K.S.RANGASAMY COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
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iSHARE

DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS [UG]

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Ishare

Editorial

We would like to wholeheartedly thank our honourable Chairman, Secretary, Executive Director and Principal for their continuous encouragement and constant support for bringing out the magazine. We profoundly thank our Heads of the Departments for encouraging and motivating us to lead the magazine a successful one right from the beginning. Ishare 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 has been sent to almost 60 Institutions in and around Tamilnadu. So far we have received feedbacks and appreciations from various Institutions.

We would be very pleased to receive your feedbacks. Please send your feedbacks to ishare@ksrcas.edu
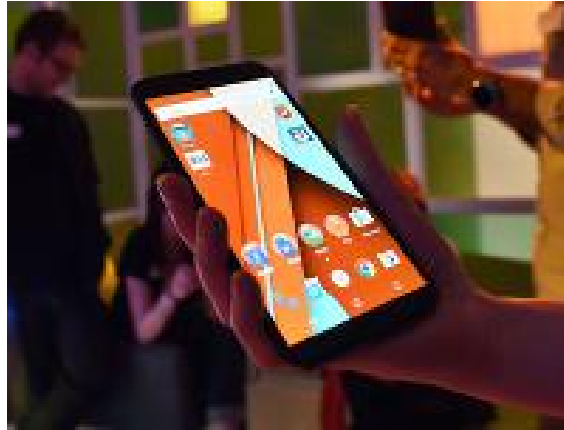
By,

Editorial Board

CONTENT March - 2016

Google rolls out Android 6.0.1 for Nexus Devices
Poornima Gopinath
II BCA C

While all the phones working on Android Operating System (OS) would wait for new Android 6.0.1 update, the Google Nexus devices will get over-the-air (OTA) update.

OTA refers to various methods of distributing new software updates, configuration settings, and even updating encryption keys to devices like cellphones, set-top boxes or secure voice communication equipment.

"We're celebrating new emojis on #Nexus which start rolling out today!", Google wrote on its Nexus Google+ page announcing the rollout to the devices.

The new Android 6.0.1 update has a bunch of new features listed on its website.

The first update is availability of "Contextual Assistance" on Tap -- an Artificial Intelligence programme or Machine Learning programme uses the raw power of the search engine to show more info about the user's search input.

It means that one can get assistance without having to leave what one is doing. A touch and hold on home button will allow the user to work on different things simultaneously.

The user can now have a dialogue with any of your apps that support the voice interaction service.

As far as updates to the battery are concerned, a feature "Doze" is introduced. This means that when your device is at rest, "Doze" automatically puts it into a sleep state to increase standby battery life.

"App Standby" enables the phone to insulate it from battery drain from seldom-used apps limiting their impact on battery life.

Android Marshmallow's new update has also got some system usability improvements. App links enables installed apps to automatically handle their web URLs so you can jump right into the app, rather than the mobile website, as appropriate.

First introduced in Android 5.1 and then spiked out of Android 6.0, the "until next alarm" option for "Do Not Disturb" mode makes a comeback. This allows the user to switch over to the silent or priority notification mode until the next alarm.

Computer Basics in Mobile Devices
Mr. M. Jayapal
Programmer

What is a mobile device?

A mobile device is basically any handheld computer. It is designed to be extremely portable, often fitting in the palm of your hand or in your pocket. Some mobile devices are more powerful, and they allow you to do many of the same things you can do with a desktop or laptop computer. These include tablet computers, e-readers, and smartphones.

Tablet computers

Like **laptops**, **tablet computers** are designed to be portable. However, they provide a different computing experience. The most obvious difference is that tablet computers don't have keyboards or touchpads. Instead, the entire screen is touch-sensitive, allowing you to type on a **virtual keyboard** and use your finger as a mouse pointer.

Tablet computers can't necessarily do everything traditional computers can do. For many people, a traditional computer like a **desktop** or **laptop** is still needed in order to use some programs. However, the convenience of a tablet computer means it may be ideal as a **second computer**. Below are some of the main features you can expect with a tablet computer.

Mobile OS: Different types of tablets use different operating systems. Examples include Android and iOS. You'll usually be able to download free updates to your OS as they become available.

Solid-state drives: Tablet computers usually use solid-state drives, which allow the computer to boot up and open programs more quickly. They are also more durable than hard disk drives.
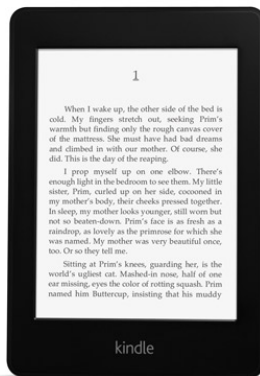
Wi-Fi and 3G/4G:

Because they are optimized for Internet use, tablet computers have built-in Wi-Fi. For a monthly fee, you can also purchase a 3G or 4G data plan, allowing you to access the Internet from almost anywhere.

Bluetooth:

In order to save space, tablet computers have very few ports. If you want to use an external keyboard or other peripherals, they will often use a wireless Bluetooth connection.

E-Book readers

E-book readers also called **e-readers** are similar to tablet computers, except

they are mainly designed for reading **e-books** (digital, downloadable books). Examples include the **Amazon Kindle** and the **Barnes & Noble Nook**. E-book readers have either an **e-paper** display or an **LCD** display.

> **Six Top Tools for Creating Presentations in 3D**
> **Mr. T. Vadivel**
> **Asst. Professor in Computer Applications**

Creating a presentation with attractive designs can sometimes be the difference between a good presentation and a failed one. One of the programs known for its ability to help users create attractive presentations is MS PowerPoint; however, it is only natural that one should use all kind of available resources for creating eye-catching presentations. Adding 3D objects can be a major source of creating attractive presentations by inserting graphs, images and other kinds of 3 dimensional objects. While PowerPoint offers some 3D shapes and designs by default, there are numerous third-party tools and add-ins that are a better alternative. Here are the tools that can be used for creating stunning presentations in 3D.

