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Editorial

We would like to wholeheartedly thank our honorable Chairman, Secretary, 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. 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

CONTENTS

1. WEBSITES WITH REALLY COOL INVENTIONS

Mr. T. Vadivel, Asst. Professor, Dept of BCA

Popular Science brings new technology and science news as it is happening right now. Most of it is on the cutting edge. If it all sounds too serious, do a bit of crystal gazing on *This Week in the Future*. But their richest resource can be mined from their 137 year old archived collections made available for free browsing.

New Scientist

The New Scientist website is all about scientific discovery, and its industrial, commercial and social consequences. It is one of the most popular destinations for those interested in cool inventions and innovations. The patent news blog which made for interesting reads on new cool inventions though has been discontinued. The best bet is to follow the news or use the search feature.

Sci-Tech Today

Sci-Tech Today brings current news from many areas of human scientific development. As a reader interested in cool inventions, you might like to check out topics headlined under *Innovation*. I just read a piece and found that a glass first manufactured in 1962 is on the cusp of becoming a multi-million dollar business now, fifty years later.

Seed Magazine
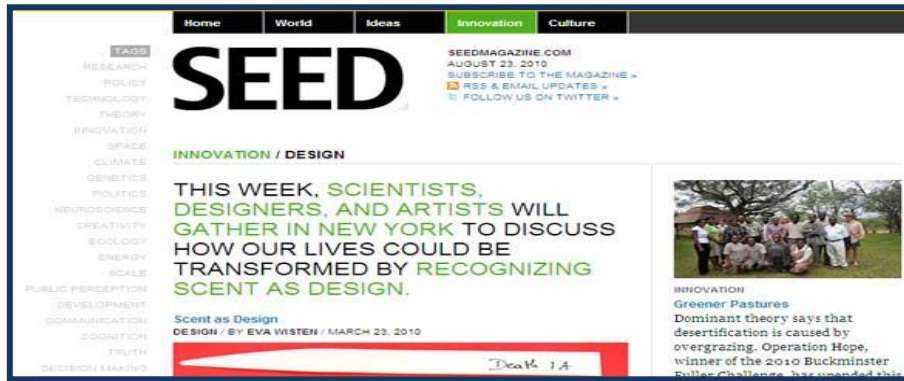
Are you looking for a better material? Did you know that there is a unique consultancy that displays a library of innovative new materials that anyone can use for research? Read about such innovations and cool inventions on this online magazine that covers technology and how it impacts business, design, and even politics.

Toxel

You might like this blog after reading all the serious stuff in the previous ones. The blog on cool inventions collates inspirations and innovations from around the websphere and presents it for quick reading

but with lots of photos. Check out the mention on the Shark Inspired Personal Watercraft.

Inventor Spot

Inventorspot.com is not only about the guy who likes to read up on latest inventions, innovations and interesting ideas, but also for the wannabe inventor. Inventors can check out the well listed resources for their kind like the *InventorPages* directory. Then there's the *Inventor's Forum* for all kinds of chit chat.

But as an interested reader, I would check out the *Inventor Gallery* where lots of cool (and crazy) inventions are arranged around categories. For instance, the Keyboard Organizer is something I could use in my space starved room.

Invention Reaction

Inventionreaction.com is very similar to the above website in that it provides all the regular dope on inventions from around the world. An interesting read in the Invention Timeline which chronologically lists groundbreaking inventions since the early millennia. You can then balance your reading of the latest cool inventions with a few from the funny and weird inventions list. How about the Defendius Door Chain as a home security system?

