IT UNLIMITED MAGAZINE

CybercrewS

A Bi-Monthly Bonanza

Feb-mar'17

ISSUE

64

KONGU ARTS AND SCIENCE COLLEGE

[AUTONOMOUS]

DEPARTMENT OF COMPUTER SCIENCE (UG)

Cyber crewS association

KONGU
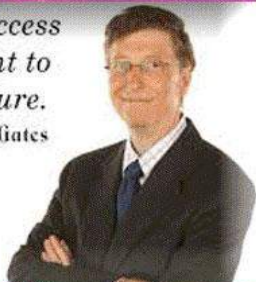Assuring The Best

TÜV SÜD
ISO 9001

THOUGHTS OF 64 THE ISSUE

REMEMBER

It's fine to celebrate success but it is more important to heed the lessons of failure.
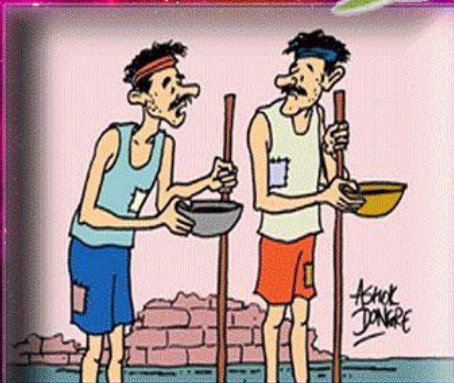Bill Gates

FREE ADVICE

MESSAGE

Live your life, and risk it all take some chances, take the fall Take your time, no need to hurry have some fun, and never worry

live for the little things.

GeniusQ...

JUST FOR FUN

I AM REALLY GETTING WORRIED ABOUT THE INCREASING USE OF CREDIT CARDS...

Managing Visual Privacy within the Web Browser

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hawkey@cs.dal.ca

Problem: Privacy of Incidental Information

Convenience features within web browsers store traces of previous activity (e.g., History, Favorites, Auto Complete).

There may be privacy concerns when this information is revealed during later collaboration around a personal display.

PrivateBits: A Privacy Management Solution

Leverages per-window partitioning of activities and privacy patterns.

Users can open windows with differing privacy levels and easily switch between modes.

Privacy modes filter the visible content in browser convenience features.

Browsing activity is tagged with the current privacy level or recording of browsing activity can be turned off.

Affords flexible, nuanced, and fine-grained privacy management.

Users can alter the privacy level of pages at any time.

Default window is public with no visual feedback of the browser's current privacy mode.

Visual feedback through colour allows users to be aware of the privacy level being applied to new browsing.

Public mode   Semi-public mode   Private mode

EDITORIAL BOARD

CONTENTS

Regular Features

In the Last 2 issues we have seen about 'Critical Reasoning'. Now we are going to see a popular type of CR test.

As we have seen already, Critical thinking is the ability to logically and rationally consider information. Rather than accepting arguments and conclusions presented, a person with strong critical thinking will question and seek to understand the evidence provided. They will look for logical connections between ideas, consider alternative interpretations of information and evaluate the strength of arguments presented.

Everyone inherently experiences some degree of subconscious bias in their thinking. Critical thinking skills can help an individual overcome these and separate out facts from opinions.

The **Watson Glaser critical thinking test** is an aptitude test designed to assess an individual's ability to digest and understand situations and information. It is often used by organizations where the ability to critically consider arguments or propositions is particularly important, such as law firms. Most people complete the Watson Glaser test within 50 minutes (approximately 10 minutes per sub-test). Tests administrators normally allow candidates one hour to complete the test.

The Watson-Glaser test has been co-normed on a sample of over 1,500 respondents representative of graduate level candidates. You will be judged against this respondent group when you sit the test.

The Watson Glaser test is designed to test your capacity to think critically.

Why is Critical Thinking Important to Potential Employers?

Critical thinking is important to employers because individuals who engage in quality thinking make better decisions. They arrive at conclusions which are impartial, well informed and objective. Furthermore, such people are able to make decisions with limited supervision, enabling them to independently make judgments: in a world where time can be money, waiting for someone else to validate decisions can be costly and result in missed opportunities.

What is involved in the Watson Glaser Test?

The Watson Glaser test evaluates a candidate's critical thinking ability in five separate areas: **inferences**, **assumptions**, **deductions**, **interpretations** and **evaluation of arguments**.

Each of these skills is tested separately and there are therefore five different types of questions in the Watson Glaser test. We will explore each of these below.

Do you know? TYPEWRITER is the longest word that you can write using the letters only on one row of the keyboard of your computer.

01

How Can You Prepare for a Watson Glaser Test?

Critical thinking ability can be significantly improved **by practice**. It is a skill that can be learned, although it does come more easily to some people than others. Look for opportunities to think critically about information every day. Once you start practicing, you'll find useful material everywhere: blog posts, newspapers, and journal articles are great places to look.

If you want to try realistic Watson Glaser Tests, Job Test Prep offers a tailored online practice pack.

It can be useful to organize your thinking and practice around the RED model mentioned earlier in the article:

  Recognize assumptions.

Practice identifying the assumptions in material. What can be objectively proven and what is inferred? Where might there be gaps in your logic? What information is important and relevant, and what isn't? What is missing? Is there any information that needs to be included which isn't?

  Evaluate arguments.

Practice carefully analyzing the arguments presented. What is your perspective on the evidence? Could someone else have a different perspective? Consider the impacts of the arguments from a range of different viewpoints (it can be useful to use a model like PESTLE – political, economic, socio-demographic, technological, legal and environmental – to organise your thoughts). How would someone argue against your position? What merits are there to their arguments?

