

KONGU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), ERODE – 638107
DEPARTMENT OF COMPUTER TECHNOLOGY AND INFORMATION TECHNOLOGY

IT Bulletin

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Table of Contents

<i>S.No.</i>	<i>Title</i>	<i>Page No.</i>
1	HEADSET COMPUTER - HEAD - UP DISPLAY	1
2	AUGMENTED REALITY	2
3	WIRELESS ALLIANCE: WI-FI 6	3
4	CHROME OS APP	4
5	BLOCKCHAIN TECHNOLOGY	5
6	GOOGLE PUSHES CONFIDENTIAL ANDRIOD SECURITY UPDATE TO PIXEL USER	6
7	RASPBERRY PI4 WITH SSD: DRAMATIC SPEED IMPROVEMENTS	7
8	GLOBAL INTERNET OF THINGS (IOT) SECURITY BREACH	8
9	THE COGNITIVE TECHNOLOGY IN THE WORLD	9
10	HYBRID CLOUD	10
11	A SCAMMER REPORTEDLY USED A DEEP FAKE TO STEAL 24300 DOLLARS	11
12	QUANTUM COMPUTING	12
13	WHATSAPP UPDATE	13
14	THE GAME-CHANGING TECHNOLOGY BEHIND CRYPTOCURRENCY	14
15	CYBER SECURITY	15
16	ROBOT DEXERITY	16
17	CHINA HAS RELEASED A COMPUTING CHIP THAT TALKS TO YOUR BRAIN	17
18	TCS EDGES PAST US – BASED DXC TO BECOME WORLD’S 3 RD LARGEST IT FIRM BY REVENUE	18
19	ROBOTIC ARMS WITHOUT BRAIN IMPLANTS	19
20	UNDER SCREEN CAMERA	20
21	THE COGNITIVE TECHNOLOGY	21
22	SMARTPHONES	22
23	200 TIMES FASTER THAN EVER BEFORE: THE SPEEDIST QUANTUM OPERATION YET	23
24	ROBOT SNAKE	24
25	EDGE COMPUTING	25
26	INTERNET OF THINGS (IOT)	26
27	QUANTUM COMPUTING IS REAL	27
28	BLOCKCHAIN EVOLUTION	28
29	DATABASE	29
30	WHATSAPP WEB MAY SOON WORK WITHOUT YOUR SMARTPHONE	30

<i>S.No.</i>	<i>Title</i>	<i>Page No.</i>
31	GOOGLE REPORTS THAT 1.5 PERCENT OF CHROME'S USER PASSWORD ARE UNSAFE AND VULNERABLE	31
32	AUGUMENTED REALITY AND VIRTUAL REALITY	32
33	DIGITAL DNA	33
34	SCIENTISTS DEVELOP WEARABLE SENSORS TO DETECT SWEAT RATES	34
35	THE PIXEL 4'S POWER-PLUNGING PUZZLE	35
36	MICROSOFT COMBINES INTUNE WITH CONFIGMGR	36
37	APPLE DELIVERS MACOS CATALINA	37
38	SAVING THE RAINFOREST WITH OLD CELL PHONES	38
39	APPLE'S EX-WIRELESS LEAD PLOTS A SOLID STATE FUTURE FOR ELECTRONICS	39
40	ZUCKERBERG V/S GOVT.OF INDIA: 6 TIME THE FACEBOOK CEO GOT THE STICK	40
41	HYBRID & MULTI-CLOUD SOLUTIONS	41
42	CLOCKY ROBOTIC ALARM	42
43	BLOCKCHAIN AS A SERVICE (BAAS)	43
44	APPLE INC	44
45	EXPLAINED: WHAT IS "QUANTUM SUPERMACY"?	45
46	BIG DATA ANALYTICS	46
47	RESEARCHERS DEVELOP LOW-POWER, LOW-COST NETWORK FOR 5G-CONNCTIVITY	47
48	CRYPTOCURRENCIES BACKED BY CASH COULD ELUDE NEW REGS	48
49	ARTIFICIAL INTELLIGENCE(AI)	49
50	GOOGLE STRENGHTENS CHROME'S SITE ISOLATION TO PROTECT BROWSER AGAINST ITS OWN VULNERABILITES	50
51	MICROSOFT TEAMS GETS PRIVATE CHANNELS, EMAIL INTEGRATION WITH OUTLOOK	51
52	TECHNOLOGY BUSINESSES	52
53	GOOGLE TO STOP INDEXING FLASH FOR SEARCH	53
54	WHAT HAPPENS AFTER WINDOWS 7'S RETIREMENT?	54
55	IIT KGP FACULTY WINS FACEBOOK AWARD FOR RESEARCH INTARGETED MEDIA BIAS	55
56	IOT DEVICE MANAGEMENT	56
57	CAN FACEBOOK'S LIBRA CRYPTOCURRENCY SURVIVE THE EXODUS?	57
58	ZOHO LAUNCHES WORKDRIVE TO PUT GREATER FOCUS ON TEAM WORK	58
59	DEEP LEARNING	59

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IT BULLETIN

DATE: 25.06.2019

HEADSET COMPUTER - HEAD - UP DISPLAY



- ✓ A head-up display (HUD) is a transparent display that presents data without requiring users to look away from their usual viewpoints.
- ✓ Near-eye augmented reality devices can be used as portable head-up displays as they can show data, information, and images while the user views the real world.
- ✓ Augmented reality is expected to include registration and tracking between the superimposed perceptions, sensations, information, data, and images and some portion of the real world.

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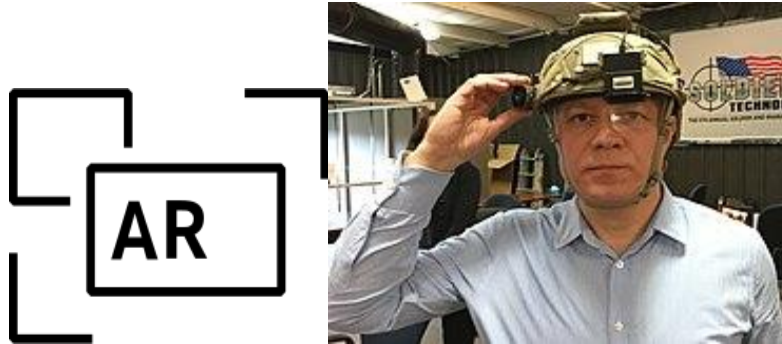
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DATE: 26.06.2019

AUGMENTED REALITY



- ✓ Augmented reality is becoming more frequently used for online advertising.
- ✓ Even further, companies such as Bodymetrics install dressing booths in department stores that offer full-body scanning.
- ✓ These booths render a 3-D model of the user, allowing the consumers to view different outfits on themselves without the need of physically changing clothes. For example, JC Penney and Bloomingdale's use "virtual dressing rooms" that allow customers to see themselves in clothes without trying them on.
- ✓ According to Greg Jones, director of AR and VR at Google, augmented reality is going to "reconnect physical and digital retail".
- ✓ AR technology is also used by furniture retailers such as IKEA, Houzz, and Wayfair. These retailers offer apps that allow consumers to view their products in their home prior to purchasing anything.

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DATE: 27.06.2019

WIRELESS ALLIANCE: WI-FI 6



- ✓ Wi-Fi 6, known to the IEEE as the 802.11ax standard, is the next major iteration of the basic Wi-Fi technology in use around the world.
- ✓ Wi-Fi 6 also provides for decreased interference between two different APs on the same network.
- ✓ Wi-Fi 6 is designed to be more or less plug-and-play, with no new infrastructure needed to support it, and backward compatibility with all existing Wi-Fi technology baked into the basic specification.
- ✓ Yet the technology could increase the demand for bandwidth among users, leading to the need for more capacity from the back end. The white paper predicts an increase in demand for high-speed Ethernet prompted by Wi-Fi 6.

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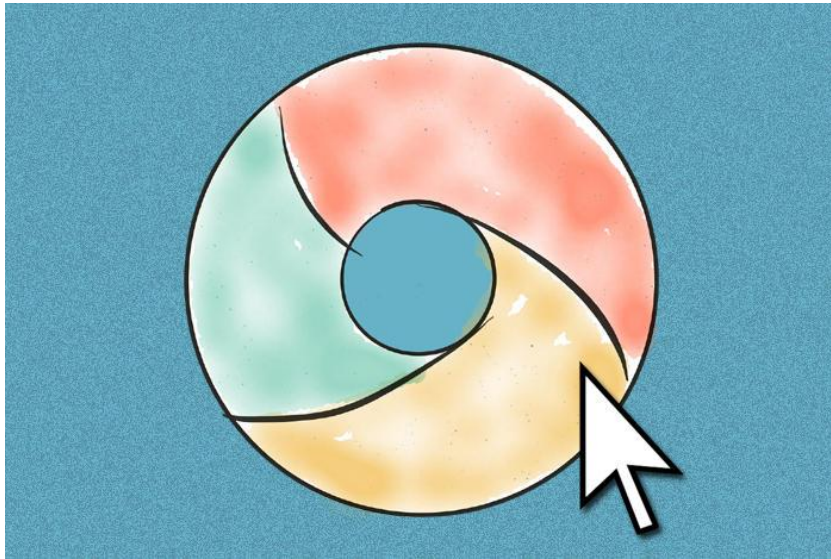
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CHROME OS APP



- ✓ Google's Chrome OS operating system is getting more interesting with every passing month as of late but figuring out how to optimize a Chrome book for the workflow isn't always obvious, especially if we used to a more traditional desktop platform.
- ✓ One common challenge is the software's absence of apps or at least apps in the most basic sense. Sure, Chrome books can run Android apps and even now Linux apps.

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DATE: 29.09.2019

BLOCKCHAIN TECHNOLOGY



In 2019, for the delight of organizations, Blockchain is going to bring the first enterprise applications in active use. The most innovative corporations will start using Blockchain as a way to improve collaboration.

