement and constant support for bringing out the magazine. We profoundly thank our Head of the Department for encouraging and motivating us to lead the magazine a successful one right from the beginning. Informatix serves as a platform for updating and enhancing upcoming technologies in Information and Communication. We are grateful to all the contributors to this magazine so far. The magazine will be sent to almost 60 Institutions in and around Tamil Nadu.

We would be very pleased to receive your feedbacks. Please send your feedbacks to [informatix@ksrcas.edu](mailto:informatix@ksrcas.edu)

By,  
Editorial Board

## ABOUT KSRCAS

K.S. Rangasamy College of Arts and Science strives to provide quality education by imparting discipline, value, knowledge and skills. It provide a vast array of courses in Information Technology, Life Sciences, Humanities and Management Studies with Co-curricular activities to enhance the soft skills of the students and created an excellent learning environment with positive support and direction for the growth of our students. The College is known for its academic excellence and character building, providing learner-centric education with high integrity, ethics, professional and societal commitments.



### About the Department

The Department of Computer Applications was established in 1998. The department profile is strengthened by the students' strength of around 600 from different nations and 25 highly qualified faculty members and it has 10 well equipped laboratories with 800 workstations connected to Internet with a speed of 40Mbps. The department organized various Intercollegiate Meets, Guest Lectures, Seminars, Workshops, Symposium etc. in order to meet the parameters of the IT sector through the support of various funding agencies. The department also brings out a Bi-monthly magazine named "informatIx" to share knowledge and to get updated with the current innovations.



# ***CONTENTS***

<b>S.NO</b>	<b>TOPICS</b>	<b>PAGE</b>
<b>1.</b>	Top 10 Technologies used in the Modern World	1
<b>2.</b>	9 Types of Phone Operating Systems	10
<b>3.</b>	Artificial Intelligence	14
<b>4.</b>	Types of Android Versions	21
<b>5.</b>	Introduction of Java	25
<b>6.</b>	Virtual Reality	27
<b>7.</b>	The Do's & Don'ts in Resume	31
<b>8.</b>	Placement Questions	35
<b>9.</b>	Best Practices	43
<b>10.</b>	Faculty Achievements	45
<b>11.</b>	Student Achievements	46

## Top 10 Technologies used in the Modern World

### 1. Brain microchips

Brain implants, often referred to as neural implants, are technological devices that connect directly to a biological subject's brain usually placed on the surface of the brain, or attached to the brain's cortex. A common purpose of modern brain implants and the focus of much current research is establishing a biomedical prosthesis circumventing areas in the brain that have become dysfunctional after a stroke or other head injuries. This includes sensory substitution, e.g., in vision. Other brain implants are used in animal experiments simply to record brain activity for scientific reasons. Some brain implants involve creating interfaces between neural systems and computer chips. This work is part of a wider research field called brain-computer interfaces.

### 2. Autonomous driving

An autonomous car is a vehicle that can guide itself without human conduction. This kind of vehicle has become a concrete reality and may pave the way for future systems where computers take over the art of driving. An autonomous car is also known as a driverless car, robot car, self-driving car or autonomous vehicle.

### **3. 5G**

The rise of 5G networks is increasing our ability to move, manipulate, and analyze data across wireless platforms, according to CompTIA. As 5G rolls out more fully in the coming years, it will drive the development of more complex apps to solve problems and increase growth across industries.

"The development and deployment of 5G is going to enable business impact at a level few technologies ever have, providing wireless at the speed and latency needed for complex solutions like driverless vehicles," Michael Haines, community chair and director of partner incentive strategy and program design for Microsoft, said in the release. "Additionally, once fully deployed geographically, 5G will help emerging markets realize the same 'speed of business' as their mature counterparts. Solution providers that develop 5G-based solutions for specific industry applications will have profitable, early-mover advantages."

### **4. Serverless computing**

Serverless computing allows organizations to create a NoOps IT environment that is automated and abstracted from underlying infrastructure, reducing operational costs and allowing businesses to invest in developing new capabilities that add more value, the report found. Serverless computing was new on the list this year, along with



robotics, replaced quantum computing, and automation, CompTIA noted.

## **5. Robotics**

Robotics is automating routine processes by using machines to make businesses faster, less expensive, and more efficient, the report found.

## **6. Biometrics**

Biometrics—including face, fingerprint, and retina scans—are becoming mainstream methods for verifying identity. These methods will form the secure foundation for solutions delivered by IT companies moving forward, CompTIA said.

## **7. 3D printing**

3D printing offers a solution for the low volume manufacturing of complex parts, as well as fast local production of difficult-to-find products, the report noted. As more affordable products become available, opportunities for this industry will continue to grow, it added.

