

New techniques expose your browsing history to attackers



Security researchers at UC San Diego and Stanford have discovered four new ways to expose Internet users' browsing histories. These techniques could be used by hackers to learn which websites users have visited as they surf the web.

The techniques fall into the category of "history sniffing" attacks, a concept dating back to the early 2000s. But the attacks demonstrated by the researchers at the 2018 USENIX Workshop on Offensive Technologies (WOOT) in Baltimore can profile or "fingerprint" a user's online activity in a matter of seconds, and work across recent versions of major web browsers.

All of the attacks the researchers developed in their that it's been used to visit each target site. When one of these sites tests positive, the phisher could then redirect their victim to the corresponding faked version.

The faster the attack, the longer the list of target sites an attacker can "sniff" in a reasonable amount of time.

The fastest history sniffing attacks have reached rates of thousands of URLs tested per second, allowing attackers to quickly put together

WOOT 2018 paper worked on Google Chrome. Two of the attacks also worked on a range of other browsers, from Mozilla Firefox to Microsoft Edge, as well various security-focused research browsers. The only browser which proved immune to all of the attacks is the Tor Browser, which doesn't keep a record of browsing history in the first place.

"My hope is that the severity of some of our published attacks will push browser vendors to revisit how they handle history data, and I'm happy to see folks from Mozilla, Google, and the broader World Wide Web Consortium (W3C) community already engage in this," said Deian Stefan, an assistant professor in computer science at the Jacobs School of Engineering at UC San Diego and the paper's senior author.

Most Internet users are by now familiar with "phishing;" detailed profiles of web surfers' online activity. Criminals could put this sensitive data to work in a number of ways besides phishing: for example, by blackmailing users with embarrassing or compromising details of their browsing histories.

History sniffing can also be deployed by legitimate, yet unscrupulous, companies, for purposes like marketing and advertising. A 2010 study from UC San Diego documented widespread commercial abuse of previously known history sniffing attack techniques, before these were subsequently fixed by browser vendors.

"You had internet marketing firms popping up, hawking pre-packaged, commercial history sniffing 'solutions', positioned as analytics tools," said Michael Smith, a computer science Ph.D. student at UC San Diego and the paper's lead author. The tools purported to offer insights into the activity of their clients' customers on competitors'

cyber-criminals build fake websites which mimic, say, banks, to trick them into entering their login details. The more the phisher can learn about their potential victim, the more likely the con is to succeed. For example, a Chase customer is much more likely to be fooled when presented with a fake Chase login page than if the phisher pretends to be Bank of America.

After conducting an effective history sniffing attack, a criminal could carry out a smart phishing scheme, which automatically matches each victim to a faked page corresponding to their actual bank. The phisher preloads the attack code with their list of target banking websites, and conceals it in, for example, an ordinary-looking advertisement. When a victim navigates to a page containing the attack, the code runs through this list, testing or "sniffing" the victim's browser for signs of websites, as well as detailed profiling information for ad targeting - but at the expense of those customers' privacy.

"Though we don't believe this is happening now, similar spying tools could be built today by abusing the flaws we discovered," said Smith.

The attacks the researchers developed, in the form of JavaScript code, cause web browsers to behave differently based on whether a website had been visited or not. The code can observe these differences - for example, the time an operation takes to execute or the way a certain graphic element is handled - to collect the computer's browsing history. To design the attacks, researchers exploited features that allow programmers to customize the appearance of their web page - controlling fonts, colours, backgrounds, and so forth - using Cascading Style Sheets (CSS), as well as a cache meant to improve to performance of web code.

VR reduces patient's pain

Innovative virtual reality technologies hold promise in reducing children's anxiety and pain before and after medical procedures and surgery.

A study found a virtual reality that induces a hypnotic state helped manage postoperative anxiety and pain in children. It found that virtual reality hypnosis reduced anxiety, total postoperative opioid consumption, and vomiting in children after scoliosis surgery.

Twenty-one children were included in the study out of which ten children received VRH support after surgery in addition to usual postoperative pain management. The children receiving VRH participated in one session per day for 20 minutes during the first 72 hours after surgery. They wore a helmet and goggles linked to software, which uses virtual reality hypnosis technology to decrease stress and anxiety after painful medical procedures. The children chose a scenario-beach, submarine or walking in mountains-and heard soothing speech and music to induce hypnosis.