Invent Now
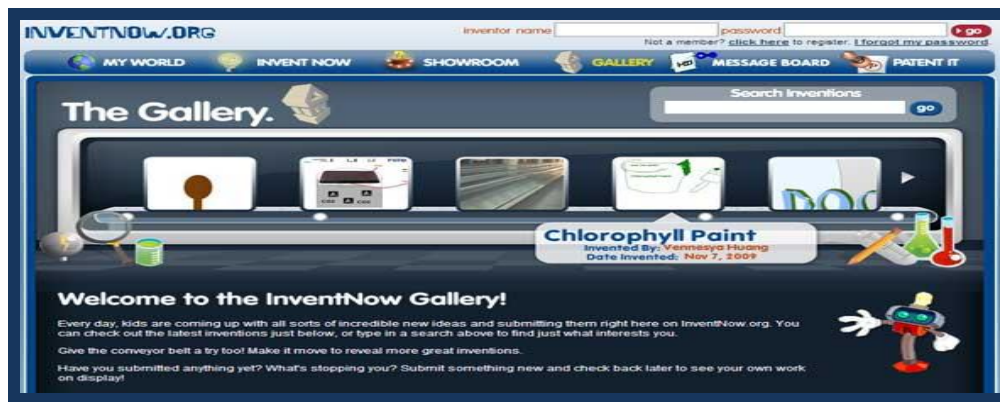
Kids are instinctively inventive. That's what **InventNow.org** comes forward to prove with its gallery of inventions that have been submitted by kids. The website also includes games, message board, contest and other activities. You can search for cool inventions by kids using the search or go through them in the *Gallery*. You have to move a conveyer belt to look at each one of them.

Invent Help News

Get invention and technology news in the form of free detailed articles which also link to the main sources. The news comes from a variety of fields, from advertising to fashion inventions. How about a Smart Mirror if you have a phobia about shopping on your own.

Why Not

Whynot.net is about asking questions and generating ideas, some of which will hopefully spark inventions. The community powered

website works like an open discussion board where you can post your ideas and get support and inputs from members. Like one of the ideas points to the YouTube video of a machine that converts plastic into oil. The website is less about illustrations and more about enlightened ideas and discussions.

Then there are the websites that help you scour the patents that get filled every day. A web resource like Patent Storm gives you the whole shebang but may be dull as dishwater for the casual reader. But Patently Silly might help to bring the sense of absurd back with a funny look at some cool inventions.

2. TRACK MOBILE NUMBER

SINDUJA.S, III B.Sc CS –'B'

Mobile phone tracking is the ascertaining of the position or location of a mobile phone, whether stationary or moving. Localization may occur either via multilateration of radio signals between (several) radio towers of the network and the phone, or simply via GPS. To locate a mobile phone using multilateration of radio signals, it must emit at least the *roaming* signal to contact the next nearby antenna tower, but the process does not require an active call. The Global System for Mobile Communications (GSM) is based on the phone's signal strength to nearby antenna masts.

Mobile positioning may include location-based services that disclose the actual coordinates of a mobile phone, which is a technology used by telecommunication companies to approximate the location of a mobile phone, and thereby also its user (bearer).

Technology

The technology of locating is based on measuring power levels and antenna patterns and uses the concept that a powered mobile phone always communicates wirelessly with one of the closest base stations, so knowledge of the location of the base station implies the cell phone is nearby.

Qualified services may achieve a precision of down to 50 meters in urban areas where mobile traffic and density of antenna towers (base stations) is sufficiently high. Rural and desolate areas may see miles between base stations and therefore determine locations less precisely. GSM localization is the use of multilateration to determine the location of GSM mobile phones, or dedicated trackers, usually with the intent to locate the user.

The location of a mobile phone can be determined in a number of ways:

- **Network-based**
- **Handset-based**
- **SIM-based**
- **Wi-Fi**

Network-based

The accuracy of network-based techniques varies, with cell identification as the least accurate and triangulation as moderately accurate, and newer "Forward Link" timing methods as the most accurate. The accuracy of network-based techniques is both dependent on the concentration of cell base station, with urban environments achieving the highest possible accuracy, and the implementation of the most current timing methods.

Handset-based

The location of a mobile phone can be determined using client software installed on the handset. This technique determines the location of the handset by putting its location by cell identification, signal strengths of the home and neighboring cells, which is continuously sent to the carrier. The key disadvantage of this technique (from service provider's point of view) is the necessity of installing software on the handset operating systems of the handsets. Typically, smart phones, such as one based on Symbian, Windows Mobile, Windows Phone, BlackBerry OS, iOS, or Android, would be able to run such software, e.g. Google Maps.

SIM-based

Using the SIM in GSM and UMTS handsets, it is possible to obtain raw radio measurements from the handset. Available measurements include the serving Cell ID, round-trip time, and signal

strength. The type of information obtained via the SIM can differ from what is available from the handset. For example, it may not be possible to obtain any raw measurements from the handset directly, yet still obtain measurements via the SIM.