1. PERSPECTOR

Perspector is an application that allows users to add 3D graphics to their PowerPoint presentations. Since bulletin boards and regular slides can be boring for your audience, adding some 3D graphical elements can help you enhance the look of your presentation and to keep the audience interested. Perspector provides a set of images that can be imported as slides to tailor them according to the user's

requirement. You can also create 3D images from scratch by using the drawing interface.
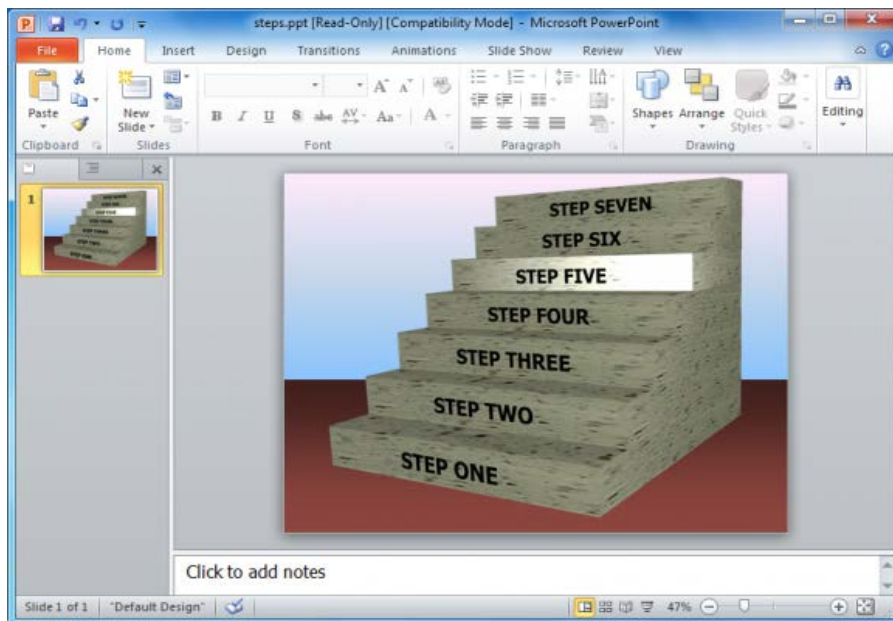
Perspector is a paid application and runs on Windows based operating systems. It creates presentations in PowerPoint file format. Additionally, you can also check out this free 3D Box PowerPoint template to create a PowerPoint presentation in 3D.

2. <u>CONVEXION</u>

Convexion is an add-in for MS PowerPoint 2007 and 2010 to convert presentations to WPF and Silverlight format. This enables creating attractive animations with the help of PowerPoint. For example, you can create a presentation, add transition effects and upload it to your blog/website after turning it to Silverlight format. Since Silverlight is cross-browser supported, therefore, the file can also be used for offline distribution as the recipient will not require PowerPoint installed on his/her system to view the Silverlight file.

The standard edition of Convexion costs $149, whereas the Pro version costs $199. The standard edition allows exporting a file to Silverlight XAP + HTML and WPF (EXE) formats, while the Pro version provides the option to adds Microsoft Blend and Visual Studio SLN Export.

3. <u>AURORA 3D PRESENTATION</u>

Aurora 3D Presentation is handy software that allows creating professional looking 3D presentations in various formats. Aurora 3D Presentation is particularly useful for beginners and intermediate users who wish to create presentations in 3D with the help of combining images, videos and textual data.
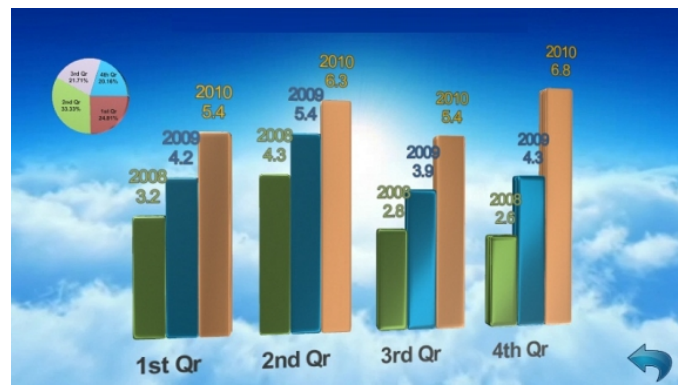
While Aura 3D does not support the MS PowerPoint format, it can be useful for creating video presentations.

4. ANAGLYPH MAKER

Anaglyph Maker is free software that can help you create anaglyph and interleave images for red-blue and LC-shutter glasses. While the utility of this application may not directly be related to the creation of presentations, however it can be used to create 3D images to insert them in applications such as MS PowerPoint.
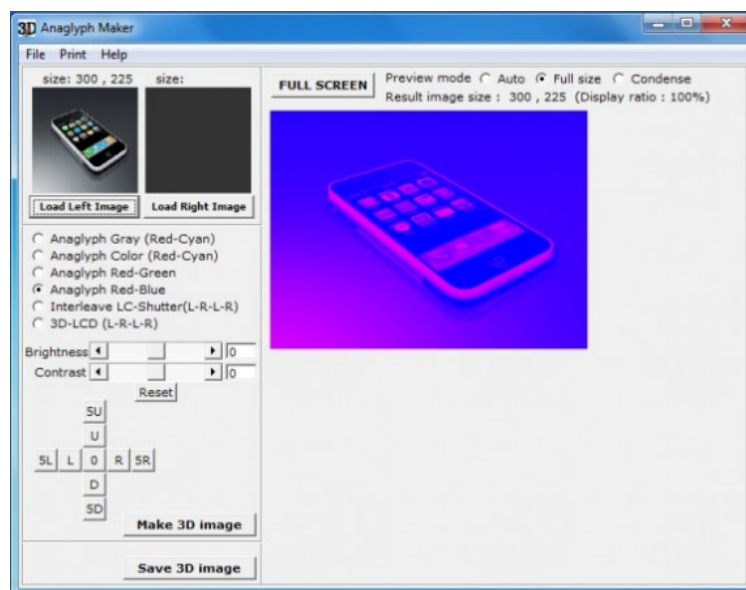
Anaglyph Maker works on Windows based operating systems, (Windows 98/2000/XP/Vista/ 7).