## **8. Drones**

Drones enable robotic automation with fewer geographical restrictions, the report noted. Opportunities for development and integration are high for this market, it added.

## **9. Cyber Security**

Computer security, cybersecurity or information technology security (IT security) is the protection of computer systems from the theft of or damage to their hardware, software, or electronic data, as well as from the disruption or misdirection of the services they provide.

The field is becoming more important due to increased reliance on computer systems, the Internet and wireless network standards such as Bluetooth and Wi-Fi, and due to the growth of "smart" devices, including smartphones, televisions, and the various devices that constitute the "Internet of things". Owing to its complexity, both in terms of politics and technology, cybersecurity is also one of the major challenges in the contemporary world.

## **10. Business Intelligence**

BI(Business Intelligence) is a set of processes, architectures, and technologies that convert raw data into meaningful information that drives profitable business actions.It is a suite of software and services to transform data into actionable intelligence and knowledge.

BI tools perform data analysis and create reports, summaries, dashboards, maps, graphs, and charts to provide users with detailed intelligence about the nature of the business.

## 9 Types of Phone Operating Systems

Mobile phone operating system is commonly applied in high-end smartphones. The overall market competition has already started to show a tendency of diversification because more companies are involved in. Let's talk about some main phone operating systems.

### 1. Android

Android, an open source mobile operating system, is developed by Google based on Linux platform. It includes operating system, user interface and application --- all the required software for mobile phone, and there is no any previous proprietary problem which impedes the innovation of mobile industry.

### 2. iPhone OS (iOS)

iOS (formerly iPhone OS) is a mobile operating system created and developed by Apple Inc. exclusively for its hardware. Originally unveiled on January 9, 2007 in the Macworld conference for the iPhone, iOS has been extended to support other Apple devices such as the iPod Touch, iPad and Apple TV.

iOS and Apple's Mac OS X operating system, both belongs to the Unix-like operating system. Originally this system is called iPhone OS, since iPad, iPhone, iPod touch are powered on iPhone OS, it was

announced to rename as iOS in 2010 WWDC conference. In iOS, there are four abstraction layers: the Core OS, Core Services, Media, and Cocoa Touch layers. The System operation occupies about 512MB of storage space.

### **3. Windows Mobile OS**

Windows Mobile OS (abbreviated as WP) is a kind of mobile operating systems developed by Microsoft for smartphones and Pocket PCs. It integrates the Xbox Live game, Xbox Music under Microsoft and exceptional video experience into the phone. Windows Mobile extends the familiar Windows desktop to portable devices, like PPC mobile phones, PDA, portable music player. It is just the "mobile version of Windows". There are three kinds of Windows Mobile operating system, namely, Windows Mobile Standard, Windows Mobile Professional, Windows Mobile Classic.

### **4. Color OS**

Color OS is an operating system created by OPPO Electronics (OPPO) of Guangdong, China, based on Google's operating system Android. The major difference between Google Android and OPPO Color OS is that the later includes some features unavailable in the former. Such features include: customizable gestures for screen off, screen on, communication, a security centre, lock screen

magazines, options for long screen shot, eye protection changing to a warmer color temperature, FTP Server and others. Color OS, in some respects, looks similar to iOS made by Apple. Color OS was available for OnePlus smartphones from their forums page.

## **5. Flyme OS**

Flyme OS is a customized mobile operating system developed by Meizu for smartphones based on the Android operating system. It allows easier navigation using only one physical button without on-screen navigation buttons. Flyme OS 4.0 was released in 2014, initially for the Meizu MX4. Later Flyme OS is available on non-Meizu devices for competing with Xiaomi. Eventually, it was officially released for devices from Samsung, Sony, LG and HTC.

## **6. Oxygen OS**

Oxygen OS is a customised version of Android operating system developed by Chinese smartphone manufacturer OnePlus exclusively for their smartphones. Oxygen OS was developed for their overseas market. There is also another version of the OS designed specifically for the Chinese home market called the Hydrogen OS.

## **7. Smartisan OS**

Smartisan OS is an Android-based smartphone platform

developed by Chinese company Smartisan, which was unveiled on March 27, 2013. It will compete with MIUI from Xiaomi and FlymeOS from Meizu in the Chinese cellphone market.

## **8. Emotion UI**

Emotion UI is an emotional operating system developed by Huawei based on Android. The original Me Widget integrates common functions, one step at a time; fast and convenient one- on-one desktop, reducing secondary menus; colorful and colorful themes, let you dazzle. Smart guidance at your fingertips, from the white state. Intimate voice assistant, instantly liberate your hands. Feel free to experience anytime, anywhere.