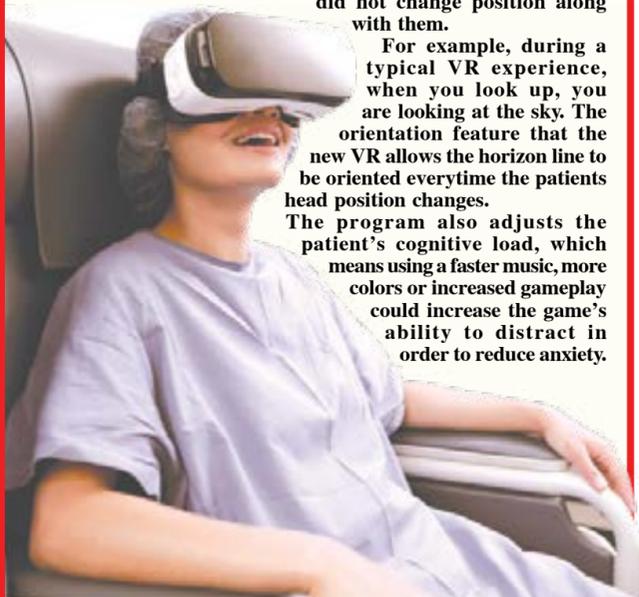
Morphine is associated with a sedating effect that may prevent patients from eating and walking sooner. The significant reduction in morphine use seen in patients given VRH which means they can have a quicker recovery. Children in VRH group were able to sit up and walk more quickly after surgery. Additionally, children in VRH group experienced less vomiting and their urinary catheters were removed sooner.

A second study examined over 600 patients, ages 6 to 18 years old, who were given a novel; virtual reality game which allows the user or clinician to reorient the gameplay in real time and adjust the cognitive load to increase its ability to distract patients, so their perception of pain is decreased.

We have known for years that pain and anxiety are highly correlated. If someone is extremely anxious about something that is about to occur, they are more likely to report pain. The main goal of this study to distract pediatric patients is to reduce their anxiety and perception of pain. The researchers developed a new VR platform in response to a problem they had encountered when using other VR programs-when a patient changed position, such as going from lying down to sitting, where the existing VR technology did not change position along with them.

For example, during a typical VR experience, when you look up, you are looking at the sky. The orientation feature that the new VR allows the horizon line to be oriented everytime the patients head position changes.

The program also adjusts the patient's cognitive load, which means using a faster music, more colors or increased gameplay could increase the game's ability to distract in order to reduce anxiety.



Brain-inspired methods to improve wireless communications

Researchers are always seeking more reliable and more efficient communications, for everything from televisions and cellphones to satellites and medical devices.

One technique generating buzz for its high signal quality is a combination of multiple-input multiple-output techniques with orthogonal frequency division multiplexing.

Virginia Tech researchers Lingjia Liu and Yang (Cindy) Yi are using brain-inspired machine learning techniques to increase the energy efficiency of wireless receivers.

They recently published their findings titled, "Realizing Green Symbol Detection Via Reservoir Computing: An Energy-Efficiency Perspective". Liu and Yi, associate and assistant professors respectively in the Bradley Department of Electrical and Computer Engineering, along with Liu's Ph.D. student Rubayet Shafin, are collaborating with researchers from the Information Directorate of the U.S. Air Force Research Laboratory - Jonathan Ashdown, John Matyjas, Michael Medley, and Bryant Wysocki.

This combination of techniques allows signals to travel from transmitter to receiver using multiple paths at the same time. The technique offers minimal interference and provides an inherent advantage over simpler paths for avoiding multipath fading, which noticeably distorts what you see when watching over-the-air television on a stormy day, for example.

"A combination of techniques and frequency brings many benefits and is the main radio access technology for 4G and 5G networks. However, correctly detecting the signals at the receiver and turning them back into something your device understands can require a lot of computational effort, and therefore energy," said Liu.

Liu and Yi are using artificial neural networks - computing systems inspired by the inner workings of the brains - to minimize the inefficiency. "Traditionally, the receiver will conduct channel estimation before detecting the transmitted signals. Using artificial neural networks, we can create a completely new framework by detecting transmitted signals directly at the receiver," said Yi.

This approach "can significantly improve system performance when it is difficult to model the channel, or when it may not be possible to



establish a straightforward relation between the input and output," said Matyjas, the technical advisor of AFRL's Computing and Communications Division and an Air Force Research Laboratory Fellow.

The team has suggested a method to train the artificial neural network to operate more efficiently on a transmitter-receiver pair using a framework called reservoir computing - specifically a special architecture called echo state network (ESN). An ESN is a kind of recurrent neural network that combines high performance with low energy.

Govt app connects public WiFi hotspots

The Government's new mobile app is all set to make it easier for us to access public Wi-Fi hotspots in the country. The department of telecommunication(DoT) has made an attempt to simplify the process of connecting to a public Wi-Fi hotspot. The app will support both one-time login and authentication to seamlessly connect to any public WiFi hotspot.

The government believes that the app will offer users cheaper and easier access to the internet compared to mobile data services. Apart from simplifying the process of connecting to public WiFi hotspots in the country, the app is also expected to boost the proliferation of public wifi hotspots. The application will be able to offload mobile data traffic on to WiFi networks.

"The app has been designed so that users can get on board the public WiFi through one-time authentication and does not have to repeat the entire process for accessing the next wifi hotspot," a person familiar with the app told Livemint. "The design also ensure back-end interoperability between telecom service providers, which means that if I am a mobile customer of a particular operator, I could seamlessly access WiFi hotspots run by other operators as well."

The seamless connectivity to wifi hotspot will be decongestion of mobile data networks in high-density areas. In the national digital communications policy, the government revealed its target to deploy 5 million public WiFi hotspots in the country by 2022 through a National Broadband Mission.