Blockchain in 2019 comes out cryptocurrency transaction and becomes an integral part of the business platform. Blockchain enables transactional transparency across a variety of business functions. In 2019, Blockchain will be present in many industries at the core of business innovation.

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GOOGLE PUSHES CONFIDENTIAL ANDROID SECURITY UPDATE TO PIXEL USER

- ✓ Google has mistakenly sent out a confidential Google-only Dog food builds of their upcoming July 2019 security update to a pixel owner.
- ✓ These builds are meant to be used internally by Google employees and are not meant to be pushed out to normal users.
- ✓ A dogfood build is a prerelease version of A software update that developers use internally on their own equipment in order to test it.
- ✓ This allows Google employees to find bugs or other issues and fix them before the update is released to the public.
- ✓ Security update available.
- ✓ CONFIDENTIAL INTERNAL ONLY- This is a confidential Googlers-only OTA to update our device to Android 9 with July 2019 security patches and critical bugfixes.



When installed, it changed the internal build number to PQ3B.190705.003

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DATE: 01.07.2019

RASPBERRY PI 4 WITH AN SSD: DRAMATIC SPEED IMPROVEMENTS



If an external SSD is attached to a Raspberry Pi 4 B, it will get significantly faster app opens and file transfers. One of the most important improvements in the Pi 4 is its USB 3.0 interface. Where previous Raspberry Pi models were limited to a USB 2's theoretical 480 Mbps / 60 MBps maximum speed when connecting to external storage, the new model has an interface that can theoretically hit 5 Gbps / 620 MBps. In the real world it would be lucky to get half of that, but you still attain speeds that are three or four times faster on tasks that matter.

By way of comparison, the microSD card reader on the Raspberry Pi 4 can only manage a theoretical maximum of around 50 MBps, which is double the bandwidth available on the Pi 3 B+.

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DATE: 02.07.2019

GLOBAL INTERNET OF THINGS (IOT) SECURITY BREACH



Hackers never sleep. Everyone in the cybersecurity industry knows that as long as you connect something to the Internet it immediately becomes vulnerable.

A quick look at the news tells us that not much has been learned. However, the great number of security breaches occurred during 2018 should serve as an alert of what can happen at a global scale in 2019 if organizations don't take the necessary precautions.

Analyst firm Gartner forecasts that 20.4 billion connected things will be in use worldwide by 2020. And with the rise of the Internet of Autonomous Things (IoAT) there is a good chance that many of these things will show a certain level of weak security.

In 2019, it will be paramount for IoT manufacturers and all of their supply chain to dramatically increase the security in all the products that come out to market. It can be a connected refrigerator, a robot, a drone, a vehicle, or a health tracker.

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DATE: 03.07.2019

THE COGNITIVE TECHNOLOGY IN THE WORLD



Microsoft has taken steps to develop its partnership with amazon to provide alex across the windows IO machine. It previously saw the attempyts to allow users to call voice assistants, cortana and alexa together. However, it seems like .

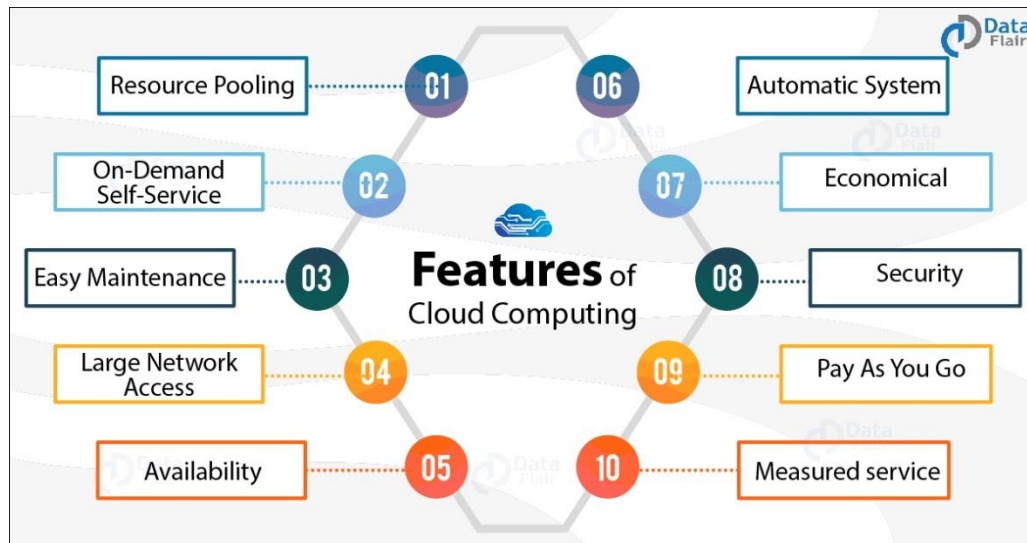
Microsoft is going to bring Alexa and other third party voice helpers directly to the lack screen. Overall it is basically gets more important for windows IO users in the future, such as third assistant Alexa could save this way by converting windows IO machine into echo show sheets , but this does not mean that the court image is completely out of the picture.

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HYBRID CLOUD



- ✓ Hybrid Cloud will become the dominant business model in the future.
- ✓ The Hybrid Cloud model offers a transition solution that blends the current on-premises infrastructure with open cloud & private cloud services.
- ✓ Multi-Cloud is the next step in the cloud evolution. It enables users to control and run an application, workload, or data on any cloud (private, public and hybrid) based on their technical requirements.
- ✓ Backup and Disaster Recovery
- ✓ According to Spiceworks report, 15% of the cloud budget is allocated to Backup and Disaster Recovery (DR) solutions, which is the highest budget allocation, followed by email hosting and productivity tools.

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DATE: 05.07.2019

**A SCAMMER REPORTEDLY USED A DEEPPAKE TO STEAL 243000
DOLLARS**

A scammer used deepfake technology to swindle a U.K. energy company out of \$243,000.



By mimicking the voice of the CEO of the energy firm's parent company, the person behind the deepfake swindling convinced the energy firm's CEO to transfer the money within the hour, according to The Wall Street Journal. It's a troubling vision of the future in which digital misinformation becomes so sophisticated that even a phone calls from your boss becomes suspicious.

The crime was reported to investigators by the energy firm's insurance company, Euler Hermes Group SA, which declined to name either of the companies involved, the WSJreports. So far, no one has identified a suspect, but the money that the energy CEO sent to a Hungarian account has since been traced to Mexico, and from there it was more widely distributed.

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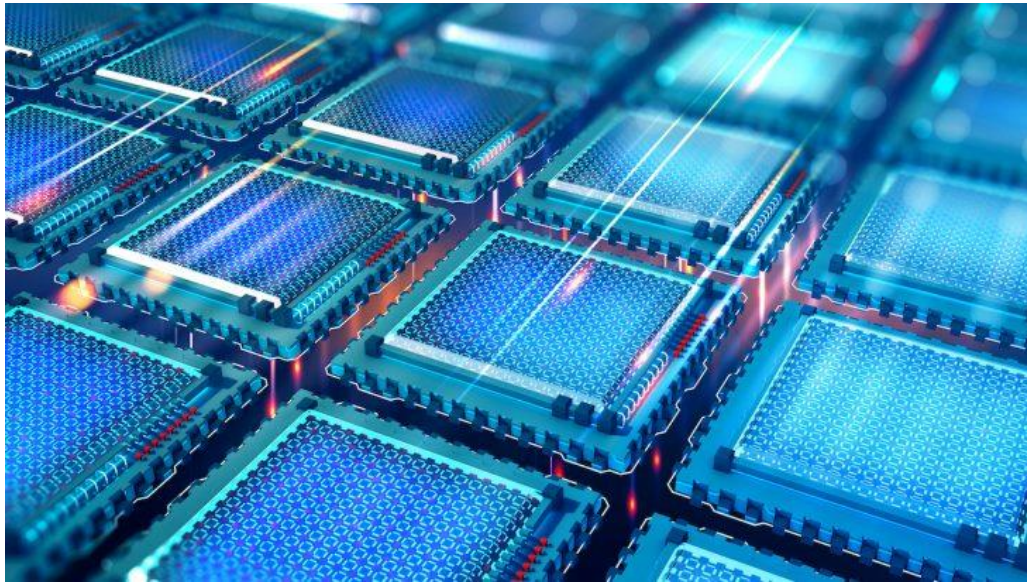
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IT BULLETIN

DATE: 06.07.2019

QUANTUM COMPUTING



The encryption used to secure the internet is extremely difficult to crack. However, recent innovations in quantum computing may make these techniques ineffective.

The world of quantum mechanics is pretty wacky. Though the laws of physics accurately describe everything big enough to be seen by the human eye, extremely small things behave differently.

Quantum computing applies “waves of probability concept to bits, the ones and zeros of a computer’s binary code. While traditional computers encode all data as a series of defined bits, quantum computers use quantum bits, or qubits.

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IT BULLETIN

DATE: 08.07.2019

WHATSAPP UPDATE

NEW DELHI: For a spyware, Pegasus can do anything. The sly subterranean invader can seize every item from any mobile device without leaving any electronic trace - through just a missed call. A close look at the complaint filed in a California court by WhatsApp against NSO Group, the Israeli technology firm that developed Pegasus, reveals the extent to which the spyware can collect data from an affected device. WhatsApp had announced an immediate update on May 13 after it identified "a vulnerability that could enable an attacker to insert and execute code on mobile devices." It and called the spyware an "example of a highly sophisticated attack" at the time.

The complaint holds NSO responsible for breach of contract and alleges that it has violated several laws of the California state. WhatsApp has alleged that the defendant (NSO) has injured its reputation, public trust, and goodwill and caused it damages "in excess of \$75,000 and in an amount to be proven at trial."

