

New system to track robots, soldiers without GPS

Washington: Scientists, including one of Indian origin, have developed an algorithm that can help locate humans and robots in areas where GPS is unavailable.

According to scientists at the US Army Research Laboratory (ARL), they need to be able to localise agents operating in physically complex, unknown and infrastructure-poor environments.

"This capability is critical to help find dismounted Soldiers and for humans and robotic agents to team together effectively," said Gunjan Verma, a researchers at ARL.

"In most civilian applications, solutions such as GPS work well for this task, and help us, for example, navigate to a destination via our car," said Verma.

However, such solutions are not suitable for the military environment.

"For example, an adversary may destroy the infrastructure (eg satellites) needed for GPS; alternatively, complex environments (eg inside a building) are hard for the GPS signal to penetrate," said Fikadu Dagefu from ARL.

"This is because complex and cluttered environments impede the straight-line propagation of wireless signals," he said.

Dagefu said that obstacles inside the building, especially when their size is much larger than the wavelength of the wireless signal, weaken the power of the signal and re-direct its flow, making a wireless signal very unreliable for communicating information about location.

According to the researchers, typical approaches to localisation, which use a wireless signal's power or delay, work well in outdoor scenes with minimal obstacles; however, they perform poorly in obstacle-rich scenes.

Scientists developed a novel technique for determining the direction of arrival (DoA) of a radio frequency signal source, which is a fundamental enabler of localisation.

The underlying idea is that the gradient of the spatially sampled received signal strength, or RSS, carries information about the source direction. "Extracting the DoA requires a theoretically grounded analysis to obtain a

robust estimator in the presence of undesirable propagation phenomena," Verma said.

"For example, large obstacles cause the RSS samples nearby to become highly correlated (so-called "correlated shadowing"). If left uncorrected, this correlation can seriously bias the DoA estimate." The key invention according to the researchers is an algorithm that statistically models the RSS gradient and controls for spatial outliers and correlations.

When the signal is extremely noisy, the estimator correctly outputs that no DoA is present, rather than incorrectly estimating an arbitrary direction.

The researchers have validated the approach with several publically available as well as in-house collected measurement datasets.

The technique works in conditions of heavy multipath in which classical phase or time of arrival based estimates would fail.

In addition to not requiring any fixed infrastructure, the proposed technique also does not rely on any prior training data, knowledge about the environment, multiple antennas, or prior calibration between nodes.



U.S. Army Research Laboratory scientists Dr. Fikadu Dagefu and Gunjan Verma pose with one of the robots used to validate a new algorithm they developed.



Israeli students respond to Tech Startups

For the first time ever, in the 2017-2018 academic year there were more students in engineering than social sciences, says Council for Higher Education, Israel.

As high-tech salaries surge, and with demand for qualified workers on the rise, Israeli students are flocking to engineering, mathematics and computer programming, while shunning the more traditional fields of business and law.

According to data published by the council, for the first time ever in the 2017-2018 academic year, there were more students in Israel registered to study engineering, some 18.3% of the student population, than social sciences, which accounted for 17.9%. One out of four undergraduate students in Israel were studying either engineering or computer sciences. The numbers are a vindication of government efforts to boost the number of technology graduates emerging from its universities and colleges, as the so-called Startup Nation faces a shortage of skilled workers to fuel its ranks. With a thousand new startups being set up every year and multinationals flocking to Israel and setting up local R&D centers, Israel is feeling a manpower squeeze, which is pushing up salaries in the tech sector to among the highest in the world and generating friction between startup entrepreneurs and multinational giants in a battle for brains.

The Council believes this trend of increased enrollment in science studies will continue, as it has allocated millions of shekels to academic institutions to boost their abilities to educate students in these fields, the statement said. "Thanks to hundreds of millions of shekels of incentives, we have succeeded in bringing about a real change in the study tracks in Israel - much more engineering and high-tech studies, and fewer studies in courses in which the market is flooded, like law and business administration," said Yaffa Zilbershats, the chairman of the Council for Higher Education.

AI detects and combats online child abuse

US tech giant Google announced that it is employing a new Artificial Intelligence technology to combat online spreading of contents involving child sexual abuse.