5. AUTODESK 3DS MAX

If you are an advanced user and are good with graphics designing then you can make use of applications such as Autodesk 3ds Max. It must be noted that Autodesk has two versions and while one version is meant for game development, animations, etc, the second version is more likely to be useful for creating presentations.

The Autodesk 3ds Max Design software has been developed for professionals such as architects, visualization specialists, engineers and the like, so that they can create and simulate models. These models can very well be used as presentations for large scale projects.

6. <u>MAXON CINEMA 4D</u>

Maxon Cinema 4D is a tool for graphic designers to create 3D images. The scope of this applications is to allow users to create 3D logos, designs, simulations, illustrations, buildings, etc. For this reason Maxon can also be used as a software for creating 3D presentations.
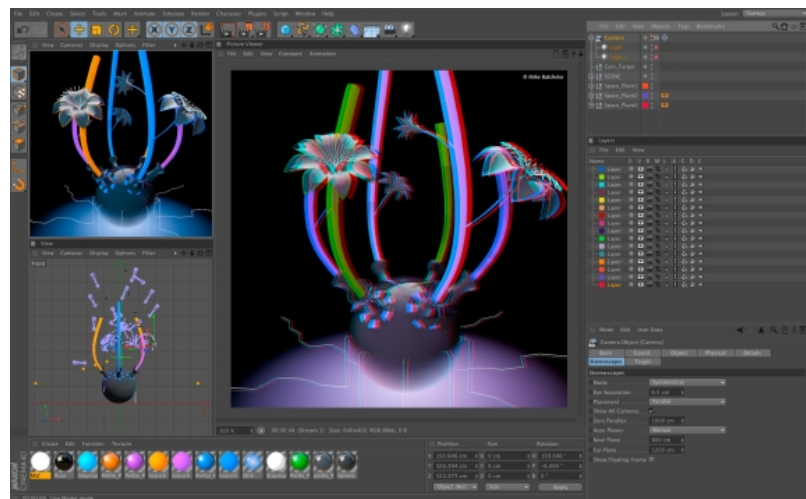
It is worth mentioning here that software like Autodesk 3ds Max and Maxon Cinema 4D are not meant as an alternative for programs such as MS PowerPoint. This software has only been included in this list because of their ability to create presentations (in the form of models and simulations) on a grand scale, e.g. a governmental project or building design.

> **Nine reasons not to upgrade to Windows 10 – yet**
> **Mr. S. Vigneshwaran**
> **Asst. Professor in Computer Applications**

Windows 10 is just about here -- and many users (especially those who have been wrestling with Windows 8) are probably eager to upgrade. But even if you can get it now -- the upgrade will be sent first to those who signed up for the Windows Insider beta program and then in "slow waves" to everyone else -- you may want to hold off.

Here are nine reasons you might want to put off a Windows 10 upgrade.
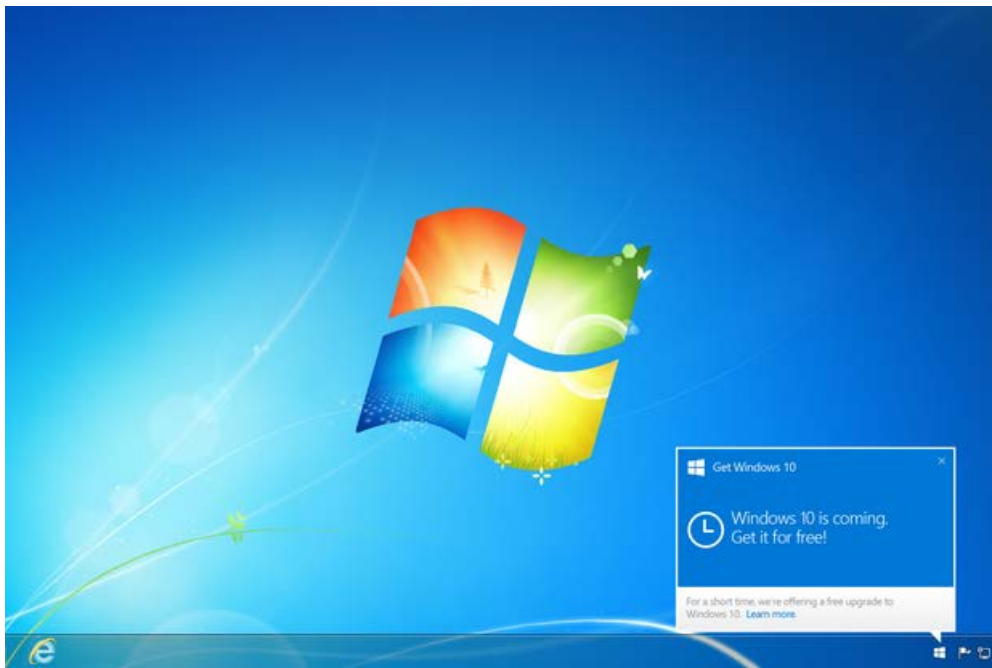
1. Your system can't run it

This may seem obvious, but sometimes it's the obvious that gets missed. In order to run Windows 10, you need a PC or tablet with a 1GHz processor or faster, 1GB of RAM for 32-bit machines or 2GB for 64-bit machines, 16GB hard disk

space for 32-bit machines or 20GB hard disk space for 64-bit machines, a DirectX 9 or later graphics card with a WDDM 1.0 driver and an 800 x 600 display or better.