## **9. MIUI**

MIUI is developed by Xiaomi, is a mobile operating system for smartphones and tablet computers based on the Google Android operating system. MIUI includes various features such as theming support. Xiaomi has released various smartphones, all of which come pre-installed with a complete version of MIUI. This includes various apps and features not available in the aftermarket version of MIUI. Other than supporting their in-house smartphones and tablets, Xiaomi also offers MIUI to be flashed on other smartphone brands such as Samsung, Sony, HTC, LG, OnePlus and Nexus.

# Artificial Intelligence

## Definition

Artificial intelligence (AI) is an area of computer science that emphasizes the creation of intelligent machines that work and react like humans. Research associated with artificial intelligence is highly technical and specialized.

The core problems of artificial intelligence include programming computers for certain traits such as:

- Knowledge
- Reasoning
- Problem solving
- Perception
- Learning
- Planning
- Ability to manipulate and move objects

## Types of AI

Artificial Intelligence has three types:

- Artificial Narrow Intelligence (ANI)
- Artificial General Intelligence (AGI)

## Current Uses of AI

Although artificial intelligence evokes thoughts of science fiction, artificial intelligence already has many uses today, for example:

- **Email filtering:** Email services use artificial intelligence to filter incoming emails. Users can train their spam filters by marking emails as “spam”.
- **Personalization:** Online services use artificial intelligence to personalize your experience. Services, like Amazon or Netflix, “learn” from your previous purchases and the purchases of other users in order to recommend relevant content for you.
- **Fraud detection:** Banks use artificial intelligence to determine if there is strange activity on your account. Unexpected activity, such as foreign transactions, could be flagged by the algorithm.
- **Speech recognition:** Applications use artificial intelligence to optimize speech recognition functions.

## Principles of AI

The Internet Society has developed the following principles and recommendations in reference to what we believe are the core “abilities” that underpin the value the Internet provides.



- Ethical Considerations in Deployment and Design
- Ensure “Interpretability” of AI systems
- Public Empowerment
- Responsible Deployment
- Ensuring Accountability
- Social and Economic Impacts

### **Ethical Considerations in Deployment and Design:**

AI system designers and builders need to apply a user-centric approach to the technology. They need to consider their collective responsibility in building AI systems that will not pose security risks to the Internet and Internet users.

### **Ensure “Interpretability” of AI systems:**

Decisions made by an AI agent should be possible to understand, especially if those decisions have implications for public safety, or result in discriminatory practices.

### **Public Empowerment:**

The public’s ability to understand AI-enabled services, and how they work, is key to ensuring trust in the technology.

### **Responsible Deployment:**

The capacity of an AI agent to act autonomously, and to adapt its behavior over time without human direction, calls for

significant safety checks before deployment, and ongoing monitoring.

### **Ensuring Accountability:**

Legal accountability has to be ensured when human agency is replaced by decisions of AI agents.

### **Social and Economic Impacts:**

Stakeholders should shape an environment where AI provides socio-economic opportunities for all.

### **Importance of AI:**

Machine learning algorithms are used in more and more products and services, there are some serious factors must be considered when addressing AI, particularly in the context of people's trust in the Internet:

- **Socio-economic impacts:** The new functions and services of AI are expected to have significant socio-economic impacts. The ability of machines to exhibit advanced cognitive skills to process natural language, to learn, to plan and to perceive, makes it possible for new tasks to be performed by intelligent systems, sometimes with more success than humans. New applications of AI could open up exciting opportunities for more effective medical care, safer industries and services, and boost productivity on a massive scale.

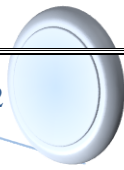
- **Transparency, bias and accountability:** AI-made decisions can have serious impacts in people's lives. AI may discriminate against some individuals or make errors due to biased training data. How a decision is made by AI is often hard to understand, making problems of bias harder to solve and ensuring accountability much more difficult.
- **New uses for data:** Machine learning algorithms have proved efficient in analyzing and identifying patterns in large amounts of data, commonly referred to as "Big Data". Big Data is used to train learning algorithms to increase their performance. This generates an increasing demand for data, encouraging data collection and raising risks of oversharing of information at the expense of user privacy.
- **Security and safety:** Advancements in AI and its use will also create new security and safety challenges.

### **How machines learn:**

Although a machine learning model may apply a mix of different techniques, the methods for learning can typically be categorized as three general types:

- **Supervised learning:** The learning algorithm is given labeled data and the desired output. For example, pictures of dogs labeled "dog" will help the algorithm identify the rules to classify pictures of dogs.