The investigation, detailed in the WhatsApp complaint, found that "between approximately January 2018 and May 2019, Defendants created WhatsApp accounts that they used and caused to be used to send malicious code to target devices in April and May 2019.

"Between approximately April 29, 2019, and May 10, 2019, defendants caused their malicious code to be transmitted over WhatsApp servers in an effort to infect approximately 1,400 target devices. The target users had WhatsApp numbers with country codes from several countries, including the Kingdom of Bahrain, the United Arab Emirates, and Mexico. According to public reporting, Defendants' clients include, but are not limited to, government agencies in the Kingdom of Bahrain, the United Arab Emirates, and Mexico as well as private entities," it adds.

Pegasus was designed, in part, to intercept communications sent to and from a device, including communications over iMessage, Skype, Telegram, WeChat, Facebook Messenger, WhatsApp, and others," WhatsApp has elaborated in its written submission. It adds that the spyware "leaves no trace on the device, consumes minimal battery, memory and data consumption and comes with a self-destruct option that can be used any time."

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THE GAME-CHANGING TECHNOLOGY BEHIND CRYPTOCURRENCY



Fast-forward a few short years and millions have downloaded cryptocurrency investment software and are investing in digital money the same way they might invest in stocks and bonds.

Hundreds of new cryptocurrency alternatives have sprung up to compete with bitcoin. Talk of blockchain technology (the technology behind cryptocurrencies) is now front-page news, and the value of cryptocurrency continues to rise. In March of 2018, buying just one bitcoin would cost an investor more than \$9,000.

But cryptocurrency is only one use for blockchain technology. Students pursuing an online master's in business administration would do well to familiarize themselves with this technology, because soon it could revolutionize everything from corporate finance to identity management.

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IT BULLETIN

DATE: 10.07.2019

CYBER SECURITY



Effective Solution for Hybrid Cloud Security will be Priority

As hybrid environments can strain traditional solutions designed for more static environments, businesses will have to ensure that their security is not left behind. To bridge these gaps, organizations and vendors' work towards finding an effective solution for hybrid cloud security will intensify in 2019.

Businesses & Cyber-Criminals will Both Leverage AI, ML

Artificial Intelligence (AI) is taking center-stage in cybersecurity and consists of Machine Learning (ML), which has the potential to identify and respond to threats as they occur. Cybercriminals will also leverage them to launch sophisticated attacks via AI botnets, better-designed phishing attacks and make it more challenging to identify complex attacks. Thus, organizations will have to account for the cybersecurity challenges that AI will pose in the future.

Data Privacy Laws Go Big

The dynamic nature of cybersecurity outruns regulations and there will be a paradigm shift in ways companies will use and manage data in 2019. In the light of high-profile data breach incidents, customers are worried and are demanding better protection measures.

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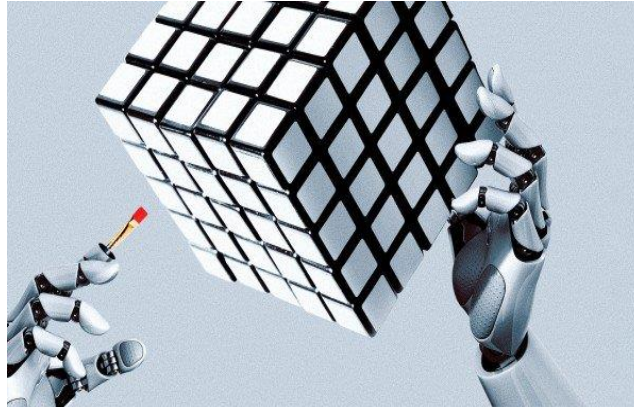
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IT BULLETIN

DATE: 11.07.2019

ROBOT DEXTERITY



For all the talk about machines taking jobs, industrial robots are still clumsy and inflexible. A robot can repeatedly pick up a component on an assembly line with amazing precision and without ever getting bored but move the object half an inch, or replace it with something slightly different, and the machine will fumble ineptly or paw at thin air.

But while a robot can't yet be programmed to figure out how to grasp any object just by looking at it, as people do, it can now learn to manipulate the object on its own through virtual trial and error. Dactyl, which comes from the San Francisco nonprofit OpenAI, consists of an off-the-shelf robot hand surrounded by an array of lights and cameras.

Using what's known as reinforcement learning, neural-network software learns how to grasp and turn the block within a simulated environment before the hand tries it out for real. The software experiments, randomly at first, strengthening connections within the network over time as it gets closer to its goal.

It usually isn't possible to transfer that type of virtual practice to the real world, because things like friction or the varied properties of different materials are so difficult to simulate. The OpenAI team got around this by adding randomness to the virtual training, giving the robot a proxy for the messiness of reality.

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IT BULLETIN

DATE: 12.07.2019

**CHINA HAS RELEASED A COMPUTER CHIP THAT 'TALKS' TO YOUR
BRAIN**



What is a BCI?

- * The chip, named "Brain Talker", was released in Tianjin at the 3rd World Intelligence Congress.
- * The "Brain Talker", a computer chip designed to be used in brain computer interfaces (BCIs).
- * Brain-computer interfaces (BCIs) are devices that create a link of communication between the brain and a computer. They are the type of tech that futurists like Ray Kurzweil believe can lead to the singularity, by eventually allowing brains to be uploaded into computers and integrated with AI.
- * The work on this new BCI is aimed at making the tech more widely adopted in the future. "The Brain Talker chip advances BCI technology allowing it to become more portable, wearable, and accessible to the general public.
- * The team of researchers hopes that the more portable nature of the new BCI device will mean that it can be used for healthcare, education, self-discipline, security, and gaming and entertainment applications.

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IT BULLETIN

DATE: 15.10.2019

**TCS EDGES PAST US-BASED DXC TO BECOME WORLD'S 3RD
LARGEST IT FIRM BY REVENUE**

Tata Consultancy Services (TCS), which had reported better-than-expected earnings for the quarter ended March, added another feather to its cap in FY19. It is now the world's third largest software services provider in terms of revenue, following IBM and Accenture. This rank was previously held by US-based DXC Technology, which announced its Q4 figures yesterday. Significantly, this is the first change in the IT outsourcing industry's totem pole in two years.

Comparing the financial results of TCS and DXC for the last fiscal, you see that the Mumbai-based firm, already India's largest software exporter, boasts slightly better figures and, hence, has bagged the new tag. In April, TCS had reported dollar revenue of \$20.91 billion for FY19, a jump of 9.6% year-on-year. According to the company, the incremental revenue stood at \$2.2 billion in constant currency (CC) terms. In comparison, DCX reported revenue of \$20.75 billion for the fiscal, down 4.5% year-on-year.

TCS, in fact, is way ahead in terms of net income for FY19 - \$4.5 billion versus \$1.26 billion for DCX. It is also far more profitable than its peers, with its FY19 operating margin pegged at close to 26% against 15.8% for DXC and 13-14% for Accenture, CNBC TV18 reported.

The Tata Group's flagship company continues to remain bullish about growth after posting its "strongest revenue growth" in the last 15 quarters. TCS had reported a 18.5 per cent rise in March quarter revenues to Rs 38,010 crore, from Rs 32,075 crore in the corresponding period in FY18. The firm's Chief Operating Officer N Ganapathy Subramaniam told PTI last month that TCS continued to remain "open and hungry for acquisitions" and was scouting for assets that could bring in intellectual property and widen market reach to further accelerate growth. But TCS will now have to double its revenue to fight it out with Accenture over the global #2 rank.

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IT BULLETIN

DATE: 16.07.2019

ROBOTIC ARMS WITHOUT BRAIN IMPLANTS

A team of researchers from Carnegie Mellon University has made a breakthrough in field of robotic device control. Using a noninvasive brain computer interface(BCI) researchers have developed the first-ever successful mind controlled robotic arms.

BCI's have been shown to achieve good performance for controlling robotic devices using the signals only from brain implants. When robotic devices are controlled with high accuracy, they can be used to complete a wide variety of daily tasks.



These implants require valuable amount of medical and surgical ability to correctly install and operate. A big challenge in BCI research is to develop less aggressive or even totally non-aggressive technology that would allow people to control their environment or robotic limbs using their own “thoughts”.

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IT BULLETIN

DATE: 17.07.2019

UNDER SCREEN CAMERA



It integrates a small rectangular area into the phone's display which uses a "special low-reflective glass with high transmittance." The front-facing **camera** sits **underneath**. It allows the **screen** to display imagery unhindered, but at the same time doesn't block light reaching the **camera** when in use.

Oppo a company has done it's share of antibezel experimentation with display notch and pop up selfie camera is the first to demonstrate an under screen camera to the public at mwc shanghi week after a tease earlier in the month alongside the showing oppo has revealed more information about how the technology actually woks

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IT BULLETIN

DATE: 18.07.2019

THE COGNITIVE TECHNOLOGY

- Cognitive Tech is in the same vein as machine learning and virtual reality except that it's border concepts.
- It include things like natural Language processing and Speech recognition and Optimization
- Although Cognitive Technologies have a broad range of applications. It includes:
 - Cognitive
 - Prescriptive
 - Predictive
 - Diagnostic
 - Descriptive
- Deloitte that the Industry sector most affected by this tread initially will be the Software sector with the 95% of enterprises Software companies projected to adopt these technologies by 2020



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IT BULLETIN

DATE: 19.07.2019

SMARTPHONES



Samsung will reportedly unveil its next generation flagship tablet, the Galaxy Tab S6, alongside the Galaxy Note 10 smartphones, on August 7 next month. The new upcoming tablet has now leaked in all its glory revealing the devices from all angles in some official-looking press renders. As the name denotes, Samsung will indeed skip the “Galaxy Tab S5” name to not make matters more confusing, as there’s already a mid range Galaxy Tab S5e that already exists on the market. But moving on, this leak of the Galaxy Tab S6 gives us a much better idea of what to expect from the upcoming tablet.