The DoT has also delicensed the 5GHz band, which was seen as a major hurdle for corporations and organizations, planning to create WiFi



hotspots. The public WiFi hotspots supported by a new app will be provisioned through BharatNet, previously called the National Optical Fiber Network.

In order to increase the footprint of public WiFi hotspots in the country, the regulator has prescribed a framework with interoperable standards to authenticate the user and payment mechanism to achieve bonding of operations. This will enable public hotspots to be created in a seamless manner and an entity setting it up won't be responsible for its marketing, customer, acquisition, payments, and settlements.



SpiceJet uses TaxiBot for taxiing aircraft to runway

New Delhi:

Spicejet has hooked up with TaxiBot for taxiing aircraft to runway. TaxiBot, a semi-robotic towbarless aircraft tractor developed by the Lahav Division of Israel Aerospace Industries can tow an aircraft from the terminal gate to the take-off point and return it to the gate after landing. The TaxiBot eliminates the use of airplane engines during landing and until immediately prior to take-off during taxi-out, significantly reducing aircraft fuel usage and the risk of foreign object damage. The TaxiBot is controlled by the pilot from the cockpit using the regular pilot controls and has an 800-hp hybrid-electric engine.

It would help in saving fuel, reducing CO2 emissions as well as noise levels, according to officials.

Currently, there are two TaxiBots at Delhi airport and would also be introduced at

According to the designers of the TaxiBot, fuel economy could reach up to 85% of kerosene during this phase of taxiing. A substantial saving in airports where the rolling are always endless.

Mumbai airport, an official said.

Apart from SpiceJet, Jet Airways and IndiGo would also be using TaxiBots, according to IAI.

In the release, SpiceJet said TaxiBot would help in "saving up to 85 per cent of fuel consumed during taxiing besides substantial reduction of noise levels".

As per KSU Aviation, around 40 TaxiBots would arrive in the country over four years. The company has the exclusive mandate from - Israel Aerospace Industries (IAI) and TLD to operate TaxiBots in India.

Xoriant recognized for IoT Technology Competency

With the world relying much on IoT based services, ample number of IoT based business firms are blooming up but only a few bag the best places. Xoriant, a Silicon Valley-based product engineering, software development and technology services firm, with offices in the U.S., Europe and Asia, announced that it has been prominently featured in the 2018 IoT Technology Services report by Zinnov - a global management & strategy consulting firm. It is placed in 'Execution Zone' for 5 major industry categories - Systems Integration, Platform & Application and Use Cases such as Predictive Maintenance, Supply Chain Intelligence and Customer 360 Xoriant.

Zinnov highlighted Xoriant's strength in key IoT technology services and competencies such as system integration and deployment, platform and application, strategy consulting and engineering capabilities. Xoriant has been positioned in the 'Execution Zone' for System Integration as well as Platform & Application Competency. Additionally, Zinnov recognized Xoriant's expertise and experience across various use case categories positioning them in the 'Execution Zone' for

predictive maintenance, supply chain intelligence and customer 360. Xoriant's strong position in these segments is a testament to its strong track record of being aware of the industry needs and bringing a unique combination of platforms, partnerships, and innovation to develop solutions that digitally transform customer's business.

With Xoriant's solutions across connected vehicles, supply chain, industrial and energy management customers are able to transform digitally while realizing measurable business benefits. They are continuing to make investments to grow exponentially and deliver value to clients at every step of their IoT journey. Xoriant has been able to establish itself as a competent provider of IoT engineering and System Integration services. The firm has built toolsets/IP for key functions across the IoT stack. In addition, the firm has partnered with enterprise customers to develop solutions for various IoT enabled use cases. Their competencies coupled with eco-system relationships enable them to be a valuable IoT partner for customers.

Google's AI predicts the end

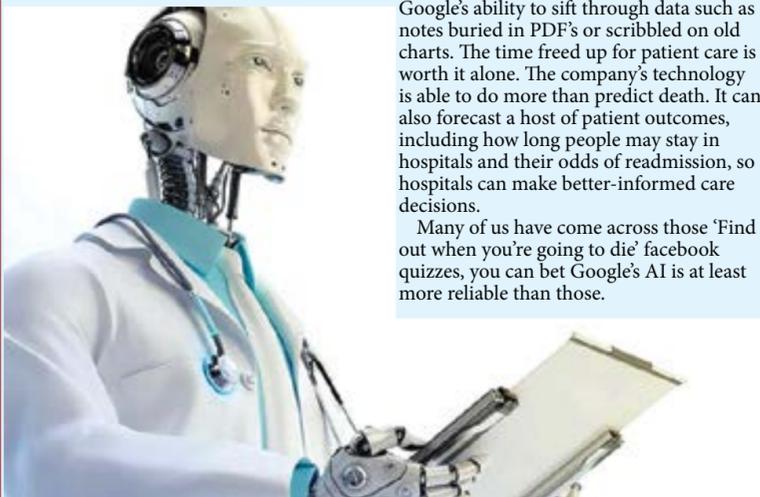
Google's AI, which it believes can predict if and when a patient is going to die is more reliable than doctors. The algorithm can quickly access a patient's medical records for more important data which could indicate the likelihood of their survival. Death comes for us all, the best we can hope for is that it's later rather than sooner and we get the chance to say goodbye. Google's AI would reduce the chances of a death

occurring suddenly while they are in care of the hospital.