Google said, its cutting-edge AI technology uses deep neural networks for image processing to help discover and detect child sexual abuse material (CSAM) online.

The new tool based on the deep neural networks will be made available for free to non-government organizations (NGOs) and other 'industry partners', including other technology companies, via a new Content Safety API service that could be offered upon request, Xinhua reported.

"Using the internet as a means to spread content that sexually exploits children is one of the worst abuses imaginable," Google Engineering Lead Nikola Todorovic and Product Manager Abhi Chaudhuri wrote in the company's official blog post.

The new AI technology will significantly help service providers, NGOs and other tech firms to improve the efficiency of CSAM detection and reduce the human reviewer's exposure

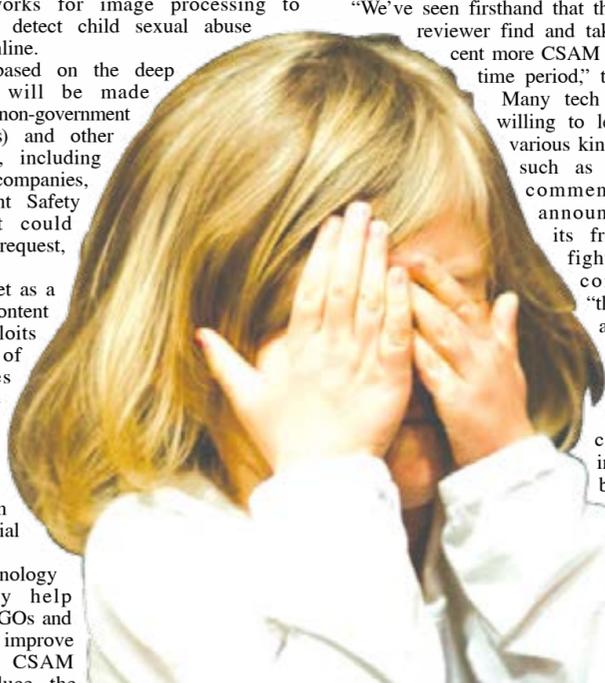
to the content, said two Google engineers.

"Quick identification of new images means that children who are being sexually abused today are much more likely to be identified and protect from further abuse," they noted.

"We've seen firsthand that this system can help a reviewer find and take action on 700 per cent more CSAM content over the same time period," they added.

Many tech companies are now willing to leverage AI to detect various kinds of CSAM contents such as nudity and abusive comments, and Google's announcement represents its fresh commitment to fighting online CSAM content by sharing "the latest technology advancements."

Google has been cooperating with some of its partners in combating online child sexual abuse, including the Britain-based charity the Internet Watch Foundation, the Technology Coalition, and the WeProject Global Alliance, as well as other NGO organizations.



TN e-Governance to be propelled by Chennai IIT

Chennai: The Robert Bosch Centre for Data Science and Artificial Intelligence (RBC-DSAI) at Indian Institute of Technology Madras is collaborating with the Tamil Nadu e-Governance Agency for enhancing data driven governance in the State. This will be carried out by working closely with various official branches and entities within the government of Tamil Nadu.

These collaborations are expected to contribute towards various aspects of governance, including but not limited to, education, healthcare, and agriculture.

Mr. Santhosh K. Misra I.A.S., Chief Executive Officer, Tamil Nadu e-Governance Agency, and Prof Ravindra Gettu, Dean (Industrial Consultancy and Sponsored Research), IIT Madras, signed the MoU on behalf of their respective institutions. The MoU was exchanged at a function held in Chennai today (9th October 2018) in presence of Minister of Information Technology Mr Manikandan

and Secretary of IT Mr Santhosh Babu. Speaking about the importance of this project, Dr. Nandan Sudarsanam, Assistant Professor, Department of Management Studies, IIT Madras, said, "Societal impact through AI is a central objective of RBC-DSAI at IIT Madras. We believe that by teaming up with the TNeGA we can contribute towards multiple pillars of the government, covering areas such as education, health-care, and agriculture."