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IT BULLETIN

DATE: 25.07.2019

200 TIMES FASTER THAN EVER BEFORE: THE SPEEDIEST QUANTUM OPERATION YET



Source: University of New South Wales

Summary: Physicist have built a super-fast version of the central building block of a quantum computer. The research is the milestone result of a vision first outlined by scientist 20 years ago.

A group of scientists led by 2018 Australian of the year professor Michelle Simmons has achieved the first two-qubit gate between atom qubits in silicon – a major milestone on the team’s quest to build an atom-scale quantum computer. The pivotal piece of research was published on July 17,2019 in the journal Nature. Getting up and close with qubits-engineering with a precision of just thousand millionths of a meter.

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IT BULLETIN

DATE: 25.07.2019

ROBOT SNAKE

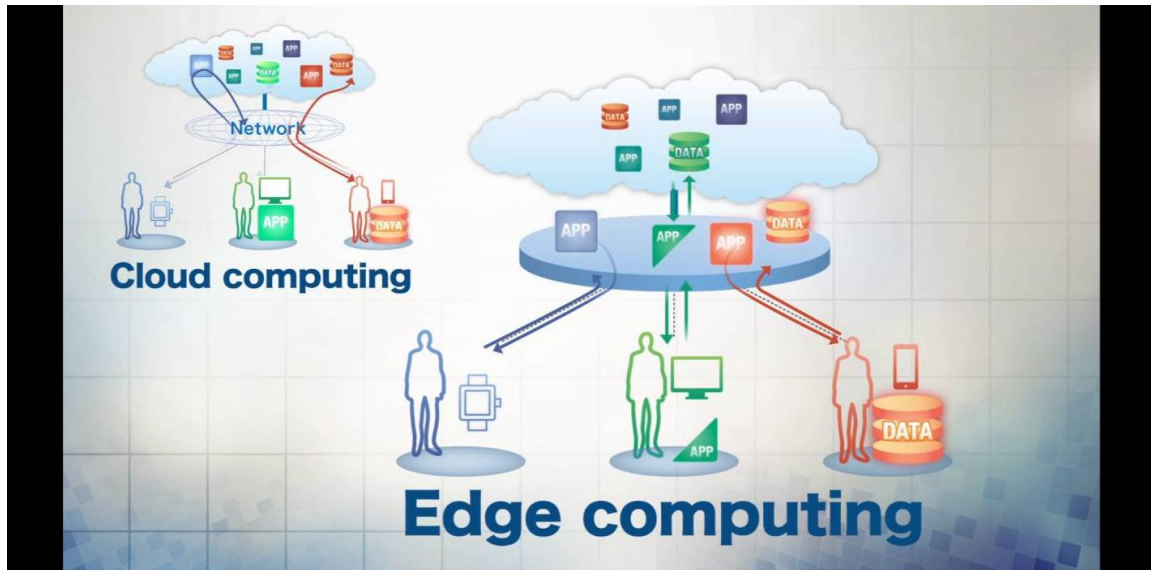
- ✓ Are you afraid of snakes? What about robots? What about snake robots?
- ✓ Now here's one of those new innovations in robotics that's solving problems by combining two things that don't quite seem to go together at first thought.
- ✓ Today Ever Widening Circles will take you on a little journey of possibility when it comes to pure ingenuity.
- ✓ Having the flexibility and movements of a slithering reptile allows these robots to squeeze into spaces that their human-form, mechanical cousins, and we humans, haven't been able to explore. They can do so much more!
- ✓ We will be able to identify structural problems in hidden places, perform minimally invasive surgery, and find survivors in fragile search and rescue missions (to name a few applications).

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EDGE COMPUTING



Edge computing is the practice of processing data near the edge of the network, where the data is being generated, instead of in a centralised data-processing warehouse.

Edge computing is a systematic approach to execute data processing at the edge of the network to streamline cloud computing. It is a result of ever increased use of IoT devices. Edge is essential to run real-time services as it streamlines the flow of traffic from IoT devices and provides real-time data analytics and analysis. Hence, it is also on the rise in 2019.

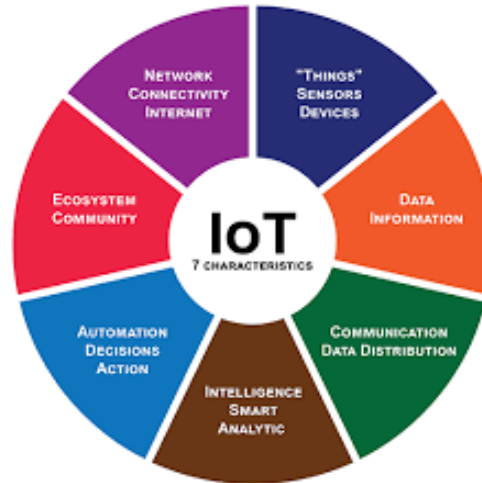
Edge computing optimizes internet devices and web applications by bringing **computing** closer to the source of the data. This minimizes the need for long distance communications between client and server, which reduces latency and bandwidth usage

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INTERNET OF THINGS (IOT)



- Another buzzword that no longer remains a buzzword but has become a full-fledged technology ecosystem in itself.
- IOT essentially is connecting many devices and creating a virtual network where everything works seamlessly via a single monitoring center of sorts.
- IOT is a giant network of connected devices-all of which gather and share data about how they are used and the environments in which they are operated.

This includes everything from your:

- Mobile phones,
- Refrigerator,
- Washing machines to almost everything that you can think of.

With IOT, we can have smart cities with optimized:

- Traffic system,
- Efficient waste management and
- Energy use

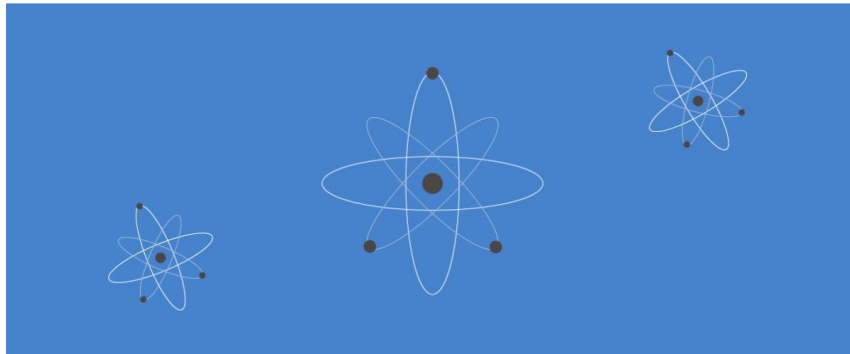
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QUANTUM COMPUTING IS REAL



It may be surprising, but the performance of traditional computers is rather slow. Information technology trends 2019 say that the next generation of computers will be quantum computers. They are actively maturing now and are going to significantly surpass their ancestors.

Quantum computing is a completely new way of transmitting and processing data based on the phenomena of quantum mechanics. Traditional computers use binary code (a bit) to handle information. The bit has two basic states, zero and one, and can only be in one of them. As for the quantum computer, it uses qubits that are based on the principle of superposition. The qubit also has two basic states: zero and one. However, due to superposition, it can combine values and be in all these states at the same time.

Such parallelism of quantum computing helps find the solution directly, without the necessity to check all the possible variants of the system states. In addition, a quantum computing device doesn't need huge computational capacity and large amounts of RAM. Imagine: it needs only 100 qubits to calculate a system of 100 particles, whereas a binary system requires trillions of trillions of bits.

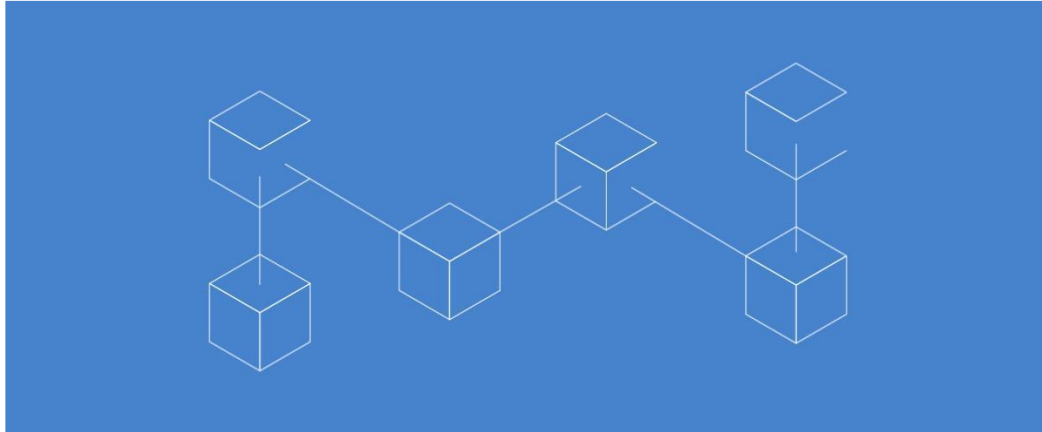
Developers have already learned to build quantum computing applications and will strive for their further development and widespread adoption.

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BLOCKCHAIN EVOLUTION



Blockchain technology should undoubtedly be included in the list of tech trends 2019, since it has been rapidly expanding for the last few months and still has huge potential.

Though most people associate blockchain with cryptocurrencies only, the technology can be successfully incorporated into many other crypto-unrelated fields. 2019 will be devoted to the creation of the blockchain industrial image and its separation from bitcoin and other cryptocurrencies.

It will probably witness blockchain convergence with other technologies such as IoT, machine learning and fog computing. As a result, new practical use cases will be represented, and the demand for blockchain experts will increase.

