TECH - SAVVY
THE NEWS LETTER

Mar-May, 2017

Department of Computer Science & Engineering

The Department of Computer Science & Engineering was established in the year 2001. It has intake capacity of 120 students. All the laboratories are well established with state of the art equipment. The department has highly qualified and experienced faculty and technical staff. An innovative teaching and learning process is implemented in imparting quality education to the students which includes conduct of workshops, seminars, industrial tours, expert lectures and various extracurricular activities.

PROF. (DR.) N. SUBHASH CHANDRA
Principal

To my mind an Educational Institute is not just about four walls with bricks, mortar and concrete, but about building characters, enriching minds and developing confidence towards above motivation. Every effort is pursued to identify the functional gaps between Holy Mary Institute of Technology & Science and the Premier Institutions of the country like IITs and NITs so as to narrow the caps as soon as possible.

PROF. B. DEVNDER
HOD-CSE

It gives me immense pleasure to lead the department of Computer Science & Engineering. The aim of the department is to provide high quality education along with training the students with all the new advancements in the computers field. I congratulate the team of faculty members and the students for their brilliant and original efforts. I wish all the students and faculty a great academic career.

From the Editorial Board

As we all know that corruption is very bad thing. It inhibits the individual growth as well as society and country growth and development. It is continuously making its roots so deeply because of the increasing human greediness towards money, power and position. Corruption is the misuse of authority, public position, natural or public resources, power, etc by someone to gain his/her personal gratifications. According to the sources, it has been identified that India ranks three in the highly corrupted countries.

Corruption is highly spread in the field of civil service, politics, business and other illegal fields. India is a famous country for its democracy but it is corruption which disturbs its democratic system. Politicians are highly responsible for all type of corruption in the country. We chose our leaders by having lots of expectations to them to lead our country in the right direction. In the starting they make us lots of promises however, just after the voting they forget all that and involve in corruption. We are sure that our India would be corruption free a day when our political leaders would be free of greediness and use their power, money, status and position in right direction to lead the country, not their own luxury and personal wishes.

We should select very honest and trustworthy leaders to lead our India just like our earlier Indian leaders such as Lal Bahadur Shastri, Sardar Vallabh Bhai Patel, etc. Only such political leaders can reduce and finally end the corruption from India. Youths of the country should also need to be aware of all the reasons of corruption and get together to solve it in group. Increasing level of the corruption needs to take some heavy steps to get control over it.

Department of Computer Science & Engineering

A Short Note on Mobile Phone

A mobile phone is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area. The radio frequency link establishes a connection to the switching systems of a mobile phone operator, which provides access to the public switched telephone network (PSTN). Most modern mobile telephone services use a cellular network architecture, and therefore mobile telephones are often also called *cellular telephones* or *cell phones*. In addition to telephony, 2000s-era mobile phones support a variety of other services, such as text messaging, MMS, email, Internet access, short-range wireless communications (infrared, Bluetooth), business applications, gaming, and digital photography. Mobile phones which offer these and more general computing capabilities are referred to as smartphones. The first handheld mobile phone was demonstrated by John F. Mitchell and Martin Cooper of Motorola in 1973, using a handset weighing c. 4.4 lbs (2 kg).In 1983, the DynaTAC 8000x was the first commercially available handheld mobile phone. From 1983 to 2014, worldwide mobile phone subscriptions grew to over seven billion, penetrating 100% of the global population and reaching even the bottom of the economic pyramid.[4] In first quarter of 2016, the top smartphone manufacturers

were Samsung, Apple and Huawei (and "[s]martphone sales represented 78 percent of total mobile phone sales").The world's largest individual mobile operator by number of subscribers is China Mobile, which has over 500 million mobile phone subscribers.Over 50 mobile operators have over ten million subscribers each, and over 150 mobile operators had at least one million subscribers by the end of 2009.In 2014, there were more than seven billion mobile phone subscribers worldwide, a number that is expected to keep growing.