If your system doesn't qualify, then you're going to have to upgrade your hardware before you upgrade your operating system.

2. You get a year for the free upgrade offer

Windows 7 and Windows 8 users get a free upgrade to Windows 10. But you don't have to upgrade right away -- you have a full year. So you can upgrade at your leisure and not waste a bright, summer day doing it.

3. You're using Windows 7

Windows 10 undoes the damage done by Windows 8, an operating system that was built more for touch devices than for traditional PCs. In fact, two of Windows 10's big improvements over Windows 8 are the addition of a Windows 7-style Start menu and the ability to work entirely on the desktop and ignore the touch-focused Start screen.

So if you currently use Windows 7, you're already set -- you have a Start menu and you work only on the desktop. In short: If you're happy with the way Windows 7 works, you may want to stay with it.

4. You like Windows 7 desktop gadgets

Windows 7 includes desktop gadgets that do things such as check the weather and stock quotes, monitor your CPU, report about the state of your system, let you listen to streaming radio stations, and check your hard drive speed and the state of your network. They don't work on Windows 10 and will be deleted when you upgrade. So if you're a gadget fan, don't upgrade.

5. <u>Security updates for Vista, Windows 7 and Windows 8 will be available for years</u>

Microsoft has a habit of pushing people to its latest operating system by ending support for its old operating systems, halting security updates and leaving users potentially open to security threats. If you have Windows 7 or Windows 8, you've got years before that happens. Microsoft will keep issuing security patches for Windows 7 until January 2020 and for Windows 8 until January 2023. Even Windows Vista will get security updates until April 2017. So no need to rush.

6. <u>You use OneDrive placeholders</u>

In Windows 8.1, OneDrive placeholders, also called smart files, let you see all of the files in OneDrive, even if the files are located in the cloud and not on your device. When you double-click a placeholder on your PC, the file is downloaded. However, when Windows 10 ships, OneDrive placeholders won't work because of the upgraded OneDrive software.

Microsoft says it will try to bring OneDrive placeholder functionality to Windows 10 by year's end. But if OneDrive placeholders are important to you, don't upgrade until they work with Windows 10.

7. <u>You have old peripherals</u>

The Achilles heel of most new operating systems is handling older peripherals, such as printers and scanners. Microsoft doesn't always make sure that drivers for vintage devices work with the new operating system -- it would take too many development resources. As a result, some of these peripherals won't work with newer operating systems.

8. <u>You love Windows Media Center</u>

Yes, it's true -- there are some people who are big fans of Window Media

Center, which was released way back in 2002 and which is used to play video, music and other media. Microsoft has been trying to kill it off for years, and even disbanded the team responsible for it back in 2009.

The truth is, Media Center was always a nightmare to set up and has been superseded by streaming media services such as Netflix, Amazon Prime, Hulu, Spotify, Apple Music and many others. Still, there are die-hards out there who love it -- and who will be dismayed to learn that Windows Media Center won't work with Windows 10. If you're one of that group, stay away from upgrading.

9. You don't need the pain of early adoption

No matter how widespread beta testing is for a new operating system, it can't uncover all the bugs and gotchas. A new operating system hasn't been tested on every possible piece of hardware, with every piece of software, and with every hardware/software combination. People who upgrade immediately are the guinea pigs. They're the ones who feel the pain.

Cryptocurrency
Ms. V. Menaka
Asst. Professor in Computer Science

A cryptocurrency is a medium of exchange like *normal* currencies such as USD, but designed for the purpose of exchanging digital information through a process made possible by certain principles of cryptography. Cryptography is used to secure the transactions and to control the creation of new *coins*. The first cryptocurrency to be created was **Bitcoin** back in 2009. Today there are hundreds of other cryptocurrencies, often referred to as Altcoins**.**

Unlike centralized banking, like the Federal Reserve System, where governments control the value of a currency like USD through the process of

printing fiat money, government has no control over cryptocurrencies as they are fully decentralized.

Most cryptocurrencies are designed to decrease in production over time like Bitcoin, which creates a market cap on them. That's different from fiat currencies where financial institutions can always create more, hence inflation. Bitcoin will never have more than 21 million coins in circulation. The technical system on which all cryptocurrencies are based on was created by Satoshi Nakamoto.

While hundreds of different cryptocurrency specifications exist, most are derived from one of two protocols; Proof-of-work or Proof-of-stake. All cryptocurrencies are maintained by a community of **cryptocurrency miners** who are members of the general public that have set up their computers or ASIC machines to participate in the validation and processing of transactions.

CRYPTOCURRENCY SECURITY

The security of crypto currencies is two parts. The first part comes from the difficulty in finding hash set intersections, a task done by miners. The second and more likely of the two cases is a "51%" attack". In this scenario, a miner who has the mining power of more than 51% of the network, can take control of the global block chain ledger and generate an alternative block-chain. Even at this point the attacker is limited to what he can do. The attacker could reverse his own transactions or block other transactions.

Crypto currencies are also less susceptible to seizure by law enforcement or having transaction holds placed on them from acquirers such as PayPal. All crypto currencies are pseudo-anonymous, and some coins have added features to create true anonymity.

CRYPTOCURRENCY LEGALITY & TAXES

While cryptocurrencies are legal in most countries, Iceland and Vietnam being an exception – Iceland mainly due to their freeze on foreign exchange, they are not free from regulations and restrictions. China has banned financial institutions from handling bitcoins and Russia, while saying cryptocurrency is legal, has made it illegal to purchase goods with any currency other than Russian rubles.