Expressing happiness about this collaboration, Mr. Santhosh K Misra said, "Today Governance needs to move from demand mode of service delivery to predictive mode of service delivery. We need to deliver the services to people even before they ask. The Governments need to tap the power of AI, IoT, Blockchain and Drones in addressing the needs of their citizens. Tamil Nadu Government is the First state Government to collaborate with a premier research institute like IITM for harnessing the power of Artificial

Intelligence and Blockchain technology in areas of health, education and agriculture."

This collaboration seeks to take up five channels for engagement:

- * Support and collaborate on research relating data science for government and e-governance,

- * Through specific projects the parties will develop products, decision-support systems and provide insights from data,

- * Capacity Building in the areas of data science and Information and communications technology (ICT) for the Government of Tamil Nadu,

- * To conduct periodic Hackathons and workshops involving students in the areas of data science and ICT, and

- * Work towards creation of registered entities, potentially in collaboration with external IT vendors, to carry forward projects at a larger scale.

IIT Madras has agreed to work with TNeGA on the above broader scope and provide complete support to TNeGA.

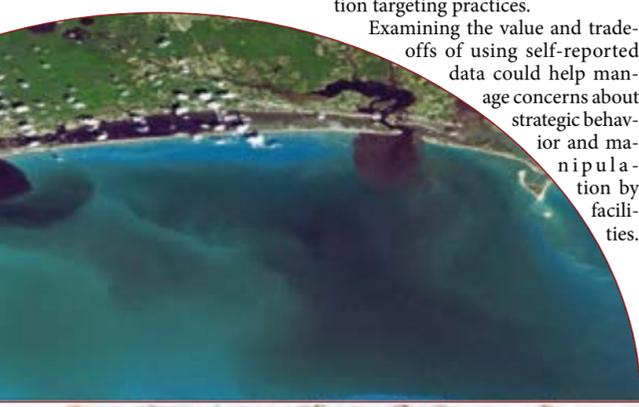
Machine learning to monitor nature



Environmental regulators have a new weapon which is, Machine learning method that could more than double the number of violations detected in the environment, according to Stanford researchers.

As Hurricane Florence ground its way through North Carolina, it released an excrement storm. Massive hog farm manure pools washed a stew of dangerous bacteria and heavy metals into nearby waterways. Satellite images of river outflows to the Atlantic Ocean show water discolored by debris including pollutants spilled by hog farms. A more efficient oversight might have prevented some of the worst effects, but the state and federal environmental regulators are overextended and underfunded to take much action. Help is at hand, however, in the form of machine learning, training computers to automatically detect patterns in data.

The study, published in Nature Sustainability, finds that machine learning techniques could catch two to seven times as many infractions as a



learning has its own flaws. Algorithms are at times imperfect, they can perpetuate bias at times and they can be gamed.

For example, agents, such as hog farm owners, may manipulate their reported data to influence the likelihood of receiving benefits or avoiding penalties. Others may alter their behavior, relaxing standards when the risk of being caught is low, if they know their likelihood of being selected by the algorithm.

The researchers suggest remedies to some of these challenges. Selecting some facilities at random, regardless of their risk scores, and occasionally re-training the model to reflect up to date risk factors could help keep low risk facilities on their toes about compliance. Environmental justice concerns could be built into inspection targeting practices.

Examining the value and trade-offs of using self-reported data could help manage concerns about strategic behavior and manipulation by facilities.

General Manager of District Industries Centre, Santosh Mishra, said if the online marketing initiative of e-commerce companies materialises, it will definitely enhance the sale of grass craft products.



Technology to help Odisha craftswomen

Kendrapara: Odisha grass craftswomen look up to the technology to promote their sales of their grass craft products. With e-commerce portals evincing keen interest to market their products, the women grass craft makers of a cluster of villages in Kendrapara district are elated at the prospect of augmenting their income.

Besides empowering the rural craftswomen by helping them earn better, the online platforms will help them by providing them a larger reach for their creations, he said.

"Marketing of the product was a major hindrance that was encountered by us. All of us engaged in this craft are excited after online sale offers were received by us recently.

"A leading e-commerce body has negotiated with us for online sale of our products. The deal is almost finalised barring some technical formalities", he said.