A report highlights the case of a woman with cancer who arrived at the hospital with fluid in lungs. The doctors gave her a 9.3 percent chance of dying at the hospital while Google's algorithm put her chances higher at 19.9 percent. The woman sadly died a few days later.

Medical professionals were impressed by Google's ability to sift through data such as notes buried in PDF's or scribbled on old charts. The time freed up for patient care is worth it alone. The company's technology is able to do more than predict death. It can also forecast a host of patient outcomes, including how long people may stay in hospitals and their odds of readmission, so hospitals can make better-informed care decisions.

Many of us have come across those 'Find out when you're going to die' facebook quizzes, you can bet Google's AI is at least more reliable than those.



Turn everyday objects into robots

Scientists have come with robotic skin that converts any object into a robot. When you think of robotics, you likely think of something rigid, heavy and built for a specific purpose. New "robotic skins" technology developed by Yale researchers flips that notion on its head, allowing users to animate the inanimate and turn everyday objects into robots.

The skins are made from elastic sheets embedded with sensors and actuators developed in Kramer Bottiglio's lab. Placed on a deformable object- a stuffed animal or a foam tube, for instance- the skins animate these objects from their surfaces. The make-shift robots can perform different tasks depending on the properties of the soft objects and how the skins are applied.

"We can take the skins and wrap them around one object to perform a task-loco-



motion, for example-and then take them off and put them on a different object to perform different tasks, such as grasping and moving an object," she said. "We can then take those same skins, off that object and put them on a shirt to make an active wearable device."

Robots are typically built with a single

purpose in mind. The robotic skins, however, allow users to create multi-functional robots on the fly. Additionally using more than one skin at a time allows for more complex movements. For instance, you can layer the skin to get different types of motion.

To demonstrate the robotic skins in action, the researchers created a handful of prototypes. These include foam cylinders that move like an inchworm, a shirt like a wearable device designed to correct poor posture, and a device with a gripper that can grasp and move objects.

Kramer-Bottiglio was recently awarded a \$2 million grant from the National Science Foundation, as part of its Emerging Frontiers in Research and Innovation program. Next, she said, the lab will work on streaming the devices and explore the possibility of 3D printing.

Small flying robots haul heavy loads

Boston

Scientists have developed small flying robots that can carry objects up to 40 times their weight, and even heave open closed doors, making them useful for search and rescue operations.

The micro air vehicles, called FlyCrocTugs, can anchor themselves to various surfaces using adhesives inspired by the feet of geckos and insects.

With these attachment mechanisms, FlyCrocTugs can pull objects up to 40 times their weight, like door handles in one scenario, or cameras and water bottles in a rescue situation.

"Combining the aerodynamic forces of our aerial vehicle along with interaction forces that we generate with the attachment mechanisms resulted in something that was very mobile, very forceful and micro as well," said Matthew Estrada, a graduate student at Stanford University in the US.

Holding tightly to surfaces as they tug, the tiny robots could potentially move pieces of debris or position a camera to evaluate a treacherous area.



Hoping to have an air vehicle that was fast, small and highly manoeuvrable but also able to move large loads, the researchers looked to wasps.

"Wasps can fly rapidly to a piece of food, and then if the thing's too heavy to take off with, they drag it along the ground. So this was sort of the beginning inspiration for the approach we took," said Mark Cutkosky, from Stanford University.

Each FlyCrocTug has a winch with a cable and either microspines or gecko adhesive in order to tug. Beyond those fixed features they are otherwise highly modifiable.

Apple's iPads, Macs gets new screens

New York

Apple's new iPads and Mac computers bag a new screen. Apple's new iPads will more closely resemble its latest iPhones as they ditch a home button and fingerprint sensor to make more room for the screen. The new iPad Pro will use facial-recognition technology to unlock the device and to authorize app and Apple Pay purchases.

Apple also unveiled new Mac computers, including a MacBook Air laptop with a high-resolution screen. The new iPads will have an LCD screen similar to the iPhone XR rather than the more vibrant one found in the top-of-the-line iPhone XS models. The displays on the new iPads don't run to the edges as much as they do on the iPhones. The new iPads start at about \$800. An optional companion pencil will now be able to attach magnetically to the iPad for storage and charging.

Apple is bringing a high-resolution display to its low-end MacBook Air, something until now limited to pricier models such as



the MacBook Pro products. But the starting price is now about \$1,200, \$200 more than before.

The Air also joins higher-end Pros in sporting a fingerprint sensor, something the iPad just lost.

The new MacBook Air and iPad Pros will now use a standard, oval-shaped connector called USB-C. That means accessories using the iPad's old Lightning port will need adapters. But the change will allow people to charge their iPhones through the iPad.