In the U.S., the IRS has ruled that Bitcoin is to be treated as property for tax purposes, making Bitcoin subject to capital gains tax. The Financial Crimes Enforcement Network (FinCEN) has issued guidelines for cryptocurrencies. The issued guidelines contain an important caveat for Bitcoin miners: it warns that anyone creating bitcoins and exchanging them for fiat currency are not necessarily beyond the reach of the law. It states:

CRYPTOCURRENCY SERVICES

There are a host of services offering information and monitoring of cryptocurrencies. CoinMarketcap is an excellent way check on the market cap, price, available supply and volume of crypto currencies. Reddit is a great way to stay in touch with the community and follow trends and CryptoCoinCharts is full of information ranging from a list of cryptocoins, exchanges, information on arbitrage opportunities and more.

Liteshack allows visitors to view the network hash rate of many different coins across six different hashing algorithms. They even provided a graph of the

networks hash rate so you can detect trends or signs that the general public is either gaining or losing interest in a particular coin.

A hand website for miner is CoinWarz. This site can help miners determine which coin is most profitable to mine given their hash rate, power consumption, and the going rate of the coins when sold for bitcoins.

Top Ten E-Commerce Mistakes
Mr. T. Vadivel
Asst. Professor in Computer Applications

<u>Trying to sell the wrong product online:</u>

Not all products will sell successfully on the Internet. Inexpensive products that require a shipping charge are typically not worth selling, particularly if they can be easily purchased in most local stores. Other products, such as specialized high-end clothing, may be more difficult to sell because people prefer to try them on. Research how other e-commerce sites have fared with similar products and what tactics that have used to entice shoppers into ordering online.

<u>Lack of marketing:</u>

Just because you have a product and a Web site does not necessarily mean anyone will find it. You need to market your site both online and off. Focus on your company's competitive advantage, and do your best to convince the customer that you are offering a great deal.

<u>A poorly designed Web site:</u>

In their haste to get online quickly and start selling, too many e-commerce novices do not display their wares well. Many would be Web designers crowd their sites with too much information or cram too many items on a single page. A

professional-looking site that features a dozen items with clear photos and descriptions is more effective than one that includes 50 sales items all bunched together. Also, be wary of too much color.

Falling behind the times:

If you do not keep your site current, you will lose out to competitors that do. Stay on top of the industry and post new items often. If customers visit your site over the course of several weeks or months and nothing has changed, they may assume the site is no longer maintained, and they may look elsewhere. A successful e-commerce site is one that stays current and appears vibrant.

Poor checkout procedures:

Once your customers decide what they want to purchase, it should be easy to go to the shopping cart and pay without having to answer questions or jump hurdles. Make completing the transaction as easy and painless as possible.

Not testing your site:

All the links on your site, including product descriptions, photos, the shopping cart, feedback, and others, should be routinely tested to make sure they work.

A hard-to-find or non-existent privacy policy:

Although most people will not actually read your privacy policy, some shoppers will want to know what you will do with the information you collect.

Poor order fulfilment:

Word travels fast on the Internet, and just one or two unhappy customers can do irreparable damage to your reputation. Before you launch your site, make sure you are prepared to fill the orders your customers place, and do your best to deliver your product in a timely fashion.

Straying from your objective:

If your goal is to have an online children's furniture business, do it; don't start selling patio furniture or antiques. Too many e-commerce sites lose their primary focus and start spreading themselves too thin. Stick with your area of expertise.

Poor customer service:

Perhaps this is the most significant area of all. Web consumers today are very conscious of customer service, and they are apt to go elsewhere if they feel you are not providing them with the level of service they deserve. If you heed only one thing from this list, make it this one. Provide excellent customer service and your satisfied customers will spread the word.

Don't Throw out Old Phone- Turn it into a Privacy Device
Mr. S. Vigneshwaran
Asst. Professor in Computer Applications

Most forms of communication used by enterprises these days are highly prone to being intercepted, whether by law enforcement, cyber thieves, corporate spies, or wayward employees and contractors. That leaves enterprise IT open to new approaches to safeguard communications. I just saw one creative idea on the Life hacker website suggesting that out-dated mobile devices could be used as top-secret, Wi-Fi-based privacy devices.

Opinion by Expert

Apple's 3D Touch system may be useful — someday

Security companies shouldn't be this thin-skinned

Update: Kaspersky: Great product, dreadful installation/upgrade process

Inside the head of your company's cyber traitor

The core of this idea is that old smart phones that are no longer tied to a cellular network can use Wi-Fi (preferably someone else's, to ensure non-traceability); a number-assigning service to send text messages or even place calls; and a VPN to encrypt the texts and anonymize location. Lifehacker focused on the usefulness of such privacy devices for law-abiding individuals. But I think enterprises could benefit too.

The enterprises always want to keep sensitive information away from competitors and hackers, and they sometimes have a legitimate interest in keeping communications out of the hands of law enforcement agencies, whose probes invariably capture a lot of irrelevant data. Merger negotiations come to mind. No company wants criminals or competitors to intercept such sensitive information, but they also would rather that it not get swept up by investigators, who could make it part of the public record.

Repurposed old cell phones could come in handy in other situations. Suppose you hear rumours that your tech staff or call centre employees are treating people poorly. You could use untraceable cell phone privacy devices to call in and see for yourself.

Or a retailer's loss-prevention people could move in on a professional shoplifter by reaching out and pretending to be an interested buyer. That won't work so well if the incoming call is clearly from HQ.

The Life hacker article makes a good point about why using an old phone is the best way to go: "You could do this with your normal, everyday phone, but the goal here is to be as untraceable as possible, and your real phone carries and leaks a ton of data about you, where you go, and what you do. The disposability of an old device that's doing nothing but acting as a ghost texting phone is important here. Plus, worst case, you can always wipe it or toss it, no harm no foul."

Just don't get carried away. Most of your communications should continue on normal channels. Keep these ghost phones locked up, and let them out only for purposes that have been approved at a high level of the hierarchy.

With all of the public and private surveillance going on and records being kept, true privacy is hard to find. Maybe, just maybe, you can find a little slice of privacy in those phones you're about to destroy. It's a cost-effective idea worth considering.