  Draw conclusions.

After you have considered all of the facts, what is the best possible conclusion? Could there be any other conclusions? What new information might change your conclusion? Does this conclusion seem sensible based on your common sense and experience? What are the implications of this conclusion?

It is also useful to develop your self-awareness. Understanding your biases and thinking patterns can help you identify where your thinking might be limited. Finally, do take some practice tests. It can be really helpful to work through some examples with explanations as you will really start to understand how they work and how to think through the questions and arrive at the correct answer.

With this we conclude Critical Reasoning. Let us see yet another useful topic soon!
Meet you all in the next issue…………. All the best!

Staff-Editor

The first electronic computer ENIAC weighed more than 27 tons and took up 1800 square feet.

Do you know?

02

Lifx Colour 1000 review-A smart colourful light bulb

Lifx is brighter than Philips Hue. It's more efficient. It puts out more accurate colours. It boasts the better app of the two. It also closes the gap with Philips' third-party dominance by featuring compatibility with IFTTT, the Nest Learning Thermostat, and the Amazon Echo smart speaker, among others. Unlike Philips Hue's ZigBee bulbs, Lifx bulbs communicate using Wi-Fi, which means that they don't need a hub.

The specs

The Lifx Colour 1000 looks like a more compact version of the original Lifx LED. It also uses less energy -- 11 watts at peak brightness, as opposed to 17 watts from the original.

The Lifx app offers sixteen separate white-light settings ranging from 2,500 to 9,000 K. Dialling the colour temperature up or down from the default 3,500 K setting, the brightness drops off a bit. This fall is a bit more pronounced than it was in generation one, where the warmest and coolest settings -- 2,500 K and 9,000 K -- are actually slightly brighter than what we see in generation two.

The smarts

One dial between those white light settings using the Lifx app on your Android or iOS device. A quick tap on the "Colours" button switches over to a full RGB colour wheel -- rotate the shade of choice to the top, and the bulb will change colours accordingly.

Each of those 16 white-light settings are labelled by colour temperature. With the colours, each shade is marked as a specific degree of the circle. In both cases, it's easy to come back to the exact shade of choice.

Tapping on "Themes" brings up a list of present colour cycles that are similar to what we'll find on the home screen of the Misfit Bolt app. Each one is tied to an emotion like "Cheerful" or "Exciting," and paired with a colourful icon that gives a good sense of the variety of tones that will be included.

There's also a music visualizer that can sync lighting changes in rhythm with whatever music is playing. This is always a fun feature to break out at parties, but want to note that Lifx does it a little differently. Most smart bulbs will sync the lights with whatever music is streaming out of the device, but Lifx instead uses phone's microphone to sync with the sound going in. This works well enough if we play music on our phone itself.
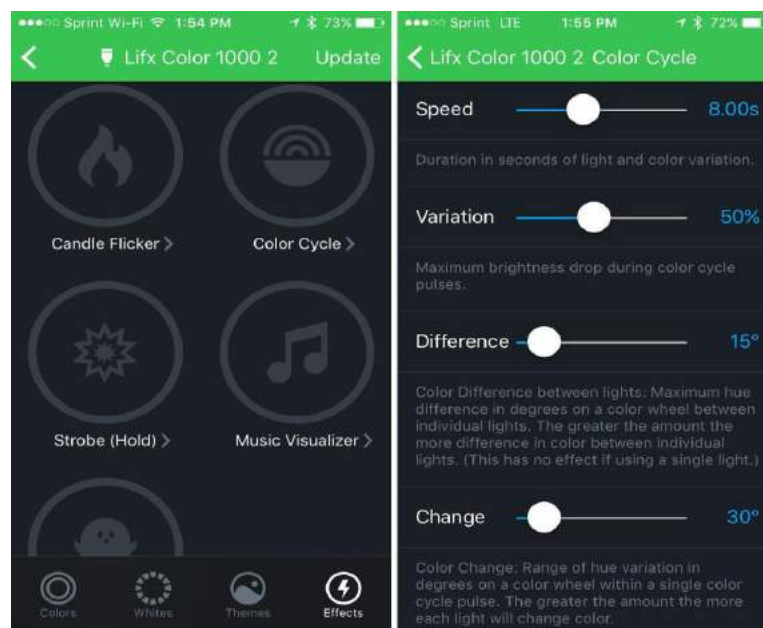
Features:

The other feature worth talking about is scheduling. When it first launched, Lifx didn't offer a way to program bulbs to turn on and off at specific times. Fortunately, Lifx has since updated its app to fix that problem, adding in a very nice scheduling feature that offers in-depth, easy-to-use controls for automated lighting.

Along with adding Cortana-powered support for PCs and devices running Windows 10, Lifx works with notable names like the Nest Learning Thermostat, the SmartThings connected home platform, the Logitech Harmony Hub, and the Amazon Echo smart speaker, which offers another way to control Lifx bulbs using spoken commands. That last bit helps Lifx compete with the Apple Home Kit-compatible Hue bulbs, which work with Siri.

The Echo integration was easy to set up -- just open the "Skills" section of the Alexa app and give Amazon access to Lifx login info. From there, We'll be able to control bulbs by talking to Alexa. After saying "Alexa" to wake the speaker up, the person has to say "ask Lifx" to activate the Lifx skill, followed by actual command. So, a full command might sound like: "Alexa...ask Lifx to dim the bedroom lamp to 10 percent."

Intel Pentium G4560

In an epic dual-core vs. eight-core battle, we put the Core i3-6100 up against the aging AMD FX-8320E in late 2015 and although the latter looked like a certain victor on paper, the Sky lake chip proved to be the better overall package.