Future lens-less cameras: Tiny light detectors will do the trick

Geckos and many other animals have heads that are too small to triangulate the location of noises the way we do, with widely spaced ears. Instead, they have a tiny tunnel through their heads that measures the way incoming sound waves bounce around to figure out which direction they came from.

Facing their own problem of minuscule size and triangulation, researchers from Stanford University have come up with a similar system for detecting the angle of in-coming light. Such a system could let tiny cameras detect where light is coming from, but without the bulk of a large lens.

"Making a little pixel on your photo camera that says light is coming from this or that direction is hard because, ideally, the pixels are very small - these days about 1/100th of a hair. So it's like having two eyes very close together and trying to cross them to see where the light is coming from," said Mark Brongersma, professor of materials science and engineering who is senior author

of a paper about this system, published recently.

These researchers are working on tiny detectors that could record many characteristics of light, including colour, polarity and, now, angle of light. As far as they know, the system they've described in this paper is the first to demonstrate that it's possible to determine angle of light with a setup this small.

"The typical way to determine the direction of light is by using a lens. But those are big and there's no comparable mechanisms when you shrink a device so it's smaller than most bacteria," said Shanhui Fan, professor of electrical engineering, who is a co-author on the paper.

More detailed light detection could support advances in lens-less cameras, augmented reality and robotic vision, which is important for autonomous cars.

If a sound isn't coming from directly over the top of the gecko, one eardrum essentially steals some of the sound wave energy that would otherwise tunnel through to the other. This inference helps the gecko

- and about 15,000 other animal species with a similar tunnel - understand where a sound is coming from.

The researchers mimic this structure in their photodetector by having two silicon nanowires - each about 100 nanometres in diameter or about 1/1000th as wide as a hair - lined up next to each other, like the gecko's eardrums. They are positioned so closely that, when a light wave comes in at an angle, the wire closest to the light source interferes with the waves hitting its neighbour, basically casting a shadow. The first wire to detect the light would then send the strongest current. By comparing the current in both wires, the researchers can map the angle of incoming light waves.

Geckos weren't the inspiration for the initial construction of this system. Soongyu Yi, a graduate student in electrical and computer engineering at the University of Wisconsin-Madison who is lead author of the paper, came upon the likeness between their design and geckos' ears after the work

had already begun. They were all surprised by the deep level of similarity. As it turns out, the same math that explains both the gecko ears and this photodetector describes an interference phenomenon between closely arranged atoms as well.

"On the theory side, it's actually very interesting to see many of the basic interference concepts that go all the way to quantum mechanics show up in a device that can be practically used," said Fan.

This project began when one of the paper's co-authors, Zongfu Yu, was a student in the Fan lab and took the initiative to combine his work there with research by Brongersma and his lab. They made progress but had to put the work on hold while Yu applied for faculty positions and, subsequently, established his lab at the University of Wisconsin-Madison, where he is now an assistant professor of electrical and computer engineering and in whose lab Soongyu Yi works.



Fastest trains on track, luxurious too



① Shanghai Maglev:

The world's fastest train isn't the newest, the shiniest, or even the one with the most expensive tickets. Charging \$8 per person, per ride, the Maglev runs the nearly 19 miles from Shanghai's Pudong International Airport to the Longyang metro station on the outskirts of Shanghai. The train which takes just over 7 minutes to complete the journey using magnetic levitation (maglev) technology, doesn't go to the city center. Inside the train, it is very modern, clean and comfortable, much like that in an airplane. Trained attendants are present. There is enough sitting space, since there are only 2 or 3 seats in a row. Air-conditioning is available and passengers can adjust the temperature by themselves. There is an LCD screen indicating the current running speed of the train. Many passengers pay close attention and some even take a picture, when the number of "431" appears on the screen.

Speed: 267 mph



④ The Italo and Frecciarossa:

Italy's dueling train operators, NTV and Trenitalia, each flaunt a high-speed train that ties as Europe's fastest, capable of shuttling passengers from Milan to Florence or Rome in under three hours. The Frecciarossa, or "red arrow," was unveiled during Expo 2015, held in Milan, and the train is remarkable as much for its speed as for its construction; its components are nearly 100 percent renewable and sustainable. Frecciarossa 500s originally had 1st & 2nd class seats. However, with private operator NTV's Italo trains now competing with Trenitalia on the Milan-Rome-Naples route, Trenitalia has refurbished its Frecciarossas with not two but four classes: Standard, Premium, Business and Executive.



② Fuxing Hao CR400AF/BF:

China wins again, also serving as home to the world's fastest non-maglev train currently in service. The name "Fuxing Hao" translates to mean "rejuvenation," and each of the two trains has been branded with nicknames: CR400AF is "Dolphin Blue," and the CR400BF is "Golden Phoenix." The "CR" stands for China Railway. Both take just under five hours to zip up to 556 passengers each between South Beijing and Shanghai Hongqiao Station, easily halving the nearly 10-hour time. The Fuxing Hao accommodates over 2,500 monitoring points to supervise temperature, braking and surroundings in real-time. Its interior space is also more comfortable than its predecessor as the carriage height has increased to around four meters from 3.7 meters and seat space is at least 102 centimeters. WiFi is available for the whole journey and more stable charging and lighting equipment are provided.