PROJECT LOON
Mr. T. Sharma
II BCA C

What is Project Loon?

Many of us think of the Internet as a global community. But two-thirds of the world's population does not yet have Internet access. Project Loon is a network of balloons travelling on the edge of space, designed to connect people in rural and remote areas, help fill coverage gaps, and bring people back online after disasters.

The Technology

Project Loon balloons float in the stratosphere, twice as high as airplanes and the weather. In the stratosphere, there are many layers of wind, and each layer of wind varies in direction and speed. Loon balloons go where they're needed by

rising or descending into a layer of wind blowing in the desired direction of travel. By partnering with Telecommunications companies to share cellular spectrum we've enabled people to connect to the balloon network directly from their phones and other LTE-enabled devices. The signal is then passed across the balloon network and back down to the global Internet on Earth.

Where Loon has been

Project Loon began in June 2013 with an experimental pilot in New Zealand, where a small group of Project Loon pioneers tested Loon technology. The results of the pilot test, as well as subsequent tests in New Zealand, California's Central Valley and in Northeast Brazil, are being used to improve the technology in preparation for the next stages of the project.

How Loon connects

Each balloon can provide connectivity to a ground area about 80 km in diameter using a wireless communications technology called LTE. To use LTE, Project Loon partners with telecommunications companies to share cellular spectrum so that people will be able to access the Internet everywhere directly from their phones and other LTE-enabled devices. Balloons relay wireless traffic

from cell phones and other devices back to the global Internet using high-speed links.

How Loon flies

Navigating with the wind

Project Loon balloons travel approximately 20 km above the Earth's surface in the stratosphere. Winds in the stratosphere are stratified, and each layer of wind varies in speed and direction. Project Loon uses software algorithms to determine where its balloons need to go, then moves each one into a layer of wind blowing in the right direction. By moving with the wind, the balloons can be arranged to form one large communications network.

Stratosphere

Situated on the edge of space, between 10 km and 60 km in altitude, the stratosphere presents unique engineering challenges: air pressure is 1% that at sea level, and this thin atmosphere offers less protection from UV radiation and dramatic temperature swings, which can reach as low as -80°C. By carefully designing the balloon envelope to withstand these conditions, Project Loon is able to take advantage of the stratosphere's steady winds and remain well above weather events, wildlife and airplanes.

How Loon is designed
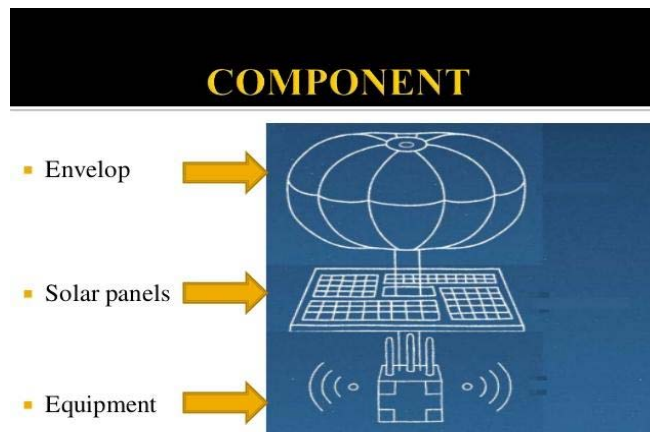
Envelope

The inflatable part of the balloon is called a balloon envelope. A well-made balloon envelope is critical for allowing a balloon to last around 100 days in the stratosphere. Loon's balloon envelopes are made from sheets of polyethylene plastic, and they measure fifteen meters wide by twelve meters tall when fully inflated. When a balloon is ready to be taken out of service, gas is released from the envelope to bring the balloon down to Earth in a controlled descent. In the unlikely event that a balloon drops too quickly, a parachute attached to the top of the envelope is deployed.

Solar Panels
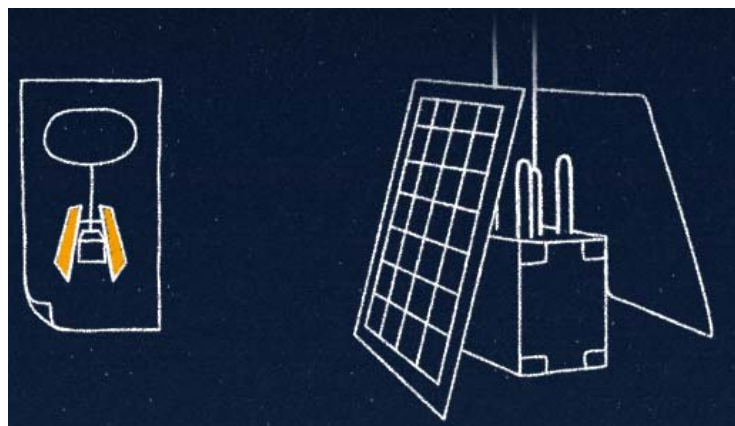
Each balloon's electronics are powered by an array of solar panels. The solar array is a flexible plastic laminate supported by a light-weight aluminium frame. It uses high efficiency mono-crystalline solar cells. The solar array is mounted at a steep angle to effectively capture sunlight on short winter days at higher latitudes. The array is divided into two sections facing in opposite directions, allowing us to capture energy in any orientation as the balloons spin slowly in the wind. The panels produce approximately 100 Watts of power in full sun, which is enough to keep Loon's electronics running while also charging a battery for use at night. By moving with the wind and charging in the sun, Project Loon is able to power itself using entirely renewable energy sources.