It's already been 14 months since we published that article and the Core i3-6100 has indeed become an extremely popular choice among budget builders thanks to its low $120 cost. But what if I told you a similar level of processing power could be bought today for half the price?

As far as enthusiasts were concerned, Intel's Kaby Lake processors looked like a bust when they launched last month. Besides some new motherboards, the seventh-generation Core i7-7700K and i5-7600K didn't bring much to the table. However, to everyone's surprise, Intel made a considerable change to its latest Pentium parts. Ever since the original Core-based Pentiums (the 65nm 'Allendale' and 'Conroe' models) the range has been comprised of dual-core chips with two threads, that is to say they forgo Hyper-Threading support.

Things have been that way for 10 years, so we were a little confused and plenty excited to see that the new Kaby Lake Pentiums have two cores *with* Hyper-Threading. That essentially makes them Core i3s, the only difference being that the Pentium models are clocked a bit lower and use the base 3MB L3 cache.

Do you know?

More than a million industrial robots are now in use, nearly half of them in Japan.

05

Set at 3.5GHz, the base model Pentium G4560 is only 200MHz slower than the much loved Core i3-6100, which technically means it can't be more than 5% slower. That's amazing news for budget shoppers who had their eye on something like the i3-6100 because the G4560 has been stamped with an MSRP of only $64.Poised to be the bargain CPU of 2017 -- or at least until AMD's Ryzen -- let's run the Pentium G4560 through our typical battery of benchmarks to see how it performs against pricier Kaby Lake chips as well as some previous-gen parts.

Kaby Pentium is The New Budget King

Model	Price	Cores/Threads	Base Frequency	Boost	L3 Cache	TDP
Pentium G4560	$64	2C/4T	3.5 GHz	N/A	3MB	54W
Pentium G4600	$82	2C/4T	3.6 GHz	N/A	3MB	51W
Pentium G4620	$93	2C/4T	3.7 GHz	N/A	3MB	51W
Core i3-7100	$117	2C/4T	3.9 GHz	N/A	3MB	51W
Core i3-7300	$147	2C/4T	4.0 GHz	N/A	4MB	51W
Core i3-7320	$157	2C/4T	4.1 GHz	N/A	4MB	51W
Core i3-7350K	$168	2C/4T	4.2 GHz	N/A	4MB	60W

The Pentium G4560 really is the best budget processor we've seen in some time and if I'm completely honest, it's the only Kaby Lake processor worth buying. In fact, it's so good we wonder how Intel is going to sell any Core i3 processors going forward. Here's a quick look at the current generation Pentium and Core i3 line-up...

The G4560 at $64 is pretty amazing. It not only invalidates the Core i3 range but it also kills off the higher end Pentiums as well. It's 22% cheaper than the $82 G4600 and yet it's clocked just 3% lower. Similarly, it's 31% cheaper than the G4620 while it can't possibly be more than 5% slower. Intel's Core i3 range doesn't look any better.

For instance, the i3-7100 retails for $117 and besides a bump in operating frequency and a slight change in iGPU, this is the exact same processor as the G4560. Clocked at 3.9GHz, the i3-7100 is up to 11% faster, but that doesn't make it worth 80% more. Comparisons only get worse as you go on: The Core i3-7300 costs well over twice the price but comes clocked less than 15% greater. Realistically, your choices are the G4560 at $64 or the Core i5-7400 at $190, everything else in-between is a bit pointless.

Against older chips such as the Skylake Core i3-6100, the Pentium G4560 wasn't a great deal slower in our Excel and Photoshop workloads and the same was true when looking at encoding performance.

The chip is no slouch in gaming either, proving to be the perfect companion for a graphics card akin to the RX 460, GTX 1050 or 1050 Ti (it worked also well with the GTX 1060 though we think a sub-$200 GPU makes more sense for playing CPU-intensive games on the G4560).

MOTROLA MOTO G5 PLUS

Moto G5 Plus will be the next generation Smartphone by Motorola. As for all times, the craze about the Moto G remains unchanged, but rather saying increasing immensely. This was somewhat good for Moto users. Motorola is going to still upgrade the resolution in the upcoming Moto G handset. As a result, Moto G Fifth Gen might include the same 5.5 inches or may increase up to 5.7 inches display and will give the 1200p resolution.

Camera and Pictures

The Camera of Moto G5 plus is going to be very crystal clear as the Dual Image Signal Processors can capture 16MP photos at 30fps (Frames per second) speed giving you pleasure of capturing pictures quickly one after another. Hence the camera quality will be enhanced significantly in the upcoming Moto device. Enhanced Snap Dragon chipset is powered with Hexagon 536 DSP and X6 LTE modem. ThisX6 LTE modem supports Cat.4 download speeds up to 300MBPS means more than a 4G speed.

Quick Charge 3.0

For enhanced charging experience, Motorola will use Quick Charge 3.0 in the upcoming model. It is the next version of Quick Charge 2.0 recently out by Qualcomm. In the next generation phone, Motorola is supposed to extend the Quick Charge version to 3.0. With this feature, it can charge your Motorola battery up to 80% in just 30-40 minutes.

Enhanced Audio Quality

The Snapdragon chipset in **Moto G5 Plus** will use Flounce technology giving a clear sound with Noise Cancellation and Echo Cancellation effects. It also springs 5.1 surrounds sound output with Dolby Digital sound and DTS technology. Qualcomm also provides Crystal clear quality voice calls

Moto G5 Plus Chipset and Processor

Moto G5 is expected to be bundled with the powerful Qualcomm Snapdragon 640 Chipset. The chipset should be Eight Cortex A-53 cores clocked at 1.5 GHz which is very latest. As per the company news, the Snapdragon 640 will be used in most of the Smartphone in the upcoming time. The processor is 64-bit and built on 28nm architecture. The new chipset is packed with Quick charge 3.0 and also has Dual Image Signal Processors (DISP).