- **Unsupervised learning:** The data given to the learning algorithm is unlabeled, and the algorithm is asked to identify patterns in the input data. For example, the recommendation system of an e-commerce website where the learning algorithm discovers similar items often bought together.
- **Reinforcement learning:** The algorithm interacts with a dynamic environment that provides feedback in terms of rewards and punishments. For example, self-driving cars being rewarded to stay on the road.
- **Data availability:** Just over 3 billion people are online with an estimated 17 billion connected devices or sensors. That generates a large amount of data which, combined with decreasing costs of data storage, is easily available for use..
- **Computing power:** Powerful computers and the ability to connect remote processing power through the Internet make it possible for machine-learning techniques that process enormous amounts of data.
- **Algorithmic innovation:** New machine learning techniques, specifically in layered neural networks also known as “deep learning” have inspired new services, but is also spurring investments and research in other parts of the field.



## **Applications:**

- Agriculture
- Health Care
- Automative
- Finance and economics
- Government
- Video games
- Military
- Advertising

## **Advantages:**

- More powerful and more useful computers
- New and improved interfaces
- Solving new Problems
- Better handling of information
- Relieves information overload
- Conversion of information into knowledge

## **Disadvantages**

- Increased costs
- Few experienced programmers



## Types of Android Versions

### A Brief Android Version History

We thought it fitting to give a brief rundown of each Android version on the accompanying code name and release date. You know, for completeness.



- Android 1.5, Cupcake: April 27, 2009
- Android 1.6, Donut: September 15, 2009
- Android 2.0-2.1, Eclair: October 26, 2009 (initial release)
- Android 2.2-2.2.3, Froyo: May 20, 2010 (initial release)
- Android 2.3-2.3.7, Gingerbread: December 6, 2010 (initial release)
- Android 3.0-3.2.6, Honeycomb: February 22, 2011 (initial release)
- Android 4.0-4.0.4, Ice Cream Sandwich: October 18, 2011 (initial release)

- Android 4.1-4.3.1, Jelly Bean: July 9, 2012  
(initial release)
- Android 4.4-4.4.4, KitKat: October 31, 2013 (initial release)
- Android 5.0-5.1.1, Lollipop: November 12, 2014 (initial release)
- Android 6.0-6.0.1, Marshmallow: October 5, 2015 (initial release)
- Android 7.0-7.1.2, Nougat: August 22, 2016 (initial release)
- Android 8.0-8.1, Oreo: August 21, 2017 (initial release)
- Android 9.0, Pie: August 6, 2018

As you can see, the update system was without any sort of regularity early on, but the Ice Cream Sandwich era started the yearly OS version update schedule.

A few other fun notes:

Honeycomb was the only tablet-specific version of Android, and it ran alongside the Gingerbread build for phones. The separate phone and tablet OSes were then combined starting with Ice Cream Sandwich.

Ice Cream Sandwich was arguably the most dramatic update to Android to date. It not only combined the tablet and phone versions of the OS, but completely overhauled the look and feel of the system.

Google initially released developer-focused Nexus devices to highlight each Android version's power. This eventually evolved into the consumer-focused Pixel device line we have today.

Android KitKat marked the first time Google teamed up with a commercial manufacturer for an Android release. They did it again for Android Oreo.

- The Latest Version of Android is 9.0, Pie
- The initial version of Android Pie (9.0) was released on August 6, 2018 on Pixel devices.

### Artificial neural networks

**Artificial neural networks (ANN) or connectionist systems** are computing systems that are inspired by, but not identical to, biological neural networks that constitute animal brains. Such systems "learn" to perform tasks by considering examples, generally without being programmed with task-specific rules. For example, in image recognition, they might learn to identify images that contain cats by analyzing example images that have been manually labeled as "cat" or "no cat" and using the results to identify cats in other images. They do this without any prior knowledge of cats, for example, that they have fur, tails, whiskers and cat-like faces. Instead, they automatically generate identifying characteristics from the examples that they process.



The connections are called edges. Neurons and edges typically have a weight that adjusts as learning proceeds. The weight increases or decreases the strength of the signal at a connection. Neurons may have a threshold such that a signal is sent only if the aggregate signal crosses that threshold. Typically, neurons are aggregated into layers. Different layers may perform different transformations on their inputs. Signals travel from the first layer (the input layer), to the last layer (the output layer), possibly after traversing the layers multiple times.

The original goal of the ANN approach was to solve problems in the same way that a human brain would. However, over time, attention moved to performing specific tasks, leading to deviations from biology. ANNs have been used on a variety of tasks, including computer vision, speech recognition, machine translation, social network filtering, playing board and video games, medical diagnosis and even in activities that have traditionally been considered as reserved to humans, like painting.

## Introduction of Java

Java is a high-level programming language originally developed by Sun Microsystems and released in 1995. Java runs on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX. This tutorial gives a complete understanding of Java. This reference will take you through simple and practical approaches while learning Java Programming language.