Electronics
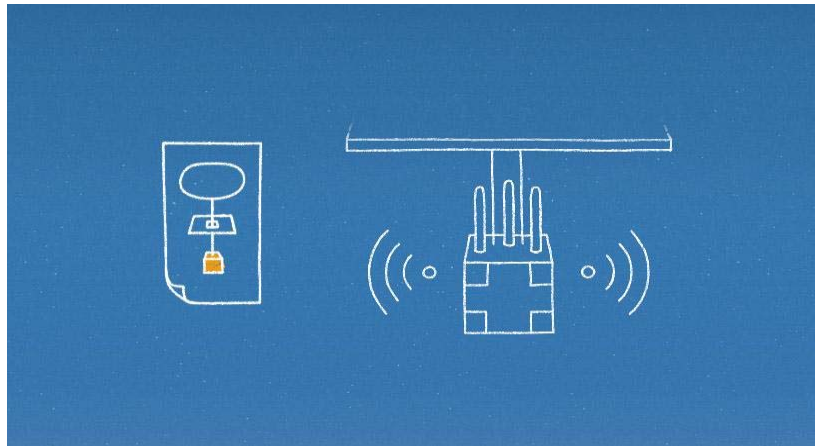
A small box containing the balloon's electronics hangs underneath the inflated envelope, like the basket carried by a hot air balloon. This box contains circuit boards that control the system, radio antennas to communicate with other balloons and with Internet antennas on the ground, and lithium ion batteries to store solar power so the balloons can operate throughout the night.

Where Loon is going

Project Loon began with a pilot test in June 2013, when thirty balloons were launched from New Zealand's South Island and beamed Internet to a small group of pilot testers. The pilot test has since expanded to include a greater number of people over a wider area. Looking ahead, Project Loon will continue to expand the pilot, with the goal of establishing a ring of uninterrupted connectivity at latitudes in the Southern Hemisphere, so that pilot testers in these latitudes can receive continuous service via balloon-powered Internet.

GOOGLE OPENS ACCESS TO MOBILE PHONE SERVICE PROJECT FI

**Mrs.R. Nirmala, M.Sc, M.Phil.,
Asst. Professor, Computer Science**

Project Fi

Project Fi is a mobile virtual network operator owned by Google, providing wireless phone and data services using Wi-Fi and cellular networks belonging to Sprint and T-Mobile.

Features

The service automatically switches between networks depending on signal strength and speed, and automatically connects to open Wi-Fi hotspots that meet a certain criteria while securing data with encryption through an automatic VPN. Phone calls, if placed over a Wi-Fi connection, will seamlessly transition to a cellular network if Wi-Fi coverage is lost.

Type	Mobile data and voice
Location	United States Roaming in 120+ countries
Protocols	GSM / CDMA / HSPA+ / LTE
Use	Wireless Smartphone service
Owner	Google
Operator	Sprint, T-Mobile
Current status	Operational
Commercial?	Yes

Plans

Monthly plans are paid at the beginning of each monthly billing cycle and start at $20.00 per month for unlimited voice and messaging and an additional

$10.00 per GB of data. Unused data is credited $10.00/GB ($0.01/MB) on the customer's next invoice, while extra data is charged at $10.00/GB ($0.01/MB).

Availability

Voice and data services are only available on compatible Nexus phones, beginning with the Nexus 6 phone and later on the Nexus 5X and Nexus 6P. Data-only service with limited coverage is available on tablets including the Nexus 7 and Nexus 9 and also on non-Nexus devices such as the cellular network-compatible versions of the iPad Air 2, iPad Mini 4, and Samsung Galaxy Tab S.

DEPARTMENT ACTIVITIES

1. DIGITAL LITERACY

ICTACT offers a Digital Literacy program for the Indian Citizens to enhance the Digital India.
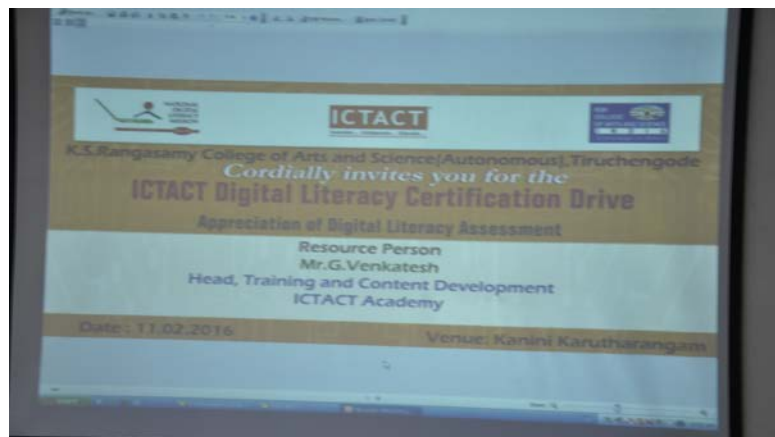
The Department of Computer Applications (UG) in association with ICTACT had conducted a **Digital Literacy Certification Drive** on 11.02.2016. The function was inaugurated by the

Resource person   **Mr. G. Venkatesh**, **Head, Training and Content Development, ICTACT Academy**.   The programme focussed on imparting the basics of Computer and Internet usage to 110 non-Computer Science students from various departments in our college.

Our Principal**, Dr. V. Radhakrishnan** addressed the gathering about the benefits of Digital Literacy.

The course had covered twenty hours of Theory and Practical sessions with the following modules:

- ✓ **Introduction of Digital Devices**
- ✓ **Operating Digital Devices**
- ✓ **Introduction to the Internet**
- ✓ **Communications using the Internet**
- ✓ **Applications of Internet**

An Online test was conducted for those 110 students to assess the knowledge they acquired through the sessions.

After the completion of assessment, the students were certified with **"Appreciation of Digital Literacy - Level 1".** Finally, there are 110 students benefitted from this certification drive.

2. <u>**NATIONAL SEMINAR**</u>

The Department of Computer Science and Applications and Department of Biological Sciences organized a National Seminar on "**Modeling the Neural Structure of Human Brain using Machine Learning**" on 17th and 18th February 2016.