Features:

- Geo-tagging, touch focus, face detection, panorama, auto-HDR
- Fingerprint (front-mounted), accelerometer, gyro, proximity, compass
- SMS (threaded view), MMS, Email, Push Email, IM
- Fast battery charging
- MP3/AAC+/WAV/Flack player
- Non-removable Li-Ion 3100 MAH battery
- Android OS, v7.0 (Nougat) version
- internal memory 32 GB.

The world record for the fastest time to log into a Gmail account is 1.16 seconds.

08

MUZO – THE PERSONAL ZONE CRETAOR

By creating a personal sound field, the device promises to block out the noise in your surroundings and replace it with a soothing soundscape. When you stick the Muzo to a flat surface like a window, it sends vibrations into the surface and uses it as a large speaker membrane to create a noise-blocking sound field.

It can be set to three different modes:

- Serenity, which creates a silent environment by using an anti-vibration system to prevent the surface from vibrating
- Sleep, which should make your sleep better by playing a soundscape
- Secret, which uses voice-masking sounds to create a bubble of privacy

When it's activated, the sound levels can be adjusted in a smartphone app, customizing the experience for your specific situation.

EXCITER – Soul of MUZO

It is basically a loud speaker without membrane. It uses the movement of the oscillating mass inside to apply the force towards mounting surface. The whole excited surface will emit the sound signals

SELF CUSTOMIZED MODE

Self-customized plus enhanced Muzo app. Customizing mood light for scene creation (RGB LEDs). Enhanced hardware and controlled buttons. Customizing music by Bluetooth 4.0

DEDICATED FIT IN PROTECTIVE CASE

- Best fit in case

- Portable sound box

- Storage for charging table.

Device description

- High sensitivity vibration sensor

- Excellent grade exciter

- Amazing compact acoustic system

- Main knob

- Bluetooth low energy

SPECIFICATIONS

- SENSOR: Vibration sensor

- AUDIO: 10W Billion sound technology

- LOUDSPEAKER: High quality speaker

- CONNECTIVITY: Bluetooth.

KURI IS A ROBOT NANNY THAT CHARMS THE KIDS AND WATCHES THE PLACE

With Wi-Fi, Bluetooth, a 1080p cam and sturdy wheels designed to traverse any interior flooring, Kuri has a lot going for it. For better or for worse, every inch of Kuri looks to be designed with the goal of making this robot helper adorable.

At first, the thought of Kuri would be a bit like an Amazon Echo strapped to a set of wheels. In practice, Kuri doesn't have nearly the functionality of the Echo -- it's more of a roving security cam with a Bluetooth speaker than an always-listening, multi-purpose assistant. Kuri's advantage is its personality.

Getting to know Kuri

On display at CES, Kuri -- created by the Bosch-backed startup Mayfield Robotics -- will be able to use its camera to check on the pets when the owner is away. It can set reminders and use its Wi-Fi connection to tell about the weather. It'll also work with IFTTT, the online rule-maker with a ton of smart home partners, to control some connected devices.

Supposedly, Kuri can also recognize faces and context and adapt its responses accordingly. Those responses include chirps and nods, since Kuri doesn't talk, though it will play podcast, music and tell stories. It also has LEDs built into its chest that can change colors.

Hands-on time

The way it smiles with its eyes is cute. The Kuri team has work to do, as Kuri wasn't yet ready to follow autonomously or ready to do anything else via voice command other than chirp.

Kuri does successfully navigate from room to room now, remembering where rooms are once we guide it there using the remote control in the app. It also successfully navigates around objects in its path using a laser sensor.

The rest of Kuri

Here's everything else we know about Kuri so far:

- It'll have an iOS and Android app
- It has three hours of battery life
- A four-microphone array helps it hear your voice commands
- It's 20 inches tall and 14 pounds, so it won't be easy to lug it to different floors
- Kuri's sensors help it map rooms and objects and avoid falling over edges.
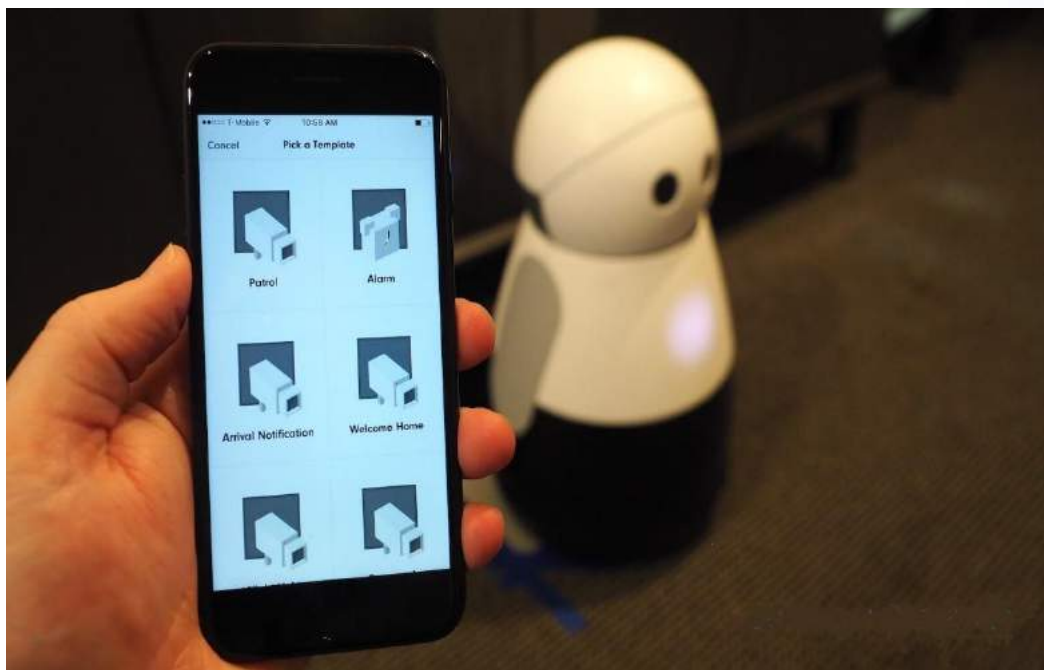
Outlook