### Why to Learn java Programming?

Java is a MUST for students and working professionals to become a great Software Engineer especially when they are working in Software Development Domain. I will list down some of the key advantages of learning Java Programming:

**Object Oriented** – In Java, everything is an Object. Java can be easily extended since it is based on the Object model.

**Platform Independent** – Unlike many other programming languages including C and C++, when Java is compiled, it is not compiled into platform specific machine, rather into platform independent byte code. This byte code is distributed over the web and interpreted by the Virtual Machine (JVM) on whichever platform it is being run on.

**Simple** – Java is designed to be easy to learn. If you understand the basic concept of OOP Java, it would be easy to master.

**Secure** – With Java's secure feature it enables to develop virus-free, tamper-free systems. Authentication techniques are based on public-key encryption.

**Architecture-neutral** – Java compiler generates an architecture-neutral object file format, which makes the compiled code executable on many processors, with the presence of Java runtime system.

**Portable** – Being architecture-neutral and having no implementation dependent aspects of the specification makes Java portable. Compiler in Java is written in ANSI C with a clean portability boundary, which is a POSIX subset.

**Robust** – Java makes an effort to eliminate error prone situations by emphasizing mainly on compile time error checking and runtime checking.

## **Applications of Java Programming**

The latest release of the Java Standard Edition is Java SE 8. With the advancement of Java and its widespread popularity, multiple configurations were built to suit various types of platforms.

The new J2 versions were renamed as Java SE, Java EE, and Java ME respectively. Java is guaranteed to be Write Once, Run Anywhere.

- **Multithreaded** – With Java's multithreaded feature it is possible to write programs that can perform many tasks simultaneously. This design feature allows the developers to construct interactive applications that can run smoothly.
- **Interpreted** – Java byte code is translated on the fly to native machine instructions and is not stored anywhere. The development process is more rapid and analytical since the linking is an incremental and light-weight process.
- **High Performance** – With the use of Just-In-Time compilers, Java enables high performance.
- **Distributed** – Java is designed for the distributed environment of the internet.
- **Dynamic** – Java is considered to be more dynamic than C or C++ since it is designed to adapt to an evolving environment. Java programs can carry extensive amount of run-time information that can be used to verify and resolve accesses to objects on run-time.

## Virtual Reality

### Introduction

The definition of virtual reality comes, naturally, from the definitions for both 'virtual' and 'reality'.

We know the world through our senses and perception systems. In school we all learned that we have five senses: taste, touch, smell, sight and hearing. These are however only our most obvious sense organs. Everything that we know about our reality comes by way of our senses. In other words, our entire experience of reality is simply a combination of sensory information and our brains sense-making mechanisms for that information. It stands to reason then, that if you can present your senses with made-up information, your perception of reality would also change in response to it. You would be presented with a version of reality that isn't really there, but from your perspective it would be perceived as real. Something we would refer to as a virtual reality.

### **In Technical terms...**

Answering “what is virtual reality” in technical terms is straightforward. Virtual reality is the term used to describe three-dimensional, computer generated environment which can be explored and interacted with by a person. That person becomes part of this virtual world or is immersed within this environment and whilst there, is able to manipulate objects or perform a series of actions.

### **How is virtual reality achieved?**

Today virtual reality is usually implemented using computer technology. These are used to actually stimulate our senses together

in order to create the illusion of reality. This is more difficult than it sounds, since our senses and brains are evolved to provide us with a finely synchronised and mediated experience. If anything is even a little off we can usually tell. This is where you'll hear terms such as immersiveness and realism enter the conversation. These issues that divide convincing or enjoyable virtual reality experiences from jarring or unpleasant ones are partly technical and partly conceptual. Virtual reality technology needs to take our physiology into account.

For example, the human visual field does not look like a video frame. We have (more or less) 180 degrees of vision and although you are not always consciously aware of your peripheral vision, if it were gone you'd notice. Similarly when what your eyes and the vestibular system in your ears tell you are in conflict it can cause motion sickness. Which is what happens to some people on boats or when they read while in a car.

If an implementation of virtual reality manages to get the combination of hardware, software and sensory synchronicity just right it achieves something known as a sense of presence. Where the subject really feels like they are present in that environment.

### **Why have virtual reality?**

This may seem like a lot of effort, and it is! What makes the development of virtual reality worthwhile? The potential entertainment

value is clear. Immersive films and video games are good examples. The entertainment industry is after all a multi-billion dollar one and consumers are always keen on novelty. Virtual reality has many other, more serious, applications as well.

There are a wide variety of applications for virtual reality which include:

- Architecture
- Sport
- Medicine
- The Arts
- Entertainment

Virtual reality can lead to new and exciting discoveries in these areas which impact upon our day to day lives.