Several villages under Baro gram panchayat are known for the craft skills of their artisans, mostly women, who weave a wide variety of products with wild Golden Grass (Vetiver zizanioids), locally known as 'Kaincha Ghasa'. With their nimble fingers, the craftswomen create products ranging from hats, baskets, hand-fans, tablemats, wall-hangings to flower-pots and mats, mobile stand, pen stand, dining mat, bed light, dust bin, cap, and ladies bags.

This craft provides self-employment to over 200 families in Baro, Trilochanpur and Tarando villages, an official said.

Acer unveils self driving concept car

Acer unveiled a self-driving concept car at the Taiwan Automotive Technology Innovation Summit 2018.

Integrating Acer's autonomous driving system with the Luxgen S3 electric vehicle platform, the two companies demonstrated their level 4-ready self-driving concept car, showcasing their shared vision of AI (artificial intelligence) and autonomous driving technology.

"Both the automotive and ICT industries are going through a paradigm shift; automation, connectivity, electrification, and 'servicification' are key trends of future development," said Edward Lin, Associate Vice President, Value Lab, Acer Inc. "In the realm of smart transportation, Acer already has a foothold in electronic ticketing, smart parking, connected car, and traffic prediction, and we're excited to work with Yulon Group to venture into self-driving cars."

Lin also added, "With Acer's strength across software, hardware, and services, we're in a great position to leverage our AI technology and fulfil the vision of Mobility as a Service (MaaS)."

"Autonomous driving is the future trend of the automotive industry, manufacturers around the world are stepping up from level 2 autonomous driving to level 3 and 4," said Jung-Kuei Chen, Vice President, Product Engineering

Group II, HAITEC.

The level 4-ready self-driving concept car is based on the Luxgen S3 electric vehicle platform, with Acer's autonomous driving system encompassing sensing, decision-making and control. Acer's self-driving system leverages AI and sensor fusion algorithms fed with data from real-time kinematic (RTK) positioning, cameras, Lidars, MMW radars, IMU (inertial measurement unit) and ultrasonic sensors. It also uses deep learning technology to conduct object recognition and then implements dynamic vehicle control to realize autonomous driving.

Acer's self-driving system makes dynamic vehicle control decisions through AI models based on key data including image recognition, 3D Lidar obstacle detection, high-precision maps and real-time positioning to help the car steer, brake, cruise, manoeuvre, or park.

It also has a cloud management system for car sharing services so that a control centre can dispatch vehicles when users make transportation requests through their mobile device. The cloud management system can manage scheduling, monitoring, notification, and reporting, and allows safety monitoring and human intervention.



In the future, Acer's self-driving system can enable multiple levels of autonomous driving, with plans to open the platform to partners and developers to collaborate on next-generation self-driving services.

Humanoids spark fear

With human-like robots becoming a trend these days, a trendy brown bob humanoid robot named Erica chatted with a man from the audience and stunned the viewers of Madrid.

Erica and other humanoids are made an important focus of robotic research, as their human appearance could be the exact thing we need to include in the machines we use nowadays. Erica was presented in front of the audience. The man next asked, "You mentioned project management. Can you please tell me more?". He was playing the roll of an employer.

According to her creators, she may not understand the conversation, however she has been trained to respond using detected keywords.

A source of controversy was created due to fears for lack of human employment because of robots. However, researchers still beg to differ and claim that these robots will benefit us. "In aging societies, robots will co-exist with humans sooner or later," said Hiroko Kamide, a Japanese psychologist who specializes in relations between humans and robots.

"While it may not be the only form used for those coming into contact with humans, it's easier for people to accept the robots when they have human like faces because people can expect how the robots will move, will react", said Kamide.

Together they accept that whether robots are humanoid or not, they will become a part of our future.



World's first hydrogen fuel train



Germany has rolled out the world's first hydrogen-powered train. The trains are officially called as Coradia iLint, and these will operate in northern German towns.

Two bright blue Coradia iLint trains, built by French TGV-maker Alstom, began running a 62 mile route between the towns and cities of Cuxhaven, Bremerhaven, Bremerverder and Buxtehude in northern Germany, normally plied by diesel trains.