A Short Note On CDMA

Today there are two major standards for cell phone technology. CDMA and GSM. Almost all phones in the United States operate on either of these networks. CDMA stands for Code Division Multiple Access, but was originally known as IS-95.

The original CDMA is now referred to as CDMA one. Several different variants of CDMA technology been developed continuously improving quality and data transfer speeds. The first release of CDMA2000 was refereed to as either 3G1X, 1XRTT, or 1X. Designed to provide data transmissions of ten times faster then the previous technology and double the voice capacity of CDMAone. As stated above, Verizon Wireless operates on the CDMA network. Depending on the phone you have and its capabilities you will notice symbols in the default screen of your phone reading either 1X, 1XEV-DO or some variation of the two. This symbol defines the CDMA2000 standards your phone is operating on. Newer phones will display EV or EV-DO using the newer faster, more reliable CDMA technology. Enhanced data transfer provides for the new technologies released by companies like Verizon. Including data transfer for files, music, games and the Internet.

WCDMA technology, standing for Wideband Code Division Multiple access, is the most developed and advanced form of the third generation CDMA2000 technology. It encompasses higher data transfer rates and provides wireless connections in markets world wide. Many existing GSM 2G (GSM/GPRS) operators have slowly began the switchto using WCDMA technology.

Top Apps. Of 2015

THIS IS WHAT YOUR FACEBOOK PROFILE LOOKED LIKE OVER THE LAST 11 YEARS

Facebook Messenger grew the most year-over-year compared to any other app on the list, with a 31% jump in the app's number of average unique users from 2014. This is particularly important for Facebook as the company continues to push the app as a one-stop-shop for your travel and shopping needs in addition to functioning as a communications tool.

Apple has two apps on the list: Apple Music and Apple Maps. It's another sign that Apple's navigation app, which has struggled since its launch in 2012, is finally starting to see some success. It's also a positive sign for Apple Music since the new streaming service has only been available for about six months.

There's a huge discrepancy in the number of unique Apple Music users recorded by Nielsen (about 54 million) and the number of paid subscribers Apple CEO Tim Cook has announced in the past (6.5 million). This is likely because Nielsen is counting the total number of people using the app in general to play their own music in addition to those who use Apple's streaming service, as Re/code pointed out.

The results are based on survey answers from thousands of smartphone users across the U.S., as Nielsen explains here
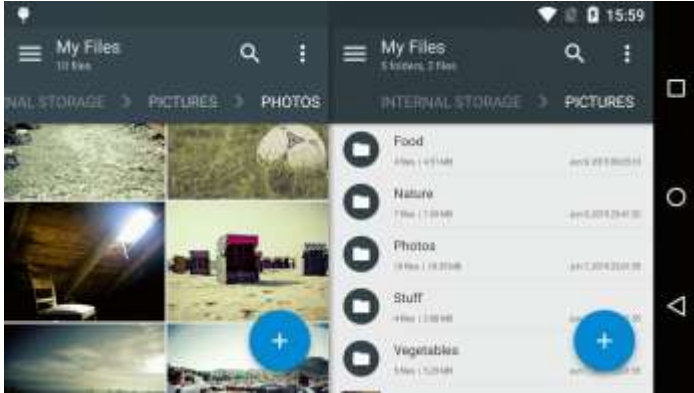
Technical Zone

A **camcorder** is an electronic device combining a video camera and recorder. Although marketing materials may use the colloquial term "camcorder", the name on the package and manual is often "video camera recorder". Most devices capable of recording video are camera phones and digital cameras primarily intended for still pictures; the term "camcorder" is used to describe a portable, self-contained device, with video capture and recording its primary function.