Wi-Fi

Crowd sourced Wi-Fi data can also be used to identify a handset's location. Poor performance of the GPS-based methods in indoor environment and increasing popularity of Wi-Fi has encouraged companies to design new and feasible methods to carry out Wi-Fi-based indoor positioning. Most smart phones combine Global Navigation Satellite Systems (GNSS), such as GPS and GLONASS, with Wi-Fi positioning systems.

Hybrid

Hybrid positioning systems use a combination of network-based and handset-based technologies for location determination. One example would be some modes of Assisted GPS, which can both use GPS and network information to compute the location. Both types of data are thus used by the telephone to make the location. Alternatively tracking with both systems can also occur by having the phone attain its GPS-location directly from the satellites, and then having the information sent via the network to the person that is trying to locate the telephone. There are also hybrid positioning systems which combine several different

location approaches to position mobile devices by Wi-Fi, Wi-Max, GSM, LTE, IP addresses, and network environment data.

Operational purpose

In order to route calls to a phone, the cell towers listen for a signal sent from the phone and negotiate which tower is best able to communicate with the phone. As the phone changes location, the antenna towers monitor the signal, and the phone is *roamed* to an adjacent tower as appropriate.

Privacy

Locating or positioning touches upon delicate privacy issues, since it enables someone to check where a person is without the person's consent. Strict ethics and security measures are strongly recommended for services that employ positioning, and the user must give an informed, explicit consent to a service provider before the service provider can compute positioning data from the user's mobile phone.

China

China has proposed using this technology to track commuting patterns of Beijing city residents. Aggregate presence of mobile phone users could be tracked in a privacy-preserving fashion.

United States

In the US there is no explicit constitutional guarantee on the privacy of telecommunications, so use of location data is limited by law. Law enforcement (like the police) can obtain permission to position

phones in emergency cases where people, including criminals, are missing. In some instances, law enforcement may even access a mobile phone's internal microphone to eavesdrop on local conversations while the phone is switched off.

3. HOW TO SETUP LIVE STREAMING VIDEO ON WEBSITE

Mr. M.Jayapal, Programmer

Ok, so you've created a website and you want to live stream content on it. This article will explain how to setup live streaming video on websites of all different types.

There are three main elements to this process: broadcasting, live streaming software, and figuring out how to embed live video stream on your site. We'll go through each of these in turn and examine the details now.

Broadcasting Live Streaming Video

Before you can stream your video, you will need a few different pieces of gear to get you recording and online.

Most basically, you'll need **video cameras** or other **capture devices**. These can be as simple as a webcam or as complicated as a 4K ultra-HD professional camcorder; what matters is that you have the right

camera for your job. For best quality, look for a camera with an HDMI connection, as these can output the highest quality stream. Don't forget audio recording equipment as well. You may be fine with the built-in microphones on your camera, but don't count on it. The best quality audio comes from external microphones worn on the lapel or held just out of the frame

Encoding for Streaming

One problem with livestreaming is that most cameras are designed to record video, not to stream it. That's why you'll need **encoding software or hardware** to change your video from a format optimized for recording and storage to one designed for transmission over the web. Hardware encoders are dedicated devices that let you bypass the need for a computer, which is important in some situations.

Software encoders are generally more affordable, and are often preferred by small-scale producers. There are even free and open-source software encoders available, but pro-level encoders like Wirecast Pro and vMix are better options. These software packages require a computer with a decently fast processor that can deal with transcoding video in real-time.

Internet Connection

To achieve any level of quality in your livestream broadcast, you'll need a **reliable, fast internet connection**. Most cable internet speeds are

sufficient for livestreaming, but beware of attempting to stream while other users on the same network are using bandwidth for other activities.
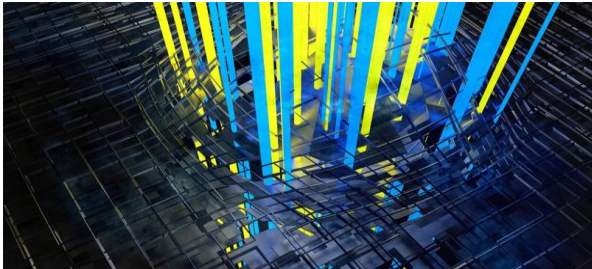
A general rule of thumb is that you need an upload speed of at least two Mbps in order to live stream quality video. Anything lower is likely to be jerky and unwatchable. Make sure your internet service isn't prone to disruptions or fluctuations in speed; it'd be a shame to interrupt your important broadcast!

internet speed has to be. We recommend your upload speed to be roughly half the quality you plan to stream at. So if you are doing an HD, 3 Mbps stream, you will need a 6 Mbps upload speed. Don't accept what your internet service provider (ISP) is selling you for your upload speed. They will give you a peak and it's almost always going to be lower than that.