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IT BULLETIN

DATE: 01.08.2019

DATABASE



A database used by Iran's paramilitary arm to device attacks against oil tankers was wiped out by a US cyberattack in June, temporarily reducing Tehran's means of targeting Persians Gulf shipping traffic, according to a report from The New York times.

Iran is trying to bring military communications networks back online and recover information lost in the attack against the Islamic Revolutionary Guard Corps. The attack, part of an unspoken cyberwar between the Us and Iran was in response to Iran shooting down a US surveillance drone it said was violating Iranian airspace, the times reported.

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IT BULLETIN

DATE: 02.08.2019

WHATSAPP WEB MAY SOON WORK WITHOUT YOUR SMARTPHONE



Recently, reliable serial WhatsApp tipster [*WABetaInfo*](#) mentioned in a tweet that the messaging app may bring the UWP version of the app, along with the new multi-platform system, which means that users could access chats and profiles on more than one device with the same account.

The multi-platform system would also work on the lines of WhatsApp UWP and offer the standard chat interface on different devices with the same account. The update will be available for Android, iOS as well as Windows phones.

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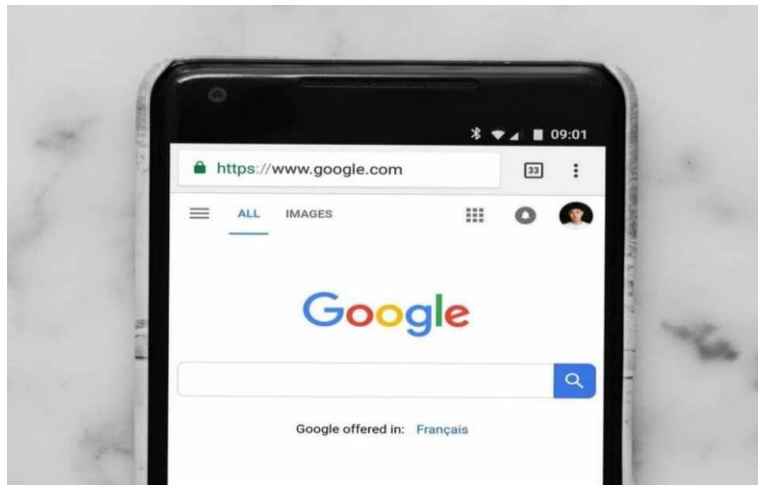
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DEPARTMENT OF COMPUTER TECHNOLOGY AND INFORMATION TECHNOLOGY

IT BULLETIN

DATE: 05.08.2019

**GOOGLE REPORTS THAT 1.5 PERCENT OF CHROME'S USER
PASSWORDS ARE UNSAFE AND VULNERABLE**



Google recently announced a new extension for Google Chrome called, "Password Checkup" and it has rolled out for all users. In this feature, Google will check passwords that are used for login and prompt warnings if the password used on a site has been compromised.

The recent report by Google, revealed that 1.5 percent of the user passwords are compromised, i.e. over 316,000 passwords. It also suggested that users are unaware of the risk reused and unsafe passwords pose to their financial, government, and email accounts. The risk is more intense when it comes to shopping websites.

Google reports that 1.5 percent of Chromes user passwords are unsafe and vulnerable Once flagged by Google's Password Check up extension, it was reported that 26 percent of the unsafe passwords are reset by users.

The report also revealed that in popular web sites, users are 2.5X more likely to reuse vulnerable passwords, putting their account at risk of hijacking

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IT BULLETIN

DATE: 05.08.2019

AUGMENTED REALITY AND VIRTUAL REALITY



The computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors.

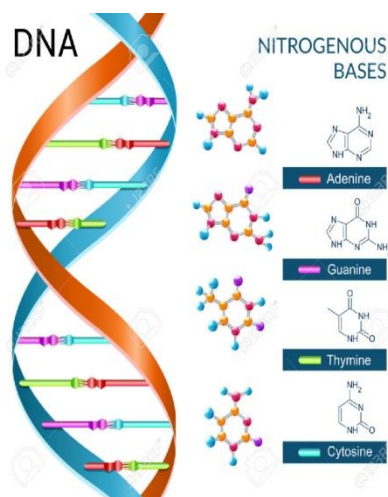
In fundamental terms, the expression augmented reality, often abbreviated to **AR**, refers to a simple combination of real and virtual (computer-generated) worlds. Given a real subject, captured on video or camera, the technology 'augments' (= adds to) that real-world image with extra layers of digital information.

Virtual is real! VR and AR, the twin technologies that let you experience things in virtual, that are extremely close to real, are today being used by businesses of all sizes and shapes. But the underlying technology can be quite complex.

Medical students use AR technology to practice surgery in a controlled environment. VR on the other hand, opens up newer avenues for gaming and interactive marketing. Virtual reality is a simulated experience that can be similar to or completely different from the real world. Applications of virtual reality can include entertainment and educational purposes. Other, distinct types of VR style technology include augmented reality and mixed reality.

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DIGITAL DNA



We know genes or DNA molecules stores biological information and transfers these information from generation to generation in species. How the information is encoded in DNA? We can compare it with electronic digital coding and understand.

In digital memory , the two symbols 0 and 1(bit) are basic elements. In DNA, four elements adenine(A), cytosine (c), guanine(G) and uraul (U) are the fundamental units(chemical) to represent bio-info. In digital, 8 bit (letters) words are used and they are called bytes. $2^8 = 256$ symbols can be encoded using 8 bits system. (today 32 bits, 64 bits are also common). example: "A" is represented by 01000001 "=" is represented by 00111101

In DNA, out of four, letters(ACGU), three letters are used to form words called codons. So, $4^3 = 64$ symbols can be represented in this way. There are 20 amino acids using which variety of proteins are built.

The proteins are basic building blocks of our body. Different set of these three letters codons represents different amino acids.

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**SCIENTISTS DEVELOP WEARABLE SENSORS TO DETECT
SWEAT RATES**



The US scientists have developed a kind of wearable skin sensors that can detect what's in wearers' sweat that may provide real-time updates on their health problems like dehydration or fatigue. The study published in the latest edition of Science Advances reported a new sensor design that can monitor the sweat rate, and the electrolytes and metabolites in sweat, the Xinhua news agency reported. The researchers also developed a way to quickly manufacture the sensor patches in a roll-to-roll processing technique similar to screen printing, which prints the sensors onto a sheet of plastic like words on a newspaper.

The new sensors have a spiraling microscopic tube that wicks sweat from the skin. By tracking how fast the sweat moves through the microfluidic, the sensors can report how much a person is sweating.

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IT BULLETIN

DATE: 08.08.2019

THE PIXEL 4'S POWER-PLUNGING PUZZLE



Fountains of virtual ink have been spilled over the Pixel 4's stamina and how the phone's battery life isn't all that it could be. The Pixel 4 and are having similarly adequate experiences in the part of the inevitable variance that comes with battery life, given the differences in how all use our phones, and perhaps also the effect of Android's Adaptive Battery system kicking in as the software starts to optimize its power consumption It's all about the Pixel 4's standby power consumption

The way the phone burns through battery life when it's idle and you aren't actively using it. And it's really quite baffling. It seems safe to say that *something* is up with the Pixel 4's standby power consumption something that's absolutely affecting the phone's overnight stamina and quite possibly affecting its overall staying power to some degree as well.

The issue may or may not be limited to the Pixel 4 and it may or may not be affecting *all* Pixel 4 units, it sure seems likely that there's some connection. If it's something that Google can pinpoint and resolve, the Pixel 4 might just go from being "okay" to being "pretty decent" with stamina, at least for people whose usage isn't exceptionally demanding.

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IT BULLETIN

DATE: 09.08.2019

MICROSOFT COMBINES INTUNE WITH CONFIGMGR



Enterprises that have System Center Configuration Manager licenses now have automatic access to Intune via the new, combined Endpoint Manager.

Microsoft has combined its System Center Configuration Manager (ConfigMgr) with its Intune unified endpoint management (UEM) platform, enabling users to access both using just one interface. Management vision has not been as simple as it could be. ConfigMgr and Intune have both played a role, but it hasn't always been clear what the future holds. So, this vision includes both ConfigMgr and Intune.

Along with offering a single management interface for ConfigMgr and Intune, Endpoint Manager includes the Device Management Admin Center (DMAC) and Desktop Analytics. The direction of travel isn't that need to shut off System Center to take advantage of Intune; it can run them both together and take a workload-based model around management around all the end points.

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IT BULLETIN

DATE : 13.08.2019

APPLE DELIVERS MACOS CATALINA



The company first unveiled the latest version of its desktop OS at its annual worldwide. Developers conference in June. It arrived for all the users on Monday. Apple today released 2019's free upgrade macOS 10.15, aka "Catalina". Available from Mac App Store, where the upgrade was tagged at the nearly 5 GB or as a larger direct download up to 8GB from its processors. Catalina is free and can be installed on a wide range of Macs. Apple posted a full list of the compatible hardware here.

Mac owners currently running 2018's Mojave (10.14) can upgrade by choosing software update from the system preferences window. However, machines running High Sierra (10.11, 10.12) or High Sierra must upgrade by choosing the Mac App Store. Those Sierra customers still relying on the Ancient Lion (10.7) or Mountain Lion must first upgrade to El Capitan before upgrading from there to Catalina (God luck).

Apple introduces macOS Catalina earlier this year at its annual worldwide developers conference (WWDC), and has conducted a summer-long beta test with both developers and the general public.