The earliest camcorders are tape-based, recording analog signals onto videotape cassettes. In 2006, digital recording became the norm, with tape replaced by storage media such as internal flash memory and SD cards.[1]

Earlier, the term *camcorder* exclusively referred to a camera with a recorder. But almost all of the electronic cameras built in 2006 provide recording capability essentially making them a "camcorder". The term *camcorder* is now exclusively used for a particular camera range which provides advanced functions over more common cameras.
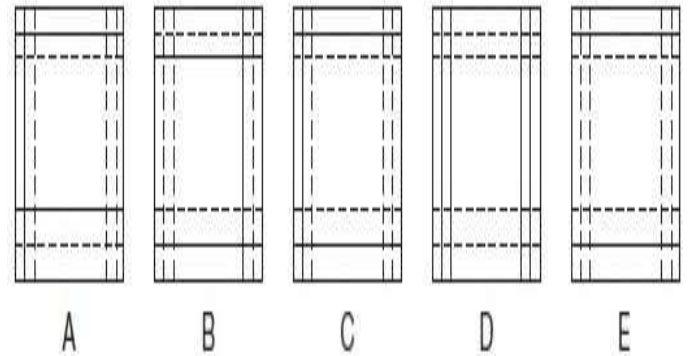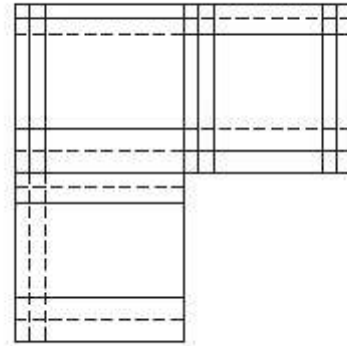
Technical corner

The biggest feature is file encryption. Solid Explorer now allows you to encrypt any given file and folder with AES256 encryption. It decrypts files transparently to the user, so you don't have to worry about re-encrypting them when you're finished. You can also use your fingerprint to unlock files (as well as to login to cloud storage).

There are other useful additions here as well, such as multi-window support on Android 7.0, automatic day/night themes, homescreen shortcuts, and more. If you want to try Solid Explorer for the first time, there is a 14-day trial available.

Solid Explorer is one of the most popular file managers on Android, but the app has never been particularly attractive. It's much improved today, though, with the release of Solid Explorer v2.0. I know what you're thinking, is that *really* just happening now? Well, it's been in beta for more than six months.

Logic Puzzles

1. Which is the missing tile?

Ans: E

Sol.
Lines continue from adjacent squares. However, continuous lines become broken and vice versa.

Vision

To produce technically competent and qualified professionals with cutting edge of research and innovative technology for the benefit of student community in particular and society in large.

Mission

M1: To be a centre of excellence in Technical and Higher Education

M2: To be a centre of excellence in Research

M3: To be a centre of excellence in Support Services

Program Educational Objective

PEO 1:

To prepare the students for entry into successful employment as software engineers in industry, service, consulting and/or government organizations or for advanced study at leading graduate schools in engineering, business, management or other technical or non-technical fields.

PEO 2:

To encourage teamwork skills among the students to design and implement complex software systems, particularly the ability to work with people from other fields in integrated engineering teams and develop the leadership skills for maximizing the performance of those teams.

PEO 3:

To offer a curriculum that encourages students to become broadly educated engineers and to equip with the attitudes and skills to foster learning themselves for life long, an ability to communicate effectively with various audiences and function as responsible member of the global society.

POs AND PSOs of Department

PROGRAMME OUTCOMES

(a) An ability to apply knowledge of mathematics, science and engineering.

(b) An ability to design and conduct experiments, as well as to analyze and interpret data.

(c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health & safety, manufacturability and sustainability.

(d) An ability to function on multidisciplinary teams.

(e) An ability to identify, formulates and solve engineering problems.

(f) An understanding of professional and ethical responsibility.

(g) An ability to communicate effectively.

(h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.

(i) A recognition of the need for and an ability to engage in life-long learning.

(j) A knowledge of contemporary issues.

(k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.