Live Video Streaming Host

Last but not least, you will not be able to broadcast your video without an **online streaming platform**, such as YouTube. YouTube may perhaps be the most popular and easy streaming service, but is cumbersome to utilize for live streaming — it's designed for online videos, and make you jump through a lot of hoops if you want to broadcast live content.

It's better to use a dedicated white label video streaming service such as DaCast, Ustream, or Livestream. These will provide a better streaming service with more control over video placement,

monetization, access, recording, and more. These services are built around live streaming as well. It's not a secondary feature of their service, but the primary attraction.

Now, no matter what sort of encoder you use from the earlier steps, you'll need to configure it to play nicely with your video streaming host. DaCast, like other hosts, allows you to download an XML file which can be uploaded to your encoder to automatically set most of the preferences. Whichever host you use will also give you a username and password that you'll need to provide for your encoder to access the video host website for live streaming.

It may sound complex, but it's pretty simple; just test it out before your begin your big broadcast, and everything will work out fine. There are a variety of guides available to you as well based on your specific encoder. For example, here is one for Flash Media Live Encoder and another for Wirecast.

Putting it All Together

Once you have all the equipment prepared, you're ready to broadcast. Turn on your cameras, connect them to your software/hardware encoder, and connect this device to your livestreaming video host. You're almost ready to start broadcasting.

Embedding

Now you know what sort of gear and software you need to be prepared for livestreaming. But that's only the first step. The second

element of this process is setting up your live-stream so it can be watched on your website.

Embed Code

This is a relatively simple process. First, you should go into the administrative dashboard for your live streaming video host and schedule a livestream event for the time your event will begin. Once you've done this, you should be able to access the embed options
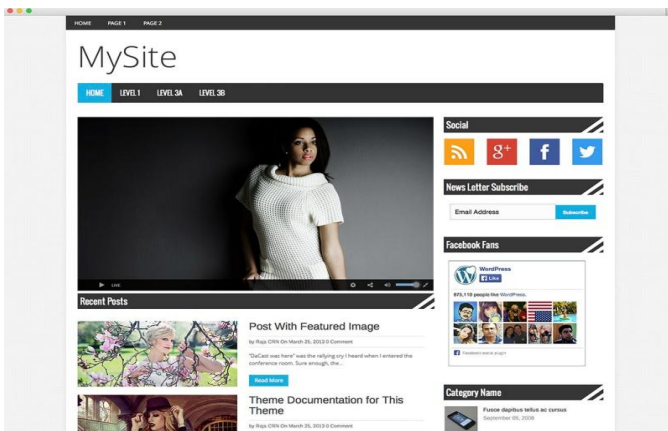
To find these options in DaCast, you first click to select the live stream that you wish to share, then click the tab labeled "Publish Settings." In the lower left of the screen, you should see two different code options, one labeled iframe and the other Javascript

Javascript is more widely supported on various browsers and devices, and provides better features to the user. Iframe is functional, but has the advantage of being more compatible with certain website frameworks. It shouldn't matter too much which of these you choose unless you have a very specific audience with specific needs, but test both on your website to make sure they work. WordPress sites, for example, require the iframe code.

Choose one of these options, then select the code in the box and copy it to your clipboard.

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Embedding on Your Website

Now that you have your code, you need to embed it in your website. This requires accessing the HTML code view. On a WordPress site, this is simple. Edit a post (or page), and click the tab for "text" to enter code-editor view. Now paste your video code on a new line, save the page, and you're ready to go.

Most other website editors have similar tools for embedding HTML code quickly and easily.

Stream Away

That's it! Once you've followed these steps, you're ready to livestream your video at any time. Start the cameras rolling, and good luck!

4. INDEX OF THE WINDOWS CMD

A. Madhan Raj, II BSC (CS)

Introduction:

Command prompt, is also known as **cmd.exe** or **cmd** (after its executable file name), is the command-line interpreter on windows NT, windows CE, OS/2 and eComStation operating systems. It is the counterpart of COMMAND.COM in DOS and Windows 9x systems (where it is also called "MS-DOS prompt"), and analogous to the Unix-

like systems. The initial version of command prompt for Windows NT was developed by Therese stowell.