"The world's first hydrogen train is entering into commercial service and is ready for serial production," Alstom CEO Henri Poupart-Lafarge said at an unveiling ceremony in Bremerverder, the station where the trains will be refuelled with hydrogen.

Alstom has said it plans to deliver another 14 of the zero-emissions trains to Lower Saxony state by 2021, while other German states have also expressed an interest.

Hydrogen trains are equipped

with fuel cells that produce electricity through a combination of hydrogen and oxygen, a process that leaves steam and water as the only emissions. Excess energy is stored in ion lithium batteries on board the train.

The Coradia iLint trains can run for about 600 miles on a single tank of hydrogen, similar to the range of diesel trains.

Alstom is betting on the technology as a greener, quieter alternative to diesel on non-electrified railway lines, an attractive prospect to many German cities scrambling to combat air pollution.

Buying a hydrogen train is somewhat more expensive than a diesel train, but it is cheaper to run.

Other countries are also looking into hydrogen trains, Alstom said, including Britain, the Netherlands, Denmark, Norway, Italy and Canada. In France, the government has already said it wants the first hydrogen train to be on the rails by 2022.

AI Tackles Fake News

South Korea A KAIST professor has said Artificial Intelligence-based fact checkers could be more effective than humans in tackling fake news in future.

Professor Cha Mi-young who teaches computing at the Korea Advanced Institute of Science and Technology (KAIST), said big data efforts to quickly discover and prevent fake news from spreading are more important than ever in the age of automated journalism.

According to a study, Cha cited during a policy forum, AI-based fact checkers are able to identify fake news with an 80 per cent accuracy rate, even better than humans.

Cha spoke during the event "Dinner and 4.0", a monthly research conference for the fourth industrial revolution at KAIST where professors give presentations to researchers and students.

"Nearly half of the top 20 news articles on Facebook with the most likes during the 2016 U.S. presidential election turned out to be fake news. The fake news took advantage of the fact that most people just see a photo, or read a title or a lead, instead of checking to read the full article," Cha said.

According to Cha, fake news tends to attract views over a longer period of time than credible news, which is often read soon after it is published.

"Fake news tends to spread among unlikely people, as they share it among each other sporadically."

It is thought that fake news tends to begin with sentences like, 'I've heard it from somewhere', 'It is not clear', or 'According to someone', all of which avoid direct responsibility.

During the conference, predictions were made for the future of the media, with some suggesting news could be graded on a scale of one to five based on credibility.

"People might want real news, but also other types of news at the lower end of the credibility scale for entertainment purposes," Cha said while laughing.

"In a new era for the media where decisions are made automatically, such as robot journalism, big data research to swiftly identify fake news and stop it from spreading is becoming increasingly necessary," Cha added.



Cha Mi-young



1



Lenovo S5 Pro :

The Lenovo S5 Pro mobile features a 6.4" (16.26 cm) display with a screen resolution of 1080 x 2280 pixels and runs on Android v8.0 (Oreo) operating system. The device is powered by Octa core (2.2 GHz, Quad core, Kryo 260 + 1.8 GHz, Quad core, Kryo 260) processor paired with 6 GB of RAM. As far as the battery is concerned it has 3300 mAh. Over that, as far as the rear camera is concerned this mobile has a 12 MP camera.

Other sensors include Light sensor, Proximity sensor, Accelerometer, Compass, Gyroscope. So, does it have a fingerprint sensor? Yes, it does. For graphical performance that can make games run smoothly, this phone has got a Adreno 512 GPU. On board storage is at 64 GB with the option to expand the memory by Yes Up to 256 GB.

Launch date: Nov 21, 2018
Expected Price :Rs. 24,990

Trendy mobiles to hit market soon

2



Samsung Galaxy X:

We've been hearing rumblings for years that a foldable smartphone from Samsung was just around the corner. That corner wasn't in 2017. However, there's new reason to believe 2018 will be the year, thanks to comments from Samsung's mobile chief, DJ Koh, who related to CNBC that the device will debut before the end of 2018.