By the time it launches, Kuri will supposedly be able to follow a routine based on who it recognizes. It can send a custom notification if it spots a dog on the couch, so one can yell at Fido using Kuri's speakers. Kuri can patrol the home using a predetermined route, letting the person to know if it spots something out of the ordinary, and it can use its motion and sound detection to hunt down an unusual occurrence and sends a recording.

All of that sounds cool, but Kuri will cost a hefty $700. Starting, one can preorder Kuri for a $100 deposit. Kuri will only be available in the US when it launches, but its price converts to around £570 or AU$975. For that much, Kuri will need to be more than a security camera that doubles as a toy.

Do you know? Garfield the cartoon character was offering an email service named GMail.com.

12

Ezviz Mini 360 Plus

When standard fixed-angle security cameras don't cover enough ground, pan/tilt models make smart alternatives   they raise, lower and rotate to capture more of a room. Elvis's Mini 360 Plus looks nice enough. It's a smallish adapter-dependent orb that can install and connect anywhere in your home over Wi-Fi. It also comes with an Ethernet port if you want to tether it directly to your router. This model has a relatively narrow 92-degree diagonal field of view, but its 340-degree panning angle and 80-degree tilting angle allow see much more.

To get started, download the Ezviz app on Android or IPhone gadget of choice, then follow the step-by-step tutorial to get the camera up and running. Already had an Ezviz account from testing out the Fixed-angle Ezviz Mini, but the configuration process took less than 10 minutes from start to finish.

Really have to poke around to find the settings and other features you're searching for. It also looks dated and is in definite need of a design refresh.

Performance:

The Mini 360 Plus has solid HD live streaming in both day and night mode. Also had a couple of (mostly) clear conversations using the app's two-way talk function, but its motion detection and related auto-tracking features fell short.

I received consistent notifications whenever the camera detected movement. The problem is, it also detected activity when the only movement was a shadow shifting in the light. At first I thought this might be due to its motion sensitivity setting, but the camera's default setting sits right in the middle between no motion detection and very high detection sensitivity. At this setting, phantom alerts shouldn't be an issue.

Do you know?

Venus is the hottest planet in the solar system and has an average surface temperature of around 450° C.

13

Its auto-tracking feature was disappointing, too. When I walked slowly in front of the camera's field of view, it tracked me pretty well. But it struggled when I walked at a slightly faster pace, to the extent that it regularly gave up and stopped following me. Zmodo's Pivot does a much better job tracking activity, likely due to its 360 degrees of built-in motion sensors.

Features:

- 1080p high-definition live streaming
- Two-way audio
- Night vision
- Local storage via a micro SD port (it supports cards up to 128GB)
- Motion detection and related alerts
- Auto-tracking
- IFTTT.

Do you know?

The footprints on the moon will be there for 100 million years. The Moon has no atmosphere, which means there is no wind to erode the surface and no water to wash the footprints away

14

You can break Android pattern lock in just five attempts

The popular pattern lock system used to secure millions of Android smartphones can be cracked within just five attempts - and more complicated patterns are the easiest to crack, security experts have warned. Pattern lock is a security measure that protects devices, such as mobile phones or tablets, and which is preferred by many to PIN codes or text passwords. It is used by around 40% of Android device owners, researchers said. In order to access a device's functions and content, users must first draw a pattern on an on-screen grid of dots. If this matches the pattern set by the owner then the device can be used. However, users only have five attempts to get the pattern right before the device becomes locked.
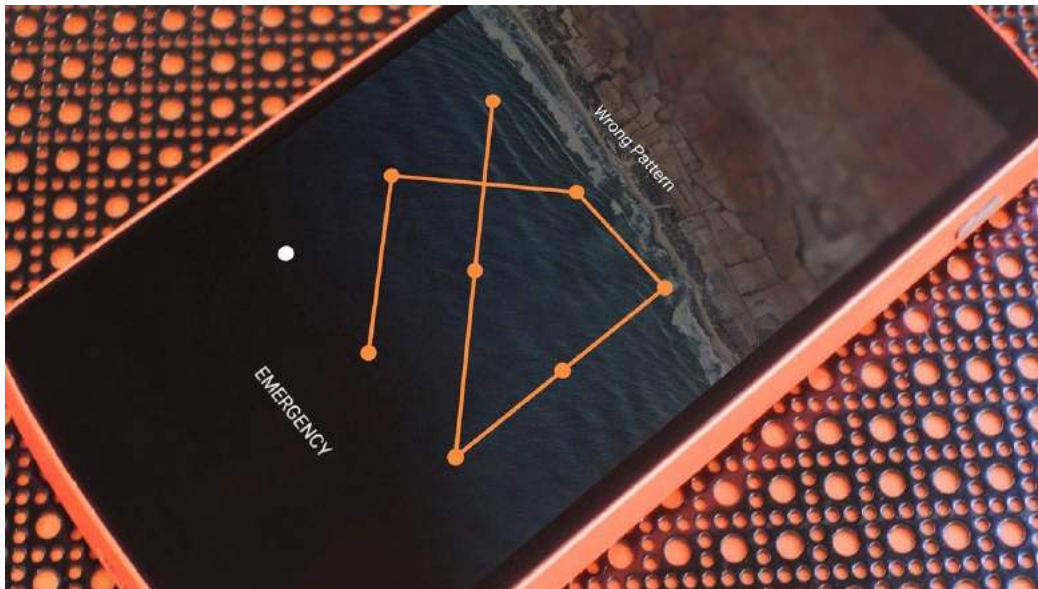
New research from Lancaster University, University of Bath in the UK and the Northwest University in China, shows for the first time that attackers can crack pattern lock reliably within five attempts by using video and computer vision algorithm software. By covertly videoing the owner drawing their pattern lock shape to unlock their device, while enjoying a coffee in a busy café for example, the attacker, who is pretending to play with their phone, can then use software to quickly track the owner's fingertip movements relative to the position of the device. Within seconds the algorithm produces a small number of candidate patterns to access the Android phone or tablet.