Operation:

Command prompt interacts with the user through a command-line interface. In windows, this interface is implemented through Win32 console. Command prompt may take advantage of features available to native programs of its own platform. For example, in OS/2, it can use real pipes in command pipelines, allowing both sides of the pipeline to run concurrently. As a result, it is possible to redirect the standard error stream. (COMMAND.COM uses temporary files, and runs the two sides serially, one after the other.)

Windows CMD:

A:

ADDUSERS	---add or list users to / from a CVS file.
ADmodcmd	---active directory bulk modify.
ARP	---address resolution protocol.
ASSOC	---change file extension associations.
ASSOCIAT	---one step file association.
ATTRIB	---change file attributes

B:

BCDBOOT	---create or repair a system partition.
BCD	---manage boot configuration data.
BITSADMIN	---background intelligence transfer Service.
BOOTCFG	---edit windows boot settings.
BROWSTAT	---get domain, browser and PDC info.

C:

CACLS	---change file permission.
CALL	---call one batch program from another.
CERTREQ	---request certificate from a certification Authority.
CD	---change directory.
CLS	--- clear screen.
CHKDSK	---check disk- check and repair disk Problems.
CHKNTFS	---check the NTFS file system.
CHOICE	---accept keyboard input to a batch file.
CMDKEY	---manage stored username or passwords
CSVDE	---import or export active directory data.
CIPHER	---encrypt and decrypt files/folders.
CONVERT	---convert a FAT drive to NTFS.

D:

DATE	---display or set the date.
DEFRAG	---defragment hard drive.
DEL	---delete one or more files.

DELPROF	---delete user profiles.
DELTREE	---delete folder and all subfolders.
Devcon	---device manager command line utility.
DIR	---display a list of files and folders.
DIRUSE	---display the disk usage.
DISKPART	---disk administration
DSMGMT	---directory service management.

E:

ECHO	---display message on screen.
ENDLOCAL	---end localization of environment
	Changes in batch file.
ERASE	---delete one or more files.
EXPAND	---UN compress CAB files.
EXPLORER	---open windows explorer.
EXIT	---quit the current script/outline and
	Set an error level.

F:

FC	---compare two files.
FIND	---search for a text string in a file.
FINDSTR	---search for string in files.
FOR /F	---Loop command: against a set of files.
FTP	---file transfer protocol.
FORMAT	---format a disk.

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FSUTIL   ---file and volume utilities

G:

GETMAC   ---display the media access control Address.

GOTO   ---direct a batch program to jump to Labeled line.

GPRESULT   ---display resultant set of policy Information.

GPUPDATE   ---update group policy settings.

H:

HELP   ---online help.

HOSTNAME   ---display the host name of the computer.

I:

iCALCS   ---change file and folder permission.

IEXPRESS   ---create a self-extracting ZIP file archive.

IF   ---conditionally perform a command

IFMEMBER   ---is the current user a member of a Group

IPCONFIG   ---configure IP

INUSE   ---replace files that are in use by the OS.

L:

LABLE   ---edit a disk label.

LODCTR   ---load permon performance counters.

LOGMAN   ---manage performance monitor logs

LOGOFF   ---log a user off.

LOGTIME   ---log the time and date in a file.

M:

MAKECAB   ---create CAB files

MAPISEND   ---send email from the command line.

MBSAcli   ---baseline security analyser.

MEM   ---display memory usage.

MD   ---create folders.

MSG   ---send a message.

MSTSC   ---terminal server connection.

MSIEXEC   ---Microsoft windows installer.

N:

NET   ---manage network resources.

NETDOM   ---domain manager.

NETSH   ---configure network interface.

NBTSTAT   ---display network statistic.

NOW   ---display the current date and time.

NLSINFO   ---display locale information (reskit).

NSLOOKUP   ---name server lookup.

NTBACKUP   ---backup folders to tape.

O:

OPENFILES   ---query or display open files.

P:

PATH   ---display or set a search path for Executable file.

PRINT   ---print a text file.

PROMPT   ---change the command prompt.

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PsExec   ---execute process remotely.

Pspasswd   ---change account password.