Speed: 249 mph

⑤ Renfe AVE:

Spain's fastest train is the Velaro E by Siemens, and it is used for long-distance services to major Spanish cities and beyond: traveling from Barcelona to Paris can be accomplished on high-speed rail in six hours. Traveling through Spain is an enchanting experience on an AVE high-speed train operated by RENFE. You'll enjoy your journey on the most modern train fleet in Europe, and also benefit from attentive service in all classes of travel. The AVE trains are a luxurious and efficient way to get around the country. With excellent customer service, punctuality and easy to understand fares, the AVE network continues to be a great boost to Spain's tourism and business.

Speed: 217 mph



③ Shinkansen H5 and E5:

The H5 and E5 series Shinkansen, respectively running the Tohoku and Hokkaido services, are two of the newer bullet trains on Japan's tracks, and so far the fastest in regular commercial service in the country cutting travel time between the country's two largest cities from nearly seven hours to a mere four by rail. It is designed to be a business and luxury car service. It comes with a premium first class seating area, called GranClass. The train features a long nose which extends 15m to the front. It prevents 'tunnel boom', the noises produced due to uneven air pressures when the train enters a tunnel at a high speed. The interiors feature genuine leather seats and wool carpeting. Dark wood and metallic elements were used create a comfortable atmosphere for the passengers.

Speed: 224 mph



⑥ Haramain Western Railway:

The Mecca-Medina high-speed link stretches the 281 miles between Saudi Arabia's most holy cities and has been in partial operation with full completion set soon. Traveling the length of the route takes two and a half hours, compared to five hours by car. Speed isn't the entire justification for the construction of this railway, however; the Haramain is expected to carry three million passengers a year, including many Hajj and Umrah pilgrims, relieving traffic congestion.

Speed: 217 mph



⑦ Deutsche Bahn ICE:

The distinctively futuristic white and silver of the Inter-City Express, or ICE, combined with its sharp red cheatline, makes an impressive sight speeding through the scenic German countryside, especially on its newest route connecting Berlin and Munich. Similar to Spain's Renfe AVE train, Germany's fastest train is another Siemens design, the Valero, and was built to fit through the Channel Tunnel. That's a serious asset for Deutsche Bahn's long-term plans to operate these trains from Frankfurt to London.

Speed: 205 mph

"If you can DREAM it, you can DO it."
-Walt Disney

Future Bright

Organisational behaviour - What is it?

An insight into its role in the Workplace.
Wishing all Happy Diwali!!!!

Organizational behaviour can be defined as – “the study and application of knowledge about human behaviour related to other elements of an organization such as structure, technology and social systems” L.M.Prasad. Stephen P Robins defines Organizational behaviour as a “systematic study of the actions and attitudes that people exhibit within organizations.”

Organizational behaviour is the study of the way individuals associate and interact within the group. Normally this study is applied to make more productive business associations. Organizational Behaviour is an interdisciplinary field, in that it draws incredibly from different subjects, like, Psychology, Sociology, Human studies, political theory and the roots of economics. The essential significance of organizational behaviour lies in understanding human behaviour. If the management can decipher legitimately the human needs within an organisation, it can move in the direction of satisfying those requirements and furthermore chalk out new plans and impetus in fulfilling the need of the workers and uplift them. There are numerous factors that promote productive organizational behaviour, say, achievements, self-actualization, encouragement, relationship and so on. The management should attempt to make sense of the main momentum that invigorates such behaviour and endeavour to incorporate more such factors in the work culture.

The role of Psychology in Organizational Behaviour: Psychologists have been able to modify individual behaviour with the help of different Psychological studies. It has contributed towards different hypotheses on learning, inspiration, Personality identification, training and development, theory on individual leadership, administration, work fulfilment, performance appraisal, self-image state, work configuration, work stress and conflict management. Studies of these assumptions can enhance individual abilities, acquire change state of mind and build up a positive attitude to deal with organizational Systems.

Various psychological tests are conducted in the Organisation for recruiting employees, estimating identity characteristics and inclinations. Different measurements of human identity are likewise estimated. These methods are logical in nature and have been established after a lot of research. Psychologists keep exploring new regions appropriate to the field of organizational behaviour. The contribution of psychological research has enhanced the organizational behaviour field to a very great extent.

The exploration of Sociology examines the effect of culture on group behaviour and has added to a huge degree to the field of the group dynamics, roles that individual plays in the Organisation, communication, principles, status, control, conflict management, formal association hypothesis, Group actions and collective choice making.

Different ideas and models in the field of organizational behaviour endeavour to recognize, human behaviour as well as to modify their state of mind and advance so they can act more adequately. This is done scientifically; hence, the organizational behaviour field is a scientific order. The information and models are for all intents and purposes connected to employees, groups and an organizational structure that give strategy to enhanced behaviour and rudiments of the relationship. The field of organizational behaviour likewise gives different Systems and models for a universal relationship that is connected to associations.