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IT BULLETIN

DATE: 14.08.2019

SAVING THE RAINFOREST WITH OLD CELL PHONES

- Rainforest Connection is saving the rainforest with something sitting in your desk drawer!
- Rainforests have some of the most complicated soundscapes on the planet. In this dense noise of insects, primates, birds, and everything else that moves in the forest, how can you detect the sounds of illegal logging?
- The old cell phone you have hanging around and collecting dust may have the answer.
- So, how exactly does one go about saving the rainforest with old cell phones? After a visit to the rainforests of Borneo, physicist and engineer Topher White was struck by the sounds of the forest. In particular, the noises he couldn't hear. While on a walk, White and others came across an illegal logger sawing down a tree just a few hundred meters away from a ranger station. This incident set White thinking that perhaps the best way to save the Earth's precious rainforest is to listen to its loggers and poachers. And the innovation he came up with uses old cell phones to do this! To introduce us to the innovation he came up with, here is Topher White on the National Geographic Live stage. National Geographic is promoting some incredible things, so go check them out to see what they've been up to lately!
- Via: National Geographic Live 1
- You can learn more about Rainforest Connection (and listen to the sounds of the rainforest) over on their website! To stay up to date with their work, make sure you give them a follow on Facebook, Twitter, Instagram, and YouTube! Great people becoming empowered to make a difference...
- It's hard to feel like our actions have an impact on solving a problem like deforestation. Yeah, we can choose to change our spending habits to stop the economic support of deforestation, but this doesn't necessarily have an impact at the root of the problem. We can, though, choose to support projects like Rainforest Connection!

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IT BULLETIN

DATE: 16.08.2019

APPLE'S EX-WIRELESS LEAD PLOTS A SOLID STATE FUTURE FOR ELECTRONICS

Apple's former 5G chief, Ruben Caballero, is working to solve one of the oldest problems in the consumer electronics business. A company called Keyssa is developing new ways to achieve high-speed, contactless connectivity. Its website describes multiple ways this might work, from pairing set-top boxes to televisions to sharing data with a bump. While processors, memory and other components have increased in speed, the actual performance of the metal pins used inside devices to connect these parts has not.



There is no Moore's Law for pins, so Keyssa's solution is to ditch the pins.

Because Keyssa is mmWave technology, it operates in a portion of the spectrum that is above all the noise caused by sub 6GHz signals – Wi-Fi and Bluetooth, for instance – as well as the harmonics caused by emissions from traces, cables and metal connectors from signals running at 5Gbps (such as USB or PCIe).

- It will soon see it used to connect a second screen to the LG V50 ThinQ.
- It is currently being tested within rotating high-speed LiDAR systems for autonomous vehicles. Vehicles using the tech are expected to appear in 2020.
- It is already used in some endoscopes.
- A rugged edge-storage device equipped with the tech will launch next year offering a total throughput of 640Gbps.

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IT BULLETIN

DATE: 16.08.2019

ZUCKERBERG V/S GOVT. OF INDIA: 6 TIMES THE FACEBOOK CEO GOT THE STICK



The latest Pegasus spyware that targeted WhatsApp users in India has put its parent company, Facebook under the scanner yet again. Unsurprisingly, the social media giant got away scot-free. Facebook CEO Mark Zuckerberg finds himself at the receiving end of the Indian government's wrath yet again – this time around, it's for the Pegasus spyware that affected WhatsApp users.

July 2017 – when Facebook launched Internet.org – Zuckerberg's idea of providing internet to the masses -- did seem like a noble intention at first. However, questions were raised around how the parent company would use the data.

November 2018 – **WhatsApp struggles in fight against fake news and malicious content.** Facebook-owned WhatsApp faced severe criticism for failing to detect and prevent criminal activities and malicious content being circulated on its platform. A series of disturbing crimes including the lynching of innocent people stemmed from fake news and malevolent content.

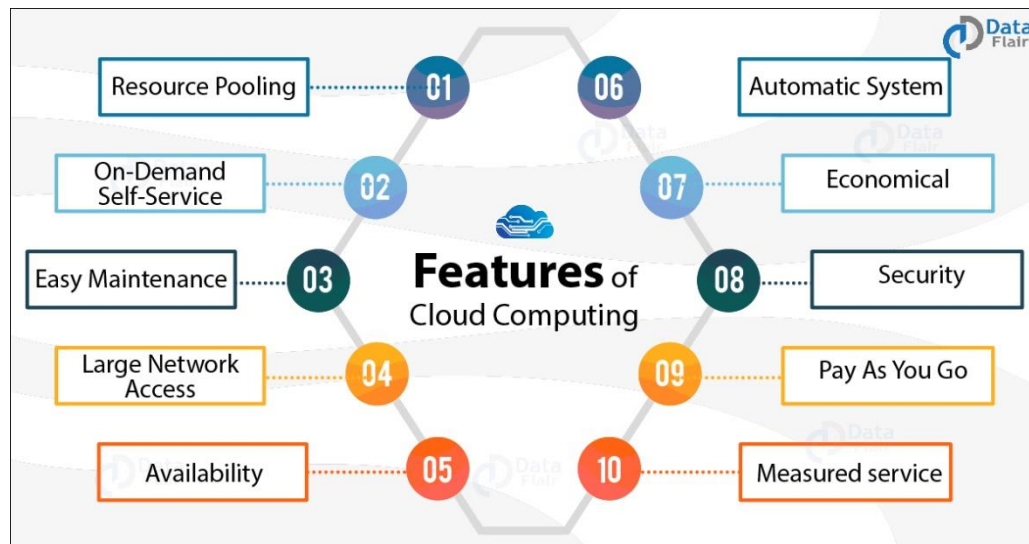
November 2019 – **CERT pulls up WhatsApp following Pegasus spyware**-Pegasus, the notorious spyware of Israeli origin, was discovered to have accessed personal information of 121 Indian users. Although the number may not sound alarming, it is reported that Pegasus targeted diplomats, government officials and journalists.

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HYBRID & MULTI-CLOUD SOLUTIONS



Hybrid Cloud will become the dominant business model in the future. The Hybrid Cloud model offers a transition solution that blends the current on-premises infrastructure with open cloud & private cloud services.

Multi-Cloud is the next step in the cloud evolution. It enables users to control and run an application, workload, or data on any cloud (private, public and hybrid) based on their technical requirements.

Backup and Disaster Recovery

According to Spiceworks report, 15% of the cloud budget is allocated to Backup and Disaster Recovery (DR) solutions, which is the highest budget allocation, followed by email hosting and productivity tools.

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IT BULLETIN

DATE: 19.08.2019

CLOCKY ROBOTIC ALARM

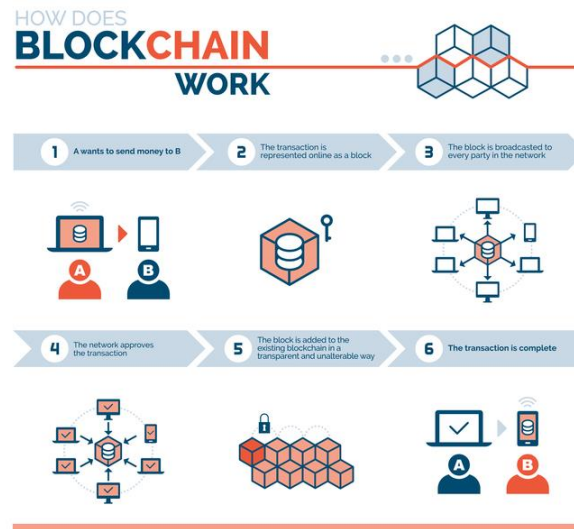


Have you felt the need for an alarm that can outsmart and wake you instantaneously? Clocky will make you run around the room before you can turn it off. This smart alarm clock runs away and hides as it continues to beep until you get off your bed. You can no longer snooze and go back to bed. Clocky will ensure you never oversleep again.

Clocky is a brand of **alarm** clock outfitted with wheels, allowing it to hide itself in order to force the owner awake in an attempt to find it. **Clocky alarm clock** to wake people who press the snooze button more than once and do not get up on time. This unusual **alarm clock** has wheels that turn so the **clock** rolls off the nightstand or counter and across the floor while the **alarm** is sounding.

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BLOCKCHAIN AS A SERVICE (BAAS)



The blockchain is undoubtedly one of the revolutionary technologies of the 20th century. It is so game-changing that plenty of startups and enterprises are working on their own blockchain solution. However, it is not always feasible to create, maintain and manage your blockchain solution. This is where Blockchain as a Service(BaaS) comes in. BaaS is a cloud-based service that allows customers to build their own blockchain powered products including apps, smart contracts, and use other blockchain features without the need for setup, manage or execute blockchain-based infrastructure.

Few companies including Amazon, Microsoft and others already provide this service. I think that the adoption of the use of BaaS will increase in 2019. It will also enable companies to use blockchain technology without worrying about the initial investment.

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IT BULLETIN

DATE: 20.08.2019

APPLE INC

- US tech giant Apple Inc is considering an investment of around Rs 1,000 crore in India soon. The iPhone maker has informed the government that it plans to establish an online selling platform as well as open three Apple retail stores across major cities in India over the next two to three years.
- "There have been meetings with company executives. The first store is likely to come up in Mumbai followed by Delhi and a third location is yet undecided," a government official told the Economic Times.
- This development follows the Union Cabinet's decision to relax foreign direct investment (FDI) norms for several sectors, including single brand retail, to attract foreign investors, and boost economic growth, promote Make in India and generate employment along the way.
- The company welcomed the government's decision and said that it planned to establish its first company-owned retail store apart from setting up its own online store in India.
- Infosys aims to earn 50% revenue from digital business; eyeing new deals worth \$6 billion in FY20, says Salil Parekh.
- India's second-biggest software services firm, Infosys Ltd is trying to push for higher margins as it is targeting to earn half its revenue from the company's digital portfolio which is its fast-growing vertical.

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EXPLAINED: WHAT IS ‘QUANTUM SUPREMACY’?