Psping   ---measure network performance.

Pssuspend   ---suspend process.

Psshutdown   ---shutdown or reboot computer.

Psservice   ---view and control services.

Q:

QGREP   ---search files for lines that match a given pattern.

QUERY PROCESS---display process.

QUERY SESSION---display all sessions.

QUERY TERMSERVER ---list all servers.

QUERY USER --- display user session.

R:

RASDIAL   ---manage RAS connection.

RASPHONE   ---manage RAS connection.

RUN   ---start/RUN commands.

RUNAS   ---execute a program under a different user count.

ROUTE   ---manipulate network routing tables.

RD   ---delete folders.

REGINI   ---change registry permissions.

RESET SESSION   ---delete a remote session.

RECOVER   ---recover a damaged file from a defective disk.

RUNDLL32   ---run a DLL command.

S:

SC	---service control.
SFC	---system file checker.
SETX	---set environment variables.
SORT	---sort input.
SHORTCUT	---create a windows shortcut.
SHUTDOWN	---shutdown the computer.
SLEEP	---wait for X seconds.
SYSTEMINFO	---list system configuration.
SUBSET	---associate a path with a driver letter.
SLMGR	---software licensing management. (Vista/2008).
SHELLRUNAS	---run a command under a different user account.

T:

TAKEOWN	---take ownership of a file.
TASKLIST	---list running applications and services.
TASKKILL	---end a running process.
TIME	---display or set the system time.
TOUCH	---change file stamps.
TIMEOUT	---display processing of a batch file.
TRACERT	---trace route to a remote host.
TREE	---graphical display of folders.
TYPE	---display the contents of a text.
TSKILL	---end a running process.

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V:

      VER   ---display version information.

      VERIFY   ---verify that files have been saved.

      VOL   ---display a disk label.

W:

      W32TM   ---time service.

      WAITFOR   ---wait for signal.

      WHERE   ---locate and display files in directory tree

      WHOAMI   ---output the current username and domain.

      WINRM   ---windows remote management.

      WINRS   ---windows remote shell.

      WMIC   ---WMI commands.

      WUAUCLT   ---windows update.

X:

      XCALCS   ---change file and folder permission.

      XCOPY   ---copy files and folders.

      ::   ---comment/remark.

      However, the command prompt is not useless. In fact, it can be pretty useful.

5. VISUAL CLOUD COMPUTING METHODS COULD HELP FIRST

Ms. J. Mary Dallfin Bruxella, Asst. Professor, Dept. of BCA

In natural or human-made disasters, the ability to process massive amounts of visual electronic data quickly and efficiently could mean the difference between life and death for survivors. Visual data created by numerous security cameras, personal mobile devices and aerial video provide useful data for first responders and law enforcement. That data can be critical in terms of knowing where to send emergency personnel and resources, tracking suspects in human-made disasters, or detecting hazardous materials. Recently, a group of computer science researchers from the University of Missouri developed a visual cloud computing architecture that streamlines the process.

"In disaster scenarios, the amount of visual data generated can create a bottleneck in the network," said Prasad Calyam, Assistant Professor of Computer Science in the MU College of Engineering. "This abundance of visual data, especially high-resolution video streams, is difficult to process even under normal circumstances. In a disaster situation, the computing and networking resources needed to process it may be scarce and even not be available. We are working to develop the

most efficient way to process data and study how to quickly present visual information to first responders and law enforcement."

The research team, including Kannappan Palaniappan and Ye Duan, Associate Professors in the Department of Computer Science, developed a framework for disaster incident data computation that links the system to mobile devices in a mobile cloud. Algorithms designed by the team help determine what information needs to be processed by the cloud and what information can be processed on local devices, such as laptops and smartphones. This spreads the processing over multiple devices and helps responders receive the information faster.

"Often, we see many of the same images from overlapping cameras," Palaniappan said. "Responders generally do not need to see two separate pictures but rather the distinctive parts. That mosaic stitching that we helped define happens in the periphery of the network to limit the amount of data that needs to be sent to the cloud. This is a natural way of compressing visual data without losing information. Clever algorithms help determine what types of visual processing to perform in the edge or fog of the network, and what data and computation should be done in the core cloud."