The attack works even without the video footage being able to see any of the on-screen content, and regardless of the size of the screen, researchers said. Results are accurate on video recorded on a mobile phone from up to two and a half metres away - and so attacks are more covert than shoulder-surfing. It also works reliably with footage recorded on a digital SLR camera at distances up to nine metres away, they said. Researchers evaluated the attack using 120 unique patterns collected from independent users. They were able to crack more than 95 per cent of patterns within five attempts.

Complex patterns, which use more lines between dots, were easier to crack because they help the fingertip algorithm to narrow down the possible options. During tests, researchers were able to crack all but one of the patterns categorized as complex within the first attempt. They were able to successfully crack 87.5% of median complex patterns and 60% of simple patterns with the first attempt.

Researchers believe this form of attack would enable thieves to access phones after pinching them to obtain sensitive information, or would allow malware to be quickly installed on devices while their owners were distracted.

They have proposed suggested countermeasures to prevent this attack, which include device users fully covering fingers when drawing the pattern; or pattern lock designers mixing pattern locking with other activities such as entering a sentence using Swype-like methods. Having the screen colour and brightness change dynamically could confuse the recording camera, researchers said.

POWER FROM THE AiR

Internet devices powered by Wi-Fi and other telecommunications signals will make small computers and sensors more pervasive.

Even the smallest Internet-connected devices typically need a battery or power cord. Not for much longer. Technology that lets gadgets work and communicate using only energy harvested from nearby TV, radio, cell-phone, or Wi-Fi signals is headed toward commercialization. The University of Washington researchers who developed the technique have demonstrated Internet-connected temperature and motion sensors, and even a camera, powered that way.

Transferring power wirelessly is not a new trick. But getting a device without a conventional power source to communicate is harder, because generating radio signals is very power-intensive and the airwaves harvested from radio, TV, and other telecommunication technologies hold little energy.

Shyamnath Gollakota and his colleague Joshua Smith have proved that weak radio signals can indeed provide all an Internet gadget needs, using a principle called backscattering. Instead of generating original signals, one of their devices selectively reflects incoming radio waves to construct a new signal—a bit like an injured hiker sending an SOS message using the sun and a mirror. A gadget using the technique absorbs some energy from the signal it is modifying to power its own circuits.

"We can get communication for free," says Gollakota. RFID chips for the contactless smart cards used in mass transit also rely on backscattering, but they require specialized reader devices and can communicate only within a few inches because the reflected signals are weak and the reader itself presents interference.

Do you know? The founder of Microsoft, Bill Gates, was a college drop out.

17

One version of the University of Washington technology, dubbed passive Wi-Fi, is being commercialized through a spin-off company, Jeeva Wireless. It lets battery-free gadgets connect with conventional devices such as computers and smartphones by backscattering Wi-Fi signals. In tests, prototype passive Wi-Fi devices have beamed data as far as 100 feet and made connections through walls. Doing that requires altering the software of a Wi-Fi access point to generate an extra signal for passive Wi-Fi devices to use, very slightly increasing its power consumption.

Smith says that passive Wi-Fi consumes just 1/10,000th as much power as existing Wi-Fi chipsets. It uses a thousandth as much power as the Bluetooth LE and ZigBee communications standards used by some small connected devices and has a longer range. A device using passive Wi-Fi to communicate for example, a security camera could power its other circuits using energy harvested from the Wi-Fi signals it is backscattering, or by feeding on other signals such as TV and radio broadcasts.

The researchers believe that tiny passive Wi-Fi devices could be extremely cheap to make, perhaps less than a dollar. In tomorrow's smart home, security cameras, temperature sensors, and smoke alarms should never need to have their batteries changed.

LEARN A TOOL

Basic Elements

In this we have used CorelDraw X5. Let's get started. Let's take a look at the basic elements used to create our design

Creating Worksheet

Now that we know the steps and elements, we will begin.

First of all, open CorelDraw program. Now create a new file and set the paper size to A2, which is a standard size for posters.

Creating Perspective Effect

Now that we have our worksheet set, now we will begin to create the Perspective Effect. First Go to the "Text Tool ", we can found it on the left toolbar, create a text object by left click on the screen and type any word we want, " gitch " After that select the font object, and press " Alt + A + B " to break the font spacing.

Creating the Extrude Effect

After the perspective is applied, we need to separate the outline from the object.

Go to the Top Toolbar, and find Arrange > Break Contour Group Apart.

This will separate the outline and the object.

Now select the Outline and go to the " Interactive Extrude Tool " it's in the left toolbar.