Wherever it is too dangerous, expensive or impractical to do something in reality, virtual reality is the answer. From trainee fighter pilots to medical applications trainee surgeons, virtual reality allows us to take virtual risks in order to gain real world experience. As the cost of virtual reality goes down and it becomes more mainstream you can expect more serious uses, such as education or productivity applications, etc.

### **Features of virtual reality systems:**

There are many different types of virtual reality systems but they all

share the same characteristics such as the ability to allow the person to view three-dimensional images. These images appear life-sized to the person.

A virtual environment should provide the appropriate responses in real time- as the person explores their surroundings. The problems arise when there is a delay between the person's actions and system response or latency which then disrupts their experience. The person becomes aware that they are in an artificial environment and adjusts their behaviour accordingly which results in a stilted, mechanical form of interaction.

### **The Do's & Don'ts in Resume**

To keep your resume current in 2019, be sure to follow this advice:

1. Put the most important information first. Anyone scanning your resume will start at the top but won't keep reading (or scanning) unless the information at the top is intriguing.
2. Swap out your "objective" to pitch why you're the best person for the job instead. Your resume is your sales tool. You're using it to sell yourself as a potential candidate and get an interview.
3. Focus on your results, not your responsibilities. Do you have numbers or other proof points? Did you win an award or other



- recognition for an accomplishment? Include specific data about your performance at past jobs.
4. Use a title that matches the position you're applying for. For example, if you're applying for a job as an AWS solutions architect, use that with your name instead of something generic like "IT Professional."
  5. Polish your LinkedIn profile and photo, and include the link in your contact information. Almost all recruiters (96 percent) use social media to look for qualified candidates, with LinkedIn used by 87 percent. Although they are using social media to look for candidates, chances are they will also turn to social media to learn more about someone who has applied.
  6. Only include relevant experience. Anyone looking at your resume is scanning, not reading, and you must make sure all the information you include is relevant so they keep scanning.
  7. Include your certifications. For example, as a delivery manager, if you are also a Certified Scrum Master (CSM), mentioning it in your resume can boost your credibility. If you are a project manager who's pursuing a Project Management Professional Certification, include that under your list of certifications as Pursuing PMP.

8. Include your soft skills. Although we're living through a time of digital transformation, soft skills are still needed—of not more important than ever. Yet it can be tricky to describe yourself as a good communicator and team player without sounding cliché. Find ways to convey this information in your descriptions instead, following the advice here.
9. Include keywords. Using keywords relevant to the job will help scanners, but this will also help you when your resume is scanned by software, not humans. Many enterprises now opt for Applicant Tracking Systems (ATS) for their initial screening round. Monster offers useful advice for using keywords here.
10. Clean up your contact information. Use a formal email address, even if you have a silly one that you typically use. Include one phone number and a link to your LinkedIn profile. Some advice says you don't need to include your street address.
11. Pay attention to design. In some industries, it's now acceptable to create visually creative resumes like infographics, but you don't have to go that far and most employers want a traditional resume anyway, even in creative fields. You can create a visually appealing resume using type alone. Use a mix of bullet lists and paragraphs, include plenty of white space, and sparingly add in bold and italic type for a document that's easy to scan and

professional in appearance.

### **The Don'ts: Four Things to Leave Out:**

In addition to the ways to improve your resume, also follow this advice for what to leave out:

1. Leave out personal information such as your height, weight, date of birth, marital status, hobbies, and religion. It's just clutter.
2. Avoid including details about work experiences which are not related to your current role or the role you're seeking. For example, you may have started out as a cook, but now work in IT. Mentioning your cooking experience adds clutter but not credibility.
3. Also, leave out your outdated skills. For example, saying that you are proficient in Visual FoxPro will not impress the recruiter. Instead, enroll for courses on the latest technologies from renowned training institutes and show it off on your resume.
4. Leave out the errors! Make sure your grammar and spelling are correct and check for typos—even two periods where there should be one. Your resume is your first impression, so it must be error-free. More than 60 percent of recruiters disqualify a

candidate if their resume contains a typo. Read it several times, and have someone else proofread it for you too.

5. Finally, stay current—in your skills, your resume, and your LinkedIn profile. Including out-of-date information makes it look like you're stagnant in your career and not attempting to grow. Neglecting to keep up with emerging technologies makes the same negative impression. Keep learning new skills, and keep your resume and social media presence updated as you learn. Also apply the advice above, and you'll increase the likelihood that you'll be in the 2 percent of applicants who actually gets an interview.