Summary:

Visual data created by numerous security cameras, personal mobile devices and aerial video provide useful data for first responders and law enforcement. That data can be critical in terms of knowing where to send

emergency personnel and resources, tracking suspects in man-made disasters, or detecting hazardous materials. Recently, a group of computer science researchers developed a visual cloud computing architecture that streamlines the process.

6. MOST FAMILIER EDUCATION ORIENTED APPS

Mr.A.Mathivanan, Asst. Professor, Dept. of CS

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Learn c++

Learn C++ is another FREE programming course by SoloLearn. Whether you've had any prior programming experience or not, this app will help you learn all you need to know in order to start creating and compiling your own programs. Learning with SoloLearn has proved to be fast, effective and fun. This app will show you how easy it is to become a programmer.

Learn C++ includes over 80 lessons split into 8 levels that cover basic concepts, data types, arrays, pointers, conditional statements, loops, functions, classes and objects, inheritance & polymorphism, templates, exceptions and files. Unlock new levels, quizzes, collect points and compete with your peers around the world.

Most importantly, learn while having fun because engaged learning makes a difference.

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SSC

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IAS (UPSC Civil Services) 2016

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i) For North India they cover exams like RAS and REET (Rajasthan), UPPSC and UPTET (Uttar Pradesh), Bihar SSC and BPSC (Bihar), Haryana PSC, MPPSC (Madhya Pradesh), Maharashtra (TET, B.Ed., Police and MPSC).

ii) For South India they cover exams like Tamil Nadu PSC, Kerala PSC, Andhra PSC and Telangana PSC exams.

OnlineTyari have largest network of students. Student community allows students to ask an answer questions, seek test prep guidance.

Study Material from publishers like Arihant, Jagran Josh, Chronicle and Pratiyogita Darpan available.

Updates related to Application form and dates, exam pattern, syllabus , Admit cards regularly sent. Know about Exam notifications, result dates within app.

Duolingo: Learn Languages Free

Learn English, Spanish, French, German, Italian, Portuguese, Dutch, Irish, Danish, Swedish, Russian, Ukrainian, Esperanto, Polish and Turkish — It's fast, fun and free.

Practice speaking, reading, listening and writing. Play a game, answer questions and complete lessons to improve your vocabulary and grammar. Start with basic verbs, phrases, and sentences, and learn new words daily.

• Editor's Choice and "Best of the Best" —Google Play

• "The best language-learning app" —The Wall Street Journal

• "This free app and website is among the most effective language-learning methods I've tried… lessons come in the form of brief challenges — speaking, translating, answering multiple-choice questions — that keep me coming back for more." —The New York Times.

Our most popular language courses are:

• English for Spanish speakers (60M learners)

•Spanish for English speakers (50M learners)

• French for English speakers (30M learners)

Our fastest growing language courses are:

• English for French speakers (8M learners)

• German for French speakers (100K learners)

• It's free. Learning a language has never been so affordable.

• It's fun. Learn by playing a game — practice new words by doing quick lessons and answering questions daily.

• It's effective. 34 hours of Duolingo are equivalent to a semester of university-level education. Millions of students use Duolingo to study and learn in language classes at school!

Duolingo is the best way to learn to read, listen, write and speak English, Spanish, French, German, Portuguese, Italian, Dutch, Irish, Danish, Swedish, Russian, Ukrainian, Esperanto, Polish or Turkish.

Google Classroom

Classroom is only available for students and teachers with a school-provided Google Apps for Education account. Using Google Classroom in a school or university? Get the Android App to use Classroom on the go.

Classroom helps teachers save time, keep classes organized and improve communication with students. It is available to anyone with Google Apps for Education, a free suite of productivity tools that includes Gmail, Drive and Docs.

Classroom is designed to help teachers create and collect assignments paperless, including time-saving features such as the ability to automatically make a copy of a Google Document for each student. It also creates Drive folders for each assignment and for each student to help keep everyone organized.

Students can keep track of what's due on the Assignments page and begin working with just a click. Teachers can quickly see who has or hasn't completed the work, and provide direct, real-time feedback and marks from within Classroom.

With the mobile app for Android, students and teachers can view their classes and communicate with their classmates in real time. Students can open their assignments and work on them directly from their phone or tablet. Teachers can keep track of who has handed in work and review the assignment – at school or on the go.

There are many benefits of using Classroom:

Easy to set up: Teachers can add students directly or share a code with their class to join. It takes just minutes to set up.