Hold and Drag the outline to create an extrude effect, to be more accurately please apply the value below, now we are going to put colour in the text object.

Select the text object, go to the " Fountain Fill Tool " in the left toolbar, Choose Custom fill on the color blend and make the type Linear.

Now we will see a color box. We can change the color by left-clicking it, fill the color with Light Yellow on the left, middle and right side of the color box.
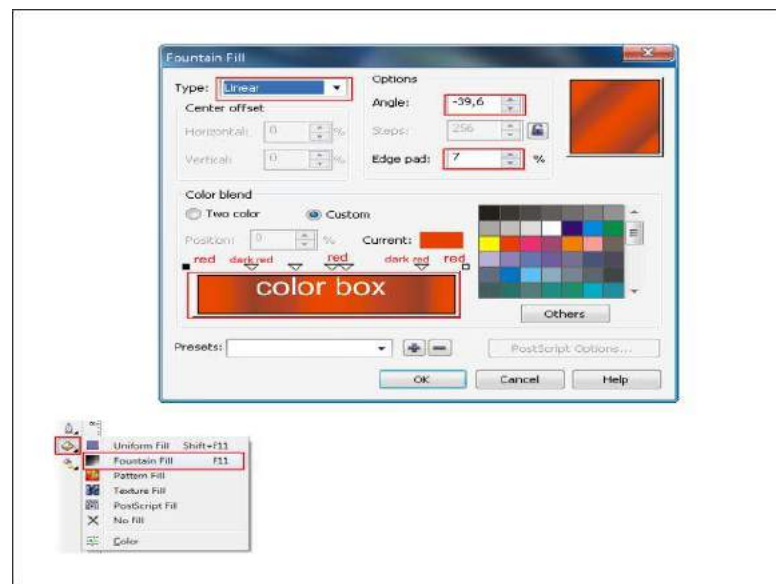
Creating the Glowing Effect

To make it more realistic, we are going to put a Glowing Effect into the text object.

We have to apply it per letter, select the " e " on the text object, and copy it.

After that put a white color in it.

As the color is white, we will make a temporary red background so we can see the object.
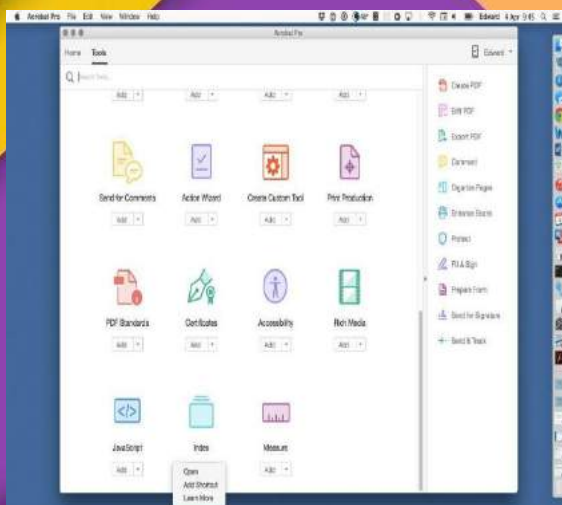
Acrobat Pro DC

Adobe Acrobat just released its biggest upgrade, including a name-change, to Acrobat Document Cloud. The new Acrobat Pro DC ($14 per month) has a shiny new touch-enabled interface, and a new Document Cloud online service that automatically gives you access to all your PDF files through Acrobat mobile apps or via a computer's Web browser.

Now the Good Stuff

The new version of the Acrobat Pro DC app is available in nearly identical releases for Windows and OS X, with reduced versions called Acrobat Mobile for iOS and Android released at the same time. The Fill and Sign mobile app lets anyone (with or without a Document Cloud subscription) sign an existing PDF form, while Document Cloud subscribers with a Pro-level plan only can also use the same app to convert a photo of a form into a signable PDF. All the apps, on all platforms, use technology from Photoshop for deskewing and straightening documents imported with a camera or scanner.

Acrobat's Best New Feature

For me, the most spectacular new feature is Acrobat Pro DC's ability to add or edit text in a document's original font—even if document is a scanned image made from a book printed in an old hot-metal font that doesn't exist on any computer. In previous versions, you could add text to a PDF, but if you didn't have the correct digital fonts on your system, Acrobat substituted one of its own built-in fonts, and you couldn't make unobtrusive changes to scanned PDFs made from old books or magazines.
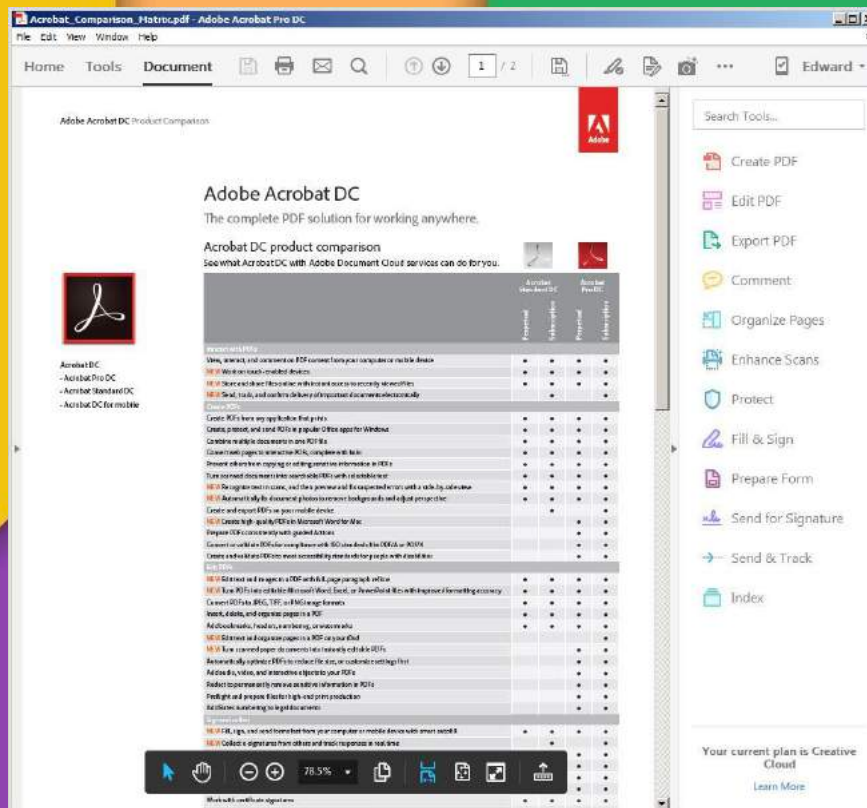
Do you know?