## Placement Questions

### Verbal ability

#### Ordering of words

1. When he

P : did not know

Q : he was nervous and

R : heard the hue and cry at midnight

S : what to do

The Proper sequence should be:

- A. RQPS

- B. QSPR
- C. SQPR
- D. PQRS

**Answer:**

**Option A**

2.It has been established that

P: Einstein was

Q: although a great scientist

R: weak in arithmetic

S: right from his school days

The proper sequence should be:

- A. SRPQ
- B. QPRS
- C. QPSR
- D. PQRS

**Answer:**

**Option B**

3. Then

P : it struck me

Q : of course

R : suitable it was

S : how eminently

The Proper sequence should be:

- A. SPQR
- B. QSRP
- C. PSRQ
- D. PQRS

**Answer:**

**Option C**

4. I read an advertisement that said

P : posh, air conditioned

Q : gentleman of taste

R : are available for

S : fully furnished rooms

The Proper sequence should be:

- A. PQRS
- B. PSRQ
- C. PSQR

D. SRPQ

**Answer:**

**Option B**

5. Since the beginning of history

P : have managed to catch

Q : the Eskimos and Red Indians

R : by a very difficult method

S : a few specimens of this aquatic animal

A. QRPS

B. SQPR

C. SQRP

D. QPSR

**Answer:**

**Option D**

## Logical reasoning

### Number series

1. Look at this series: 2, 1,  $(1/2)$ ,  $(1/4)$ , ... What number should come next?

A.  $(1/3)$

B.  $(1/8)$

C. (2/8)

D. (1/16)

**Answer:**

**Option B**

**Explanation:**

This is a simple division series; each number is one-half of the previous number. In other terms to say, the number is divided by 2 successively to get the next result.

$$4/2 = 2$$

$$2/2 = 1$$

$$1/2 = 1/2$$

$$(1/2)/2 = 1/4$$

$$(1/4)/2 = 1/8 \text{ and so on.}$$

2. Look at this series: 7, 10, 8, 11, 9, 12, ... What number should come next?

A. 7

B. 10

C. 12

D. 13



**Answer:****Option B****Explanation:**

This is a simple alternating addition and subtraction series. In the first pattern, 3 is added; in the second, 2 is subtracted.

3. Look at this series: 36, 34, 30, 28, 24, What number should come next?

A. 20

B. 22

C. 23

D. 26

**Answer:****Option B****Explanation:**

This is an alternating number subtraction series. First, 2 is subtracted, then 4, then 2, and so on.

4. Look at this series: 22, 21, 23, 22, 24, 23, What number should come next?

A. 22

B. 24

C. 25

D. 26

**Answer:**

**Option C**

**Explanation:**

In this simple alternating subtraction and addition series; 1 is subtracted, then 2 is added, and so on.

5. Look at this series: 53, 53, 40, 40, 27, 27, What number should come next?

A. 12

B. 14

C. 27

D. 53

**Answer:**

**Option B**

**Explanation:**

In this series, each number is repeated, then 13 is subtracted to arrive at the next number.

**Verbal reasoning**  
**seating arrangement**

1. A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. In which position A is sitting ?

- A. Between B and D
- B. Between B and C
- C. Between E and D
- D. Between C and E

**Answer:**

**Option B**

**Explanation:**

\*       \*       \*       \*       \*

Therefore, A is sitting in between B and C.

2. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P ?

- A. A

- B. X
- C. S
- D. Z

**Answer:**

**Option B**

**Explanation:**

\* \* \* \* \*

The seating arrangement are as follows:

Therefore, right of P is X.

**Best Practices**

- Teacher's day celebration conducted by the department students and the students gifted books to the faculty members.
- A seminar taken by Mr V.HariKrishnan who was in SDW(Software Development Wing at KSRCAS)about Academic project to final year students.
- Final year students are taken to the Industrial Visit on 21-Aug-2019 and they came back on 25-Aug-2019.The students visits various places such as Bangaluru (Infosys,Wonderla water theme park),Mysore(Chamundeshwari temple,Zoological park,Mysore

palace),Ooty(Botanical garden).The students enjoyed their Industrial visit .

- The students shared about their ideas(What they are going to do after their college) on Creative Saturday.

## Faculty Achievements

S.NO	NAME OF THE FACULTY	NAME OF THE PROGRAM PARTICIPATED
1	Ms.S.Padma	AICTE Sponsored FDP on “Success Mantra to Promote Higher Education in Digital Era: Teach to learn and Learn to Teach” at K.S.R School of Management on July 18-21.
		Awareness programme on Intellectual Property Rights at AIC NIFT TEA Incubation centre, Tirupur on June 19.
		NPTEL Workshop conducted by IIT Madras on July 26.
2	Mr.J.Ramesh	FDP on Introduction to Python Programming at J.K.K.Nataraja on July 18-19.
3	Ms.S.Latha	FDP on two days National level workshop on ”Publishing articles in SCI Indexed Journal & Filling IPR” in KSRIET on July 25 & 26.
4	Mr.S.Krishnamoorthi	
5	Mr.K.J.P.Satheeshkumar	
6	Ms.G.Mangayarkarasi	
7	Ms.S.Umaparameswarai	FDP on “Data science the new black” in Bengaluru on Aug 3.
		Workshop on Big data in PSG Arts on Aug 10.
8	Ms.S.Sindhu	FDP on Published a paper on “Software process models” in International journal for scientific research and development.
9	Ms.A.Maheshwari	FDP on “Rural Impression Camp” Conducted by Mahatma Gandhi National Welfare at KSRCT on Aug 19-23.
10	Mr.M.Jayapal	

All the faculty in our department attended a FDP on “Writing Quality and Research Paper” sponsored by ACM on August 8.