Saves time: The simple, paperless assignment workflow allows teachers to create, review and mark assignments quickly, all in one place.

Improves organization: Students can see all of their assignments on an assignments page, and all class materials are automatically filed into folders in Google Drive.

Enhances communication: Classroom allows teachers to send the announcements and start class discussions instantly. Students can share resources with each other or provide answers to questions on the stream.

Affordable and secure: Like the rest of our Google Apps for Education services, Classroom contains no ads, never uses your content or student data for advertising purposes and is free for schools and universities.

> ## Department Activities

1. <u>FILMOGRAPHY</u>

The students of Final BCA conducted a course on Filmography on August 6, 2016. Mr. Chandrasekar Srinivasan of Final BCA organized this event. Nearly 250 students from various departments attended this course. The event covered the following topics:

- Introduction to Filmography
- Planning for short film
- Narration of the story
- Differences among Short film, Ad film, Experimental Film, and Documentary Film.

The Participated students gathered a lot of information about how to make a short film. The session was interactive and useful.

2. SCIENCE ACADEMIES LECTURE WORKSHOP ON NUMERICAL METHODS AND SCIENTIFIC COMPUTING

The Department of Computer Applications (UG) organized the Science Academies Lecture Workshop on "**Numerical Methods and Scientific Computing**" from August 10 to 12, 2016. 150 Participants

(PG Students and Faculty Members) belonging to the Department of Computer Science/Applications and Mathematics from various colleges attended the workshop.

Mr.R.Srinivasan, Secretary, KSR Educational Institutions, Presided over the function. Dr.V.Radhakrishnan, Principal, K.S.Rangasamy College of Arts and Science (Autonomous) and Dr.M.Karthikeyan, Principal, K.S.R.College of Arts and Science for Women felicitated the gathering. Then Mr.P.Kandaswamy, Convenor, addressed the gathering with a crisp speech.

In the technical sessions, Dr.P.Kandaswamy, Science Academy Fellow gave a lecture on the title "Numerical Methods and Scientific Computing". Dr.C.Chellappan, Principal, GKM College of Engineering and Technology provided a wonderful talk on "Numerical Methods for Computer Vision and Image Processing". Mrs.S.Padma, Head of the Department, Department of Computer Applications gave a lecture on "Sequential Learning Algorithms in Neural Networks".

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On the second day, Prof.Sasikumar Ganesan gave his presentation on "Parallel Numerical Algorithms for Super Computers" followed by Prof.S.Saravanan spoke on the topic entitled "Finite Volume Method".

On the final day of the workshop Prof. R.Natarajan shared his view on "Linear and Non-Linear Systems". Prof. Sanjeev GuruGopinath presented a Lecture on "Compressive Sensing".

The participants shared their experience and the learning they had on the three days.

3. <u>DBT SPONSORED NATIONAL WORKSHOP ON "ENTERING THE LIFE SCIENCE RESEARCH ARENA THROUGH BIG DATA"</u>

The Department of Computer Science, Computer Applications and Biological Sciences, organized DBT sponsored National Workshop on "Entering the Life Science Research Arena through Big Data" on 23rd and 24th August, 2016.

The resource person Mr. Dhanasekaran Palaniappan, Data Scientist, Hexaware Technologies Pvt. Ltd., Chennai gave a valuable keynote address. He presented a lecture on research techniques on Big Data. Mr. Shankar M. Mepparambath, Mentor, Research and Training, CARES, Bangalore, taught the usage of Big Data Tools for carrying research in the field of Life Sciences.

The Research Scholars, Students and Faculty Members from various institutes from Tamil Nadu participated in the workshop.

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.Pannir Selvam, 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.
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- Dr. D.I. George Amalarethinam, Director, Department of MCA, Jamal Mohamed College, Tiruchirapalli – 20.
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- Dr.H.FaheemAhmed, Asst Prof & HOD of CS, Islamiah College, Vaniyambadi – 02
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- Prof. Dr.C.Swaminathan, Vice Chancellor, Periyar University, Salem-11.
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- Mr.V.Saravanan, Associate Professor, Dept of CA, Hindustan College of Arts and Science, Coimbatore – 28.

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- **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, Sri Vasavi College, Erode – 16.**
- **Dr.R.Pugazendi, Assistant Professor, Dept. of CS, Government Arts and Science College, Salem-7.**