In fact, he hinted it may even be as soon as Samsung's developer conference, slated to begin Nov. 7.

When it does ship — perhaps next year — the phone is expected to fold out into a larger tablet, with the latest rumor suggesting a device that would leave part of the display uncovered when folded up so you could easily see incoming calls or an always-on display. The Galaxy X's most similar counterpart would have to be ZTE's Axon M, an AT&T-exclusive foldable handset that came out in 2017.

Launch date: 2019
Expected price: Rs. 39,990.

3



Nokia 7.1 Plus:

The Nokia 7.1 Plus mobile features a 6.18" (15.7 cm) display with a screen resolution of 1080 x 2246 pixels and runs on Android v8.1 (Oreo) operating system. The device is powered by Octa core (2.2 GHz, Dual core, Kryo 360 + 1.7 GHz, Hexa Core, Kryo 360) processor paired with 4 GB of RAM. As far as the battery is concerned it has 3400 mAh. Over that, as far as the rear camera is concerned this mobile has a 12 MP camera. Other sensors include Light sensor, Proximity sensor, Accelerometer, Compass, Gyroscope. So, does it have a fingerprint sensor? Yes, it does. For graphical performance that can make games run smoothly, this phone has got a Adreno 616 GPU. On board storage is at 64 GB with the option to expand the memory by Yes Up to 400 GB. Design is one of the most important factors when it comes to mobiles. This phone is 7.9 mm slim and weighs 185 grams.

Launch date: Oct 11, 2018
Expected Price:Rs.21,990.

4



Google Pixel 3, 3XL :

Following months and months of spot-on leaks, they're finally here. Google just took the wraps off of the Pixel 3 and Pixel 3 XL, both of which pack some big changes from last year's models.

The Pixel 3 sees more polish than last year's bland rectangle, bringing in some curves while trimming a bit of bezel on the top and bottom. The 5.5in 1080p OLED display is a bit larger, too, while the back is all glass now to enable wireless charging.

You'll get top-end Android tech inside, with a Qualcomm Snapdragon 845 chip and 4GB RAM, along with Android 9 Pie. And while other flagships are popping multiple cameras on the back, Google's stuck with one here — but puts two on the front to add a wider-angle group selfie option. New A.I.-driven tricks should produce even better photos and videos from the rear, however.

The Pixel 3 XL is essentially identical in terms of specs, aside from a larger battery, but it packs in a 6.3in Quad HD OLED display... and a rather deep notch atop the screen. The standard Pixel 3 doesn't have a notch.

Launch date: 2018.
Expected price: pixel 3 -Rs.71,000.
pixel 3XL -Rs.81,000.

5



OnePlus 6T:

If OnePlus follows the example it set last year when it released the OnePlus 5T in November, there's a good chance we'll see the OnePlus 6T within the next two months. Rumors to date suggest the 6T will boast a new teardrop notch design and potentially even debut on a U.S. carrier. That carrier is believed to be T-Mobile, though the device could make it to other networks as well. OnePlus has already announced the its next phone will feature an in-display fingerprint sensor while simultaneously removing the 3.5-mm headphone jack, so the 6T seems like it may end up being more than simply a basic redesign of the already excellent OnePlus 6.

Launch date: 2018
Expected price: Rs.36,999.

6



Xiaomi Redmi Note 6 Pro:

Xiaomi Redmi Note 6 Pro The phone comes with a 6.26-inch touchscreen display with a resolution of 1080 pixels by 2280 pixels.

The Xiaomi Redmi Note 6 Pro is powered by octa-core processor and it comes with 4GB of RAM. The phone packs 64GB of internal storage that can be expanded. As far as the cameras are concerned, the Xiaomi Redmi Note 6 Pro packs a 12-megapixel (f/1.9, 1.4-micron) + 5-megapixel primary camera on the rear and a 20-megapixel front shooter for selfies.

The Xiaomi Redmi Note 6 Pro is powered by a 4000mAh. It measures 157.90 x 76.38 x 8.20 (height x width x thickness).