A dentist named Alfred Southwick invented the electric chair.

Adobe Acrobat Pro DC

PROS

Efficient new interface. Major improvements in OCR and text-editing. Document Cloud service includes built-in PDF signing and routing. Mobile Acrobat DC apps convert photos into PDF forms.

CONS

No undo function the OCR correction feature. Confusing subscription and purchase plans.

BOTTOM LINE

Acrobat has always towered above all rival PDF software, and the latest version is the best upgrade in years.
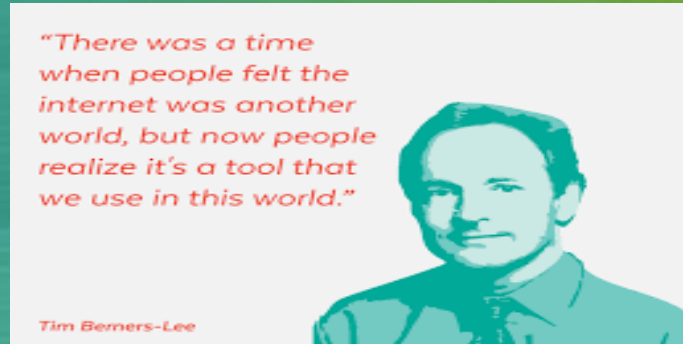
FAMOUS AND FAVOURITE

TIM BERNERS-LEE

"There was a time when people felt the internet was another world, but now people realize it's a tool that we use in this world."

Tim Berners-Lee

Tim Berners-Lee invented the Web while at CERN, the European Particle Physics Laboratory, in 1989. He wrote the first web client and server in 1990. His specifications of URIs, HTTP and HTML were refined as Web technology spread. Best known as the inventor of **WORLD WIDE WEB.**

Born	8 JUN 1955 , London UK.
Education	The Queen's College, Oxford (1973-1976), Emanuel School (1969–1973).
Awards	Internet Hall of Fame, Royal Medal, more.
Books	Weaving the web , A framework for web science .
Nationality	British.

On an average work day, a typist's fingers travel about 12.6 miles.

Do you know?

IT VITA

1. What is the term used for describing the judgmental or common-sense part of problem solving?

2. The Strategic Computing Program is a project of the

3. An AI technique that allows computers to understand associations and relationships between objects and events is called as

4. The new organization established to implement the Fifth Generation Project is called as

5. The field that investigates the mechanics of human intelligence is

6. What is the name of the computer program that simulates the thought processes of human beings?

7. What is the full Form of CPCT?

8. A computer program that contains expertise in a particular domain is called an

9. Natural language processing is divided into the two subfields of

10. High-resolution, bit-mapped displays are useful for displaying

11. Short cut for Save as command a _____.

12. Claude Shannon described the operation of electronic switching circuits with a system of mathematical logic called as

13. For transferring files from one host to another host over a TCP network which protocol we use

14. Password is a

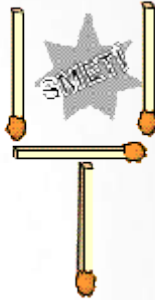15. The range of frequencies that a medium can pass is called as

Do you know?

The very first Apple logo featured Sir Isaac Newton sitting underneath a tree, with an apple about to hit his head.

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MIND PUNCH

1. Move just two matches and remove dust from the shovel.

2. Which word in the dictionary is spelled incorrectly?

3. If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more distance travelled by him is:

4. Imagine you are in a dark room. How do you get out?

5. Which letter replaces the question mark?

6. letter is next in this sequence?

   O, T, T, F, F, S, S, E, __

   Hint: It's a number series Puzzle

7. What Word does this rebus represent?

8. What has a head and a tail, but no body?

9. Voiceless it cries,

   Wingless flutters,

   Toothless bites,

   Mouthless mutters.

10. In which direction car is moving?

SOLUTIONS

MIND PUNCH	IT VITA
1. 2. Incorrectly 3. 50 km 4. Just stop imaging 5. N for Nine 6. A coin 7. Wind 8. K 9. Crossroads 10. No wheels which imply car is not moving.	1. Heuristic. 2. Defense Advanced Research Projects Agency. 3. Pattern matching. 4. ICOT (Institute for New Generation Computer Technology). 5. Cognitive science. 6. Personal information. 7. Corresponding Parts of Congruent Triangles. 8. Expert system. 9. Understanding and generation. 10. Clearer characters and graphics. 11. F12. 12. Boolean algebra. 13. FTP (File Transfer Protocol). 14. Case sensitive. 15. Bandwidth.

SENSE OF GRATITUDE

The Editorial Board expresses its sincere gratitude to all those who are responsible, either by being on the stage or behind the screen for the successful launch of the Magazine!!!...