In his book on Organizational Behaviour, the Author Prof. Kondalkar brings out different perceptions. A leader must search for indicators of individual behaviour and of the groups in any Organisation. The indicators have a main driver underneath. As a Leader, it is that symptom, which must be assessed, and the reason for human behaviour built up so that if the behaviour is great, the managers can build up the standards of behaviour. If this behaviour isn't helpful to accomplish the organizational target, then the reasonable alternative model can be connected to channelize individual behaviour towards a fitting organizational esteem framework and along these lines of modified individual behaviour. An organization has three fundamental components specifically, individuals, structure, and upgraded technology.

Perception of employees
The manner in which a person sees comprehends and interprets things is what is called perception. While one employee may welcome a specific policy of the organisation, another may contradict it on the ground that it is a detriment to the interests of the employees. An Organisation must have a reasonable organizational structure, with a fitting number of level and detailing framework appropriately explained. A Leader must have the capacity to portray, comprehend, anticipate and control individual behaviour in the Organisation. There are Various approaches to Organizational Behaviour; Interdisciplinary methodology

Contingency Approach.
The contingency approach can also be called the situational approach depends on the premise that techniques or behaviours which work adequately in one circumstance but explodes in another. Results contrast since circumstances vary, the director's assignment, along these lines, is to recognize which strategy will, in a specific circumstance, under specific conditions, and at a specific time, best addition to the fulfilment of organisation's objectives. The quality of the possible approach lies in the reality it supports investigation of every circumstance preceding activity while in the meantime debilitates the routine with regards to widespread suspicions about techniques and individuals.

Efficiency approach
Profitability which is the proportion of yield to entering is a proportion of an association's viability. It likewise uncovers the administrator's productivity in advancing

Organizational behaviour is a coordination of all other sociologies and teaches, for example, brain research, human science, organizational hypotheses and so on. They all are reliant and impact one another. The man is examined in general and along these lines, all controls concerning man are incorporated.

HR Approach

This methodology perceives the way that individuals are the focal asset in any organisation and they ought to be produced towards more elevated amounts of competency, innovativeness, and fulfilment. People along these lines add to the accomplishment of the association. The HR approach is additionally called the strong methodology as in the director's job changes from the control of the worker to the dynamic help of their development and execution. The steady methodology appears differently in relation to the conventional administration approach. In the conventional methodology, supervisors chose what representatives ought to do and nearly observed their execution to guarantee assignment achievement. In the HR approach, the job of leaders changes from organizing and controlling to supporting.

Contingency Approach.

The contingency approach can also be called the situational approach depends on the premise that techniques or behaviours which work adequately in one circumstance but explodes in another. Results contrast since circumstances vary, the director's assignment, along these lines, is to recognize which strategy will, in a specific circumstance, under specific conditions, and at a specific time, best addition to the fulfilment of organisation's objectives. The quality of the possible approach lies in the reality it supports investigation of every circumstance preceding activity while in the meantime debilitates the routine with regards to widespread suspicions about techniques and individuals.

Efficiency approach
Profitability which is the proportion of yield to entering is a proportion of an association's viability. It likewise uncovers the administrator's productivity in advancing

Dr. Krishna Suresh M.D

Doctor of Alternative Medicine

NLP Practitioner/

Soft Skill Trainer/Faculty

softskillkrishna@gmail.com



asset usage. The higher the numerical estimation of this proportion, the more prominent the effectiveness. Organizational behaviour choices normally include human, social, and additionally monetary issues, thus profitability is ordinarily a huge piece of these choices is perceived and talks about broadly in the writing on Organisation Behaviour. Systems approach.

The Systems Approach to Organisation behaviour sees the Organisation as collective individuals, the premeditated framework made from interrelated parts. This methodology gives a manager a method for looking at the organization overall, complete, individual, group, and the entire social structure. In this manner, the Systems approach reveals to us that the action of any portion of an association influences, in differing degrees the action of each other section. A Systems view ought to be the worry of everyone in an association. The job of manager, at that point, is to utilize organizational behaviour to help assemble an organizational culture in which gifts are used and additionally created, individuals are roused, groups end up profitable, associations accomplish their objectives and society receives the benefit.

Managers in the Organisation should train their subordinates ceaselessly; point being a progress of abilities, development of efficiency and change of individual behaviour. It is a ceaseless procedure with respect to the manager. He should set down control measures with the goal that the energy of labourers is occupied towards organizational goals. Communication ought to be utilized to guarantee that the behaviour of the individual is guarded. A situation greatly affects human behaviour. The proper condition would assist the organisation with building a good work culture that will encourage people and groups in the Organisation to work viably towards higher profitability.

The manager ought to settle on the idea of structure and guarantee solidarity of order, various levels that might be required for compelling direction and control. Communication, a designation of power, all around characterized approaches, rules, control, frameworks, methods and procedures. Presentation of the most recent innovation is a fundamental piece of organizational improvement that ought to be dealt with by the chief in charge of running the organization. Occupations ought to be dispensed to the individual dependent on the inclination and the forms must be good with the innovation being utilized. A standout amongst the most essential segments is nature.