The Xiaomi Redmi Note 6 Pro is a dual SIM (GSM and GSM) smartphone that accepts Nano-SIM and Nano-SIM. Connectivity options include Wi-Fi, GPS, Bluetooth, Micro-USB, 3G and 4G. Sensors on the phone include Fingerprint sensor, Proximity sensor and Accelerometer.

Launch date: November 28, 2018.
Expected price: Rs. 15,599.

7



Oppo K1:

Oppo K1 smartphone was launched in October 2018. The phone comes with a 6.40-inch touchscreen display with a resolution of 1080 pixels by 2340 pixels.

The Oppo K1 is powered by 2.2GHz octa-core processor and it comes with 4GB of RAM. The phone packs 64GB of internal storage that can be expanded up to 256GB via a microSD card. As far as the cameras are concerned, the Oppo K1 packs a 16-megapixel + 2-megapixel primary camera on the rear and a 25-megapixel front shooter for selfies.

The Oppo K1 is powered by a 3600mAh. Connectivity options include Wi-Fi, GPS and Bluetooth. Sensors on the phone include Fingerprint sensor, Compass/Magnetometer, Proximity sensor, Accelerometer and Ambient light sensor.

Launch date: Dec 26, 2018
Expected Price : Rs. 17,145

8



Moto G7:

The Moto G7 is a mid-ranged device from Motorola that offers users the best features and a premium smartphone experience. The cameras on the device are great for clicking pictures under any condition. It has a massive battery capacity which can provide enough power to give day-long backup. The device holds a configuration set perfect for any and all games plus all the multitasking jobs to run smoothly. The storage on the device is ample for the user need. The display is also good with a protected layer of glass that keeps it scratch proof.

The Moto G7 flaunts a stunning 6.4-inch IPS LCD display with a resolution of 1,080 x 2,240 pixels and a pixel density of 389ppi which can deliver an immersive viewing experience. The device is powered by a 3,500 mAh Li-ion battery which charges quickly with the help of Turbocharging. The device offers an internal space of 64GB which is ample for the files and data storage. It is expandable up to 256GB which provides room for the bigger files of the users.

Launch date: Oct 24, 2018
Expected Price : Rs. 19,990

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

Future Bright

SOCIAL SKILLS FOR EVERYONE

Dr. Krishna Suresh M.D

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The Importance of practising Social Skills

Social skills are the skills we use to communicate and interface with one another, both verbally and non-verbally, through gestures, non-verbal communication and our own physical appearance. Human beings have created numerous approaches to convey our messages, contemplations and sentiments with others.

There are numerous reasons why a human may have social skills deficiency. It could happen due to a lack of knowledge, say, the inability to get to know new skills, or in view of a competency insufficiency. Now and again, the individual may know how to play out the social skill; however, they may battle to perform because of constrained practice or inadequate feedback. There may likewise be inward or outer variables that meddle with the individual playing out the social ability, for example, tension or disordered environment. Here are five regular sorts of social skills shortages.

Essential Communication Skills

These incorporate the capacity to tune in, pursue bearings and avoid talking. For instance, listening skills include the capacities of focus and overlooking diversions. Great listening skills are shown by demonstrating consideration, for example, gesturing and grinning and giving criticism on what has been said or talked about. It additionally incorporates the capacity to allude to past remarks, for example, binds a present state to a past one, or inquiry about potential, future thoughts, activities and occasions. Essential relational abilities incorporate non-verbal communication and practices, like eye to eye connection, physical stillness and passionate mindfulness while the other individual is talking.

Empathy and Rapport Skills: Certain psychological, social and emotional well-being conditions may constrain a person's capacity to feel empathy and interface with others. This includes Autism, which accompanies archived social hindrances, and Borderline Personality Disorder. The individuals who experience the ill effects of serious social nervousness and the individuals who are exceptionally hesitant may show either too little or an excessive amount of spotlight on another person. This implies a few people with nervousness are edgy to please others and maintain a strategic distance from the encounter, so they will consider what others say, or constantly volunteer to help or do favours. The inverse of this, a few people will feel overpowered by their social

condition and just close around others.