## Student Achievements

Students of our Editorial Board Contributed their participation in Releasing a Magazine “**informatIx**” on **August 8**.

### EXPO “INVATA 2K19”

The event was coordinated by

**Mr.K.Murugesan M.C.A.,M.Phil.,**  
Asst. prof, Department of Computer Applications

#### STUDENT LIST:

S.NO	TEAM LEADER	TEAM MEMBERS	TITLE
1.	MOHAMED RIYAS.S	RAM KUMAR.R	HOME AUTOMATION USING GOOGLE ASSISTANT
		MANOJ.S	
		SRIGANTH.A	
		ARAVIND.M	
		GOWTHAM.S	
2.	KEERTHIVASAN	SNEHA.V	DETECTION OF WATER TANK ALERT LEVEL
		PRITHIKSA.P	
		KAMULRAJ.V	
		KEERTHILAL SANJAY.E	
3.	ANEES RAHMAN.S	SYED MOOSA UMER.S	WOMEN’S SAFETY AND SELF DEFENSE USING STUNT
		MOHAMMED NOWFAL.N	
		DHARINE.N	
		KARTHIKEYAN.M	
		KAVITHARASI.A	

		KAVIN.M	GUN
4.	AKILAN.A	PREMNATH.C	DETECTION OF GAS LEAKAGE
		ARAVINDHAN.C.D	
		GOKUL.R	
		NANDHINI	
5.	PARIMALA.S	SRIMATHI.B	BANK LOCKER SAFTY SYSTEM
		AMIRTHA.A	
		SASINATH.D	
		LOGESH.A	
6.	PRIYA DHARSHINI.M	PRIYA	THE ROVERTRON
		SURENDHAR	
		NAVEEN.P	
		CHANDRU.S	
		SURESH KUMAR.R	
7.	SIVASANKARI.J	ASHIK ANWAR.M	AUTOMATIC ACCIDENT DETECTION USING IOT AND GPS
		NIRANCHAN.V.M	
		HARIHARAN.K	
		MOHAMMED AADHL.M	
		PRIYA DHARSHINI	
8.	KARTHIK VELAVAN.S	DINESH KUMAR.M	HOME AUTOMATION USING BLUETOOTH
		GOKULAN.A	
		GOVARTHAN.A.M	
		KAMALRAJ.V	
		ANGURAJ	
9.	DINESH KUMAR.R	VIGNESHWARAN.P	IOT BASED ROBOTICS CAR
		RESHMA SRI.S	
		SANTHOSH KUMAR.A	
		HARIHARAN.A	
		SUBASH.M	



10.	SANJEEP KUMAR .S	SUFFAIYAN.A	BIOMETRICS FOR DOOR OPEN/CLOSE
		SHIVANI.K	
		SARAVANAN	
		DEEPIKA.S	
11.	RANJAN GOKUL.P.G	SADHASIVAM.T.S	MOBILE CHARGING USING SOLAR SYSTEM
		SIVASANKAR.V	
		LOGARAJ.C	
		BABY PRIYADHARSHAN	
12.	GOKULAKRISHNAN.S	NITHISH KUMAR.R	TWITTER SENTIMENT CLASSIFICATION
		MALARKODI.V	
		LISHMITHA.M	
		UDHAYANITHI.A	
13.	SREE YADHAV.G.V	AKILA.B	WATER DISPENSER MANAGEMENT SYSTEM
		VAISHNAVI.S	
		DEEPAK.S	
		JAYAPRAKASH.S	
14.	SAPNA	LOGANAYAGI.M.S	TROLLEY MANAGEMENT SYSYEM WITH RF- ID.
		SRIDHAR RAJ.R.S	
		KARAN.G	
		JITHENDHIRA RAJAN.K	

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  - **Dr.R.Pugazendi, Assistant Professor, Dept. of CS, Government Arts and Science College, Salem-7.**
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THE  
**ONLY**  
**WAY**  
TO FINISH  
IS TO  
**START**

Have the courage to follow your heart and intuition. They somehow already know what you truly want to become.

-Steve Jobs