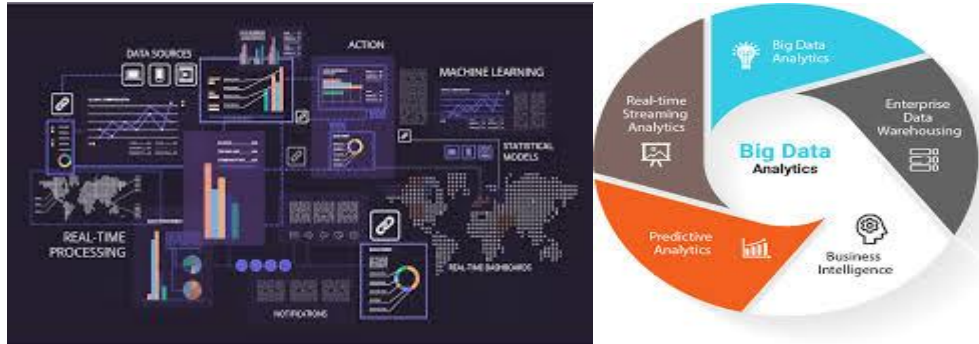
What have researchers at Google achieved? How are quantum computers different from regular personal computers? How will it impact the technology world?

Tech websites and theoretical computer-science outlets were aflame earlier in the U.K. based Financial Times said Google had claimed to have achieved ‘quantum supremacy’. In a line, it means that researchers at Google had solved a really difficult problem in seconds with the help of quantum computers which a supercomputer could not.

The research paper is yet to be formally vetted by peers in the field and became public after having appeared briefly on the National Aeronautics and Space Administration (NASA) website apparently some of its researchers were involved in the project. It is likely to reappear soon in a complete form.

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BIG DATA ANALYTICS



Big data analytics is the often complex process of examining large and varied data sets to uncover information such as hidden patterns, unknown correlations, market trends and customer preferences that can help organizations make informed business decisions.

The importance of big data analytics:

- New revenue opportunities
- More effective marketing
- Better customer service
- Improved operational efficiency
- Competitive advantages over rivals

Emergence and growth of big data analytics:

In 2001, Doug Laney, then an analyst at consultancy Meta Group expanded the notion of big data and also include increases the variety of data being generated by organizations and the velocity at which that data was being created and updated. The term **big data** was first **used** to refer to **increasing data volumes** in the mid1990s. In velocity and variety became known as the 3vs of big data, a concept Gartner popularized after acquiring Meta Group and hiring Laney in 2005.

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IT BULLETIN

DATE: 30.08.2019

RESEARCHERS DEVELOP LOW-POWER, LOW-COST NETWORK FOR 5G CONNECTIVITY

- A millimeter wave network for billions of things
- Source : University of Waterloo
- Summary: Researchers have developed a cheaper and more efficient method for Internet-of-Things devices to receive high-speed wireless connectivity.



With 75 billion Internet of Things (IoT) devices expected to be in place by 2025, a growing strain will be placed on requirements of wireless networks. Contemporary Wi-Fi and cellular networks won't be enough to support the influx of IoT devices, the researchers highlighted in their new study.

Millimeter wave (mmWave), a network that offers multi-gigahertz of unlicensed bandwidth -- more than 200 times that allocated to today's Wi-Fi and cellular networks, can be used to address the looming issue. In fact, 5G networks are going to be powered by mmWave technology. However, the hardware required to use mmWave is expensive and power-hungry, which are significant deterrents to it being deployed in many IoT applications.

"To address the existing challenges in exploiting mmWave for IoT applications we created a novel mmWave network called mmX," said Omid Abari, an assistant professor in Waterloo's David R. Cheriton School of Computer Science. "mmX significantly reduces cost and power consumption of a mmWave network enabling its use in all IoT applications."

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IT BULLETIN

DATE: 31.08.2019

CRYPTOCURRENCIES BACKED BY CASH COULD ELUDE NEW REGS

Stablecoins can include features that are typical of regulated securities, meaning they might be able to avoid new government oversight. Cryptocurrencies backed by cash could potentially be covered by the same regulations used to govern securities, according to a global financial oversight group. The finding could help move forward projects such as Facebook's Libra digital currency, known as a stablecoin. The International Organization of Securities Commissions (IOSCO), made up of securities regulators from the U.S., Europe and Japan, said [its analysis](#) shows "stablecoins can include features that are typical of regulated securities."



The cryptocurrency app will allow Facebook users to send, add or withdraw money "in just a few taps," using WhatsApp, and it will allow someone to fill their wallet, cash out or split a restaurant tab all using Messenger, "It is important that those seeking to launch stablecoins, particularly proposals with potential global scale, engage openly and constructively with all relevant regulatory bodies where they may be seeking to operate," Alder said. Unlike Bitcoin, which arguably has no intrinsic value because its based solely on supply and demand, "stablecoin" value is based on fiat currency or other assets to which it's tied such as real estate, precious metals or artwork.

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IT BULLETIN

DATE: 03.09.2019

ARTIFICIAL INTELLIGENCE (AI)

- Computer scientists at the university of leads are using the artificial intelligence (AI) techniques of the automated planning and reinforcement learning to “train” a robot to find an object in a cluttered , such as a warehouse self or in a fridge and move it.
- The aim is to develop robotic autonomy, so the machine can across the unique circumstances presented in a task and find a solution akin a to a robot transferring skills and knowledge to a new problem
- The big challenge is that in a confined area, a robotic arm may not be able to grasp an object from above. Instead it has to plan a sequence of moves to reach the target object. Perhaps by manipulating other items out of the way. The computer power needed to plan such a task is so great. The robot will often pause for serval minutes. And when it does execute the move it will often fail.
- Developing the idea of practicemakes perfect, the computer science scientist at leads are bringing together two ideas from AI.

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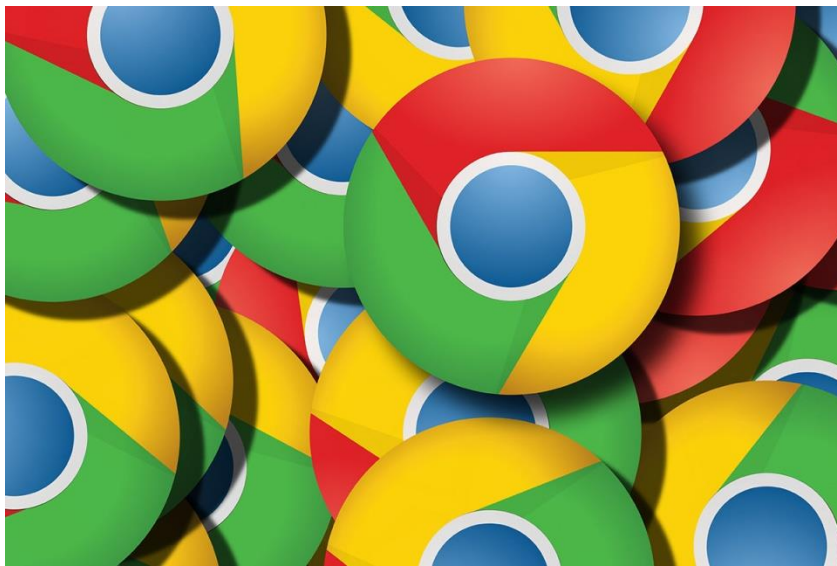
DEPARTMENT OF COMPUTER TECHNOLOGY AND INFORMATION TECHNOLOGY

IT BULLETIN

DATE: 04.09.2019

GOOGLE STRENGTHENS CHROME'S SITE ISOLATION TO PROTECT BROWSER AGAINST ITS OWN VULNERABILITIES

One Google engineer called site isolation 'the single greatest advance in browser security since the creation of the sandbox.' Google is telling Chrome users that it has extended an advanced defensive technology to protect against attacks exploiting vulnerabilities in the browser's Blink rendering engine.



Chrome 77, which launched in September but was supplanted by Chrome 78 on Oct. 22, received the beefed-up site isolation, wrote Alex Moshchuk and Łukasz Anforowicz, two Google software engineers, in an Oct. 17 post to a company blog. "Site Isolation in Chrome 77 now helps defend against significantly stronger attacks," the two said. "Site Isolation can now handle even severe attacks where the renderer process is fully compromised via a security bug, such as memory corruption bugs or Universal Cross-Site Scripting (UXSS) logic errors."

As of Chrome 77, the Android version also sports site isolation, Moshchuk and Anforowicz said in their post two weeks ago. The technology wasn't enabled the same way as on desktop personal computers, though. "Unlike desktop platforms where we isolate all sites, Chrome on Android.

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IT BULLETIN

DATE: 05.09.2019

MICROSOFT TEAMS GETS PRIVATE CHANNELS, EMAIL INTEGRATION WITH OUTLOOK

Microsoft's work stream collaboration platform is getting a slew of updates, including the long-awaited private channels and new IT admin controls. Microsoft Teams users can now converse with colleagues privately after the long-awaited introduction of private channels – one of a variety of updates announced by Microsoft at its Ignite conference in Orlando, Fla. this week. The company also highlighted enhanced integration with Outlook and a multi-window feature. Private channels have been in high demand from Teams users, and are the most requested feature on the Microsoft User Voice feedback page for Teams. The feature had been proposed by Microsoft before the launch of Teams in 2017, with a preview announced earlier this year.



The new feature allows Teams users to create channels that are viewable and accessible only by specified coworkers, which can be useful for teams dealing with sensitive or confidential content. “Every group, every team, every business has some discussions where they need to maintain some level of confidentiality,” said Karan Nigam, group product marketing manager for Microsoft Teams. “For a lot of companies, it is the financial data. With private channels, the intent is that any team can restrict the membership of that particular channel so that not everyone has access to [it] only a certain set of people do.”

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IT BULLETIN

DATE: 06.09.2019

TECHNOLOGY BUSINESSES

Technology businesses are at the heart of the UK economy, making cities greener and underpinning the financial, health, manufacturing, and mobility sectors

Pioneering

The UK has one of the world's largest technology ecosystems with thousands of tech start-ups, built around a strong entrepreneurial culture.