Study of organizational behaviour is exceptionally intriguing. It is the workmanship with respect to the managers to comprehend, portray, gauge and adjust individual behaviour. A considerable measure of studies has been attempted in the field of organizational behaviour and tremendous writing is accessible, which should be examined by an expert in the field of human resources.

Alliance University offers global exposure

Bangalore:

Alliance School of Business which has been ranked #10 among the best B-School by Outlook Magazine is one of the top institutions in the country for offering global exposure, to its students. The fact that Alliance School of Business has been ranked No. 10 by Outlook Magazine, for offering Global Business Courses, is a testimony to the University's commitment to excellence. Alliance University has collaborative agreements with 50 international partners in areas of academics, research, projects, internships, student and faculty exchange. These partnerships span across countries such as USA, UK, Switzerland, Italy, Russia, China, France and many more.

International programs are among the most exciting and career enhancing facets of a student's learning process. Understanding new cultures, improving foreign language skills, studying a discipline with an international perspective, and seeking new challenges are significant elements of a study-abroad experience. International programs are often the first stepping stone towards global awareness and there are many tailor-made options for students to choose from. International programs at Alliance University offer students a distinct and definitive advantage, enriching student careers.

Some of the International articulation agreements of Alliance University are with institutions such as: Antwerp Management School, Belgium; Beijing Institute of Technology, China; Berlin School of Economics and Law, Germany; Duisenberg School of Finance, The Netherlands; Georgia State University, USA; ICHEC Brussels Management School, Belgium; INSEEC, France; Kennesaw State University, USA; Nanhua University, Taiwan; National Tsing Hua University, Taiwan; Oakland



University, USA; Royal Roads University, Canada; San Jose State University, USA; Telecom School of Management, France; The University of Memphis, USA; Togliatti Academy of Management, Russia; Toulouse Business School, France; University of Dundee, UK; University of Milano Bicocca, Italy; University of Scranton, USA; and Webber International University, USA.

These associations help students at Alliance with an opportunity to study at internationally-renowned universities, while gaining an in-depth exposure to a different study environment.

Courses offered at Alliance School of Business: MBA: The MBA program at Alliance is crafted with utmost care and with the cooperation of academics and practitioners worldwide, the curriculum offered is rigorous, contemporary and forward-looking. Alliance University offers a full time MBA in Marketing, Finance, Organizational Leadership and Strategy, Operations, Retail, Banking and Financial Services, Hospitality, Entrepreneurship and Family Business, International Business and Communications.

PGDM (Post Graduate Diploma in Management): The two-year, full time PGDM course at Alliance School of Business beckons graduates with zeal to excel and experience learning like never before. With class room-based learning coupled with rich exposure to real time insights, this program will equip one to become a leader for tomorrow.

IIT Chennai sees increase in placement offers

Indian Institute of Technology Madras has seen an increase in Pre-Placement Offers (PPOs) yet again this Academic Year of 2018-19. As many as 130 students (Excluding Department of Management Studies Dept Students) of IIT Madras got PPOs (as of 22nd Oct 2018) as against 114 in the preceding year.

One of the principal reasons for this strong show in PPOs has been the robust internship program of IIT Madras, which results in students getting to intern in companies that are large recruiters.

The Department of Management Studies, IIT Madras, which coordinates its own internships and placements, also recorded an increase in PPOs during 2018-19.

The internships are facilitated through an Institute-coordinated process. The constant increase in PPOs is the result of excellent performance of students during the internships.

Speaking about the increase in PPOs this year, Prof. Manu Santhanam, Advisor, Training and Placement, IIT Madras, said, "The good number of PPOs is hopefully indicative of a strong placement season. The steady increase over the years in PPOs also points to the value placed by recruiters on the internship program."

The major sectors that offered PPOs during 2018-19 are as follows:

- * Core and R&D: 61 per cent
- * Analytics, Consulting & Finance: 19 per cent

* FMCG (Fast-Moving Consumer Goods): 14 per cent

* Information Technology: 6 per cent
The Companies that offered the highest number of PPOs are as follows:

** Qualcomm: 19
** Samsung Research (Noida, Delhi, Bangalore combined): 16

** Microsoft: 9
** Goldman Sachs: 8
** ITC Ltd: 7

** PPO from Start-ups (Aether Energy): 1
Major Recruiters from DOMS, IIT Madras, to give PPO/PPIs are companies such as Accenture, VIP Industries, Dell, Ford, Amazon, IBM, Tiger Analytics, Royal Bank of Scotland, Wipro and Fresh Works besides Titan and Crisil.

Speaking about the placement process at DOMS, Prof. Usha Mohan, Placement Coordinator, DoMS, IIT Madras, said, "A good number of companies visiting our Department do provide pre-placement offers to our students during their summer internships. We constantly strive to invite and work with firms that offer challenging projects and multiple job profiles to our students. We also support MSMEs and non-profit firms through our departmental initiatives."

Students also got to work on social organizations such as Rural Technology Action Group (RuTAG) and Government projects (from Madhya Pradesh) as part of summer internship process.