Experts from various Universities delightfully took part in the Technical Sessions by sharing their knowledge about Research and their Area of

Specialization.

"Kongu Nattu Saathanaiyalar"
Lion Dr.K.S.RANGASAMY MJF
Founder-Chairman,
KSR Group of Institutions

Mr. R.SRINIVASAN
Secretary,
KSR Group of Institutions

Dr.ANNAPPA
Associate Professor of Computer Science & Engineering,
National Institute of Technogoly Karnataka Surathkal
PO Srinivasnagar, Mangalore, Karnataka, India-575025.

Dr. VELIKKAKATH ANOOP KUMAR GOPI, Ph.D.,
Post Doctorate Fellow
IISER Research, Trivandrum.

Dr. R.KRISHNAMOORTHY, M.Tech., Ph.D.,
Professor of Information Technology,
University College of Engg., BIT Campus,
Anna University,
Tiruchirappalli – 620 024, India.

Dr.T.S.GNANENDRA Ph.D.,
Assistant Professor of Bio-Technology,
Mahendra Arts and Science College,
Kallipatti,Tiruchengode(TK),
Namakkal(DT), Tamilnadu, India.

Dr. G.NANJUNDAN Ph.D.,
Professor of Statistics,
Bangalore University,
Jnanabharathi, Bangalore 560056.
Karnataka State, India.

Dr. Annappa, gladly shared the details of his academic programs and covered some interesting facts on "**Artificial Intelligence**".

Dr. Velikkakath Anoop Kumar Gopi, excellently explained about "**Molecular Biology**" and motivated the students through his inspiring words, how to do research as a passion that leads to success.

Dr. Nanjundan shared his experience in "**Cellular Automata**" through his remarkable speech.

A fabulous speech was provided by **Dr. T.S. Gnanendra**, about the interconnectivity of Computer Science and Biological Science and made the session interactive.

Over 20 papers were presented from both Computer Science and Biological Science departments of various colleges in and around Tamilnadu.

MAILING LIST – To Whom We Send

- Mr.B.Murali, HOD of CS, PSG college of Arts and Science, Coimbatore- 14.
- Mr.P.Narendran, HOD of CS, Gobi Arts &Science College, Gobichettipalayam-53.
- Dr.M.Chandrasekharan, HOD of CS, Erode Arts College (Autonomous), Erode - 09.
- Mr.S.SureshBabu, HOD of CS, Thiruvalluvar Government Arts College, Rasipuram.
- Dr.K.Thangavel, HOD of CS, Periyar University, Salem-11.
- Prof S. Joseph Gabriel, HOD of CS, MazharulUloom College, Vellore – 02
- Dr.P.Venkatesan, Principal, Vysya College of Arts and Science, Salem-03,
- Dr.P.Swaminathan, Dean, School of Computing, SASTRA University, Kumbakonam.
- Dr.S.K.Jayanthi, HOD of CS, Vellalar College for Women, Erode-9
- Dr.S.Krishnamoorthy, Dean, Anna University, Trichy-24.
- Dr. K. Rama, Deputy Adviser, NAAC, Bangalore.
- Dr.HannahInbarani, Asst Prof, Dept of CS, Periyar University,

Salem-11.

- Dr.R.Balasubramaniam, Prof& HOD of CS, ManonmaniamSundaranar University, Tirunelveli.
- Dr.P.Jaganathan, Director, Dept of MCA, PSNA Engineering College, Dindugal-22.
- Dr.D.Venkatesan, SeniorAsst. Prof, Dept. of CS, School of Computing, SASTRA University, Tanjore-01.
- Dr.C.Muthu, Reader, Dept of Information Science and Statistics, St. Joseph College, Tiruchirapalli– 02.
- Dr. D.I. George Amalarethinam, Director, Department of MCA, Jamal Mohamed College, Tiruchirapalli – 20.
- Mr. B. Rajesh Kanna, Assistant Professor in Elect &Comm, Annamalai University, Chidambaram.
- Dr.H.FaheemAhmed, Asst Prof & HOD of CS, Islamiah College, Vaniyambadi – 02
- Dr. S. Leela, Controller of Examination, Periyar University, Salem-11.
- Dr. K. Angamuthu, The Registrar, Periyar University, Salem-11.
- Prof.Dr.C.Swaminathan, Vice Chancellor, Periyar University, Salem-11.
- Mr.Vaithiyanathan, Project Manager HCL Technologies, Chennai.
- Dr.T.Santhanam, Reader& HOD of CA, Dwaraka Doss Goverdhan Doss Vaishnav College, Chennai –06.
- Dr.SheelaRamachandran, Vice Chancellor, Avinashilingam

University, Coimbatore.

- **Dr.R.Rajesh, Asst. Prof, Dept of CS & Engineering, Bharathiyar University, Coimbatore – 46**

- **Dr.R.S.Rajesh, Reader, Computer Science and Engineering, ManonmaniamSundaranar University, Tirunelveli-12.**

- **Dr.L.Arockiam, Associate Professor, Dept of CS, St. Joseph College, Tiruchirapalli-620002**

- **Mr.V.Saravanan, Associate Professor, Dept of CA, Hindustan College of Arts and Science, Coimbatore – 28.**

- **Dr.R.Ravichandran, Secretary, Dept of CS, KGISL Institute of Technology, Coimbatore-35.**

- **Dr. N.Sairam, Associate Dean, School of Computing, Sastra University, Tanjore – 01**

- **Dr.T.Senthikumar, Asst Prof, Amrita Institute of Technology, Coimbatore - 12**

- **Mr.S.T.Rajan, Sr. Lectr, Dept of CS, St. Josephs College, Trichy-02.**

- **Dr.R.AmalRaj, Prof. Dept Of CS, SriVasavi College, Erode – 16.**

- **Dr. R. Pugazendi, Assistant Professor, Dept. of CS, Government Arts and Science College, Salem-7.**