Multi-purpose

UK technology fuels our most successful sectors, including digital, healthcare, transport, creative, entertainment, financial services, cyber security, agriculture, and communications.

Diverse

Many of the world's best-known companies use technology innovations from the UK including artificial intelligence, Internet of things, data centres, and 5G communication

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IT BULLETIN

DATE: 07.09.2019

GOOGLE TO STOP INDEXING FLASH FOR SEARCH



With browser makers already putting the kibosh on the once-popular multimedia format, Google search is about to deliver something of a coup de grace. Google on Monday announced that it will soon stop indexing Flash content for its search engine, effectively throwing an invisibility cloak over that content.

"Google Search will stop supporting Flash later this year," Dong-Hwi Lee, an engineering manager, wrote in a post to the company's Webmaster Central blog. "In Web pages that contain Flash content, Google Search will ignore the Flash content. [And] Google Search will stop indexing standalone .swf files." Minus indexing, searches for Flash content will come up empty. If Google doesn't index it, in other words, does it exist?

For the vast majority on the web - analytics vendor Net Applications said Google accounted for 75% of global search activity last month - that would be a no. Google, for example, disabled Flash by default in Chrome 76, the version that debuted in July. (Users can manually turn on the Flash Player, as can IT admins through group policies.) Come Chrome 87 - currently slated for a December 2020 release - the browser won't run Flash at all.

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IT BULLETIN

DATE: 09.09.2019

WHAT HAPPENS AFTER WINDOWS 7'S RETIREMENT?



The January end-of-support deadline for Windows 7 is fast approaching. Here's a rundown of some of the issues companies should keep in mind as that date draws near. The operating system will continue to work or not, as it did or didn't, for each user the day before support retirement. That's important to remember, if only because some still don't assuming that after midnight on Jan. 14, 2020, the OS screeches to a stop.

Even Microsoft reminds customers that Windows 7 will continue to run post-retirement, although it could move those reminders closer to the top of its to-do list. In this FAQ about the end of support, Microsoft waited until the fifth item before making note of the operating system's resilience. "If you continue to use Windows 7 after support has ended, your PC will still work," Microsoft pledged, also noting, "Your PC will continue to start and run." Unlike Office, Microsoft will stop patching Internet Explorer 11 (IE11) at the same time it halts updates to Windows 7.

In other words, on Jan. 14, 2020. "As a component of Windows, Internet Explorer follows the support lifecycle of the Windows operating system it's installed on," Microsoft says and has for ages, since that's been boilerplate for seemingly forever. But elsewhere, the firm put it plainly. "Support for Internet Explorer on a Windows 7 device will also be discontinued on January 14, 2020," .The only way to keep receiving IE11 security updates in Windows 7 is to pay for Extended Security Updates (ESU).

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IT BULLETIN

DATE: 09.09.2019

**IIT KGP FACULTY WINS FACEBOOK AWARD FOR RESEARCH
INTARGETED MEDIA BIAS**

The award is part of Facebook’s initiative to encourage research on AI ethics and address intricate challenges and complex ethical questions in the AI domain. The award is part of Facebook’s initiative to encourage research on AI ethics and address intricate challenges and complex ethical questions in the AI domain. An IIT Kharagpur professor has been named for Ethics in AI Research Award, which is part of Facebook’s initiative, for his project dealing with bias in Indian media.



Animesh Mukherjee, Associate Professor at the Computer Science and Engineering department, has been selected for the Ethics in Artificial Intelligence (AI) Research Award in the ‘operationalizing ethics’ The award is part of Facebook’s initiative to encourage research on AI ethics and address intricate challenges and complex ethical questions in the AI domain, the statement said. for his project “Targeted Bias in Indian Media Outlets”, an IIT KGP statement. The award-winning project which is part of a collaborative work with Prof Pawan Goyal and PhD student Souvic Chakraborty, deals with the issue of fake news. Mukherjee, who has been working in the areas of AI, big data analytics and information retrieval, has arrived at a solution in leveraging available information on online published media.

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IT BULLETIN

DATE: 11.09.2019

IOT DEVICE MANAGEMENT



Recently completing a study evaluating the IoT device management market, Mind Commerce has identified an industry need for IoT device management solutions that encompass device provisioning, administration, monitoring, and diagnostics important for trouble replication and corrective measures.

Device installation and configuration will lead the industrial IoT device management segment at \$199M by 2024. Integrated platforms will lead consumer IoT device management, exceeding \$450M by 2024.

Chief among consumer IoT devices are those found in the healthcare industry. Managing medical device security and privacy is a major concern and opportunity for the healthcare vertical. With major initiatives underway for cybersecurity, the government segment will lead IoT device management.

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IT BULLETIN

DATE: 11.09.2019

CAN FACEBOOK'S LIBRA CRYPTOCURRENCY SURVIVE THE EXODUS?

Seven of the founding members of the Libra Association, Facebook's non-profit governing council for its planned cryptocurrency, have jumped ship amid increasing scrutiny by U.S. and European regulators. After the withdrawal of seven of the 29 founding members of the Libra Association, the governing council for Facebook's planned global cryptocurrency, the project's fate looks increasingly uncertain. PayPal, Visa, Mastercard, eBay, Stripe, Mercado Pago and Brooking Holdings have backed away from participation on the Libra Association; their hands were forced when all members met Monday in Switzerland for formalize their commitment to the project. Libra is currently scheduled to go live in 2020.



Dante Disparte, head of policy and communications for The Libra Association, said via email that the council will not launch the global payment system "until questions and concerns by regulators are addressed." "This is enshrined in our long launch runway, which has helped inform regulators, policymakers and other stakeholders around the world about our commitment to responsible financial innovation and strong oversight," Disparte said. "Our mission of financial inclusion enjoys broad global support. Over 1,500 entities have proactively reached out to the association about joining." "Industry experts and research analysts have speculated that Libra In separate statements after their departure, eBay and payment software provider Stripe said they "respect" or "support" the vision of the Libra Association. "However, eBay has made the decision to not move forward as a founding member. At this time, we are focused on rolling out eBay's managed payments experience for our customers," the company stated.

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DATE: 12.09.2019

ZOHO LAUNCHES WORKDRIVE TO PUT GREATER FOCUS ON TEAMWORK

Zoho's new file management system will replace Zoho Docs and serve as the underlying document storage platform for all of the company's 40-plus apps. Zoho has overhauled its cloud-based file management platform, placing greater emphasis on team collaboration and offering a single repository for documents across its portfolio of apps.



The company, which sells a range of office productivity and line-of-business applications, has offered Zoho Docs as its main file management tool for storing and accessing documents such as spreadsheets or presentations, similar to Google Drive, Dropbox or Microsoft OneDrive. To that end, Zoho created Team Folders – essentially shared workplaces to store files that relate to a particular team or project. Once added to a Team Folder account, a user gets access to files by default, with a graded range of role-based permissions for document access; certain users are able to view and comment only, for example, while others may be authorized to edit and share files more widely. Updates to documents will create alerts, allowing users to track project development. “The construct of Work Drive is built around the team,” said Vijay Sundaram, chief strategy officer at Zoho. “The ability of sharing, starting from working together on the documents to the workflow that moves the documents across people within the team, is all encapsulated in that structure without the user having to explicitly do anything.”

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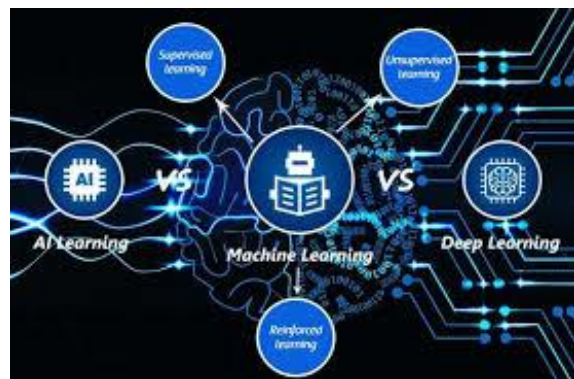
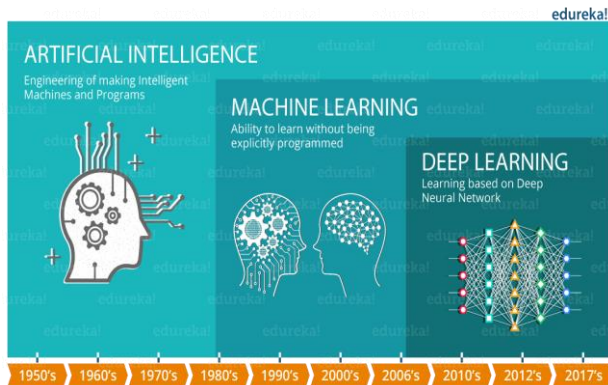
DEPARTMENT OF COMPUTER TECHNOLOGY AND INFORMATION TECHNOLOGY

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DATE: 13.09.2019

DEEP LEARNING

Deep learning is an artificial intelligence function that imitates the workings of the human brain in processing data and creating patterns for use in decision making. Deep learning is a subset of machine learning in artificial intelligence (AI) that has networks capable of learning unsupervised from data that is unstructured or unlabeled. Also known as deep neural learning or deep neural network. Deep learning has evolved hand-in-hand with the digital era, which has brought about an explosion of data in all forms and from every region of the world. This data, known simply as big data, is drawn from sources like social media, internet search engines, e-commerce platforms, and online cinemas, among others.



Deep learning is an AI function that mimics the workings of the human brain in processing data for use in decision making. Deep learning AI is able to learn from data that is both unstructured and unlabeled. Deep learning, a machine learning subset, can be used to help detect fraud or money laundering.

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