Interpersonal Skills

Interpersonal skills incorporate the capacities of sharing, teamwork, group activity, requesting authorization. The individuals who have a social skill deficiency may battle with asking precise and succinct inquiries. Being not able to ask a straightforward question makes obstructions to getting data and starting a discussion. The individuals who battle to ask questions will seem unengaged and they even portray an enemy of social. Those with poor social skills may want to put the only close question because these inspire brief and controlled reactions. For grown-ups with constrained social skills, they may battle to understand appropriate conduct in various social settings and settings.

Critical thinking Skills

Critical thinking includes requesting help, apologizing to other people, choosing what to do and tolerating results. A few people may battle to distinguish the main drivers of issues, so they can't completely understand potential arrangements or systems. The individuals who battle with taking care of issues might be bleakly modest or clinically withdrawn. They may want to maintain a strategic distance from issues since it makes them feel awkward. The individuals who fight with taking care of issues will undoubtedly have poor conflict resolution skills. A few youngsters' battles to properly manage to prod, while a few grown-ups experience issues managing losing to the rivalry.

Responsibility

A few people are petrified of being criticised in the open. They may struggle with tolerating fault for issues or managing valuable criticism. A few people normally connect responsibility with dependability and development. Somebody who guarantees to accomplish something and then neglects to do it might have an authentic reason; however, their clear absence of responsibility may demonstrate that they are problematic and youthful. Responsibility is additionally a fundamental piece of peace promotion claiming perceiving botches is an amazing method to demonstrate a propitiatory and helpful state of mind.

The individuals who need to enhance their social skills should centre on mimicking attractive states of mind and taking out bothersome practices. They can utilize

displaying, pretending and execution criticism to enhance their social skills shortage.

One can begin enhancing their social skills by following these methodologies.

Carry on Like a Social Person you can carry on like a more social animal, regardless of whether you don't feel like it. Don't be overpowered by anxiety. Try not to enable uneasiness to keep you down. Settle on the choice to speak with new persons and to go into discussions notwithstanding when you're feeling anxious about it. After some time, it will get less demanding and you'll rapidly begin enhancing your social skills.

Begin Small if Necessary By heading off to a party or investing energy in a group may appear to be overwhelming, begin little. Go into a cab or an auto start conversation and on finishing the ride say, "Thank you," to the driver. Work on making casual discussion step by step.

Ask Open-Ended Questions if you need the reflection of yours predominant in a discussion, get acquainted with open-ended questions. Urge others to talk. By asking questions that require more than a yes or no answer and you may open the way to welcome the other individual to prop the discussion up.

Investigate these tips on How to Be Amazingly Good at Asking Questions.

Urge Others to Talk about Themselves

A great many people truly appreciate talking about themselves. Make an inquiry on their profession, leisure activities, or family. Show you're keen on hearing what is being said. By doing so you can prop the discussion up, you should make it like playing a game. By following step by step these instructions it is possible to Connect with Someone Deeper Within a Short Time. Make Goals for Yourself: Set up some little objectives for yourself. Maybe you need to hone one specific expertise or perhaps you need to begin going to a social movement in your locale. Set up an objective and start to chip away at methodologies that will enhance your social life. Figure out how to Use SMART Goal to enable you to impart better.

Offer Compliments munificently:

Compliments can be an awesome method to open the way to a discussion. Offer your colleague a compliment on an introduction or compliment your neighbour on

his new car. Good wishes can demonstrate to others that you are well disposed and there're more reasons why you should pay an admiring comment to someone every day.

Read Books about Social Skills: There are numerous books available that can enable you to learn social skills and approaches to begin discussions. In any case, remember that perusing about these skills won't make you a specialist. You'll have to rehearse them again and again.

Focus on Your Body Language: Non-verbal communication is critical. Focus on the sort of non-verbal communication you make use of. Attempt to seem loose, reach, and seem open to discussion.

Join a Social Skills Support Group:

Numerous groups offer social ability to bolster socialising. Care groups help individuals who feel modest, ungainly, or to a great degree on edge in social circumstances learn and rehearse new skills. You'll begin enhancing social skills and might have the capacity to make new friends who comprehend your challenges. Remain Up Date on Current Events Read up on current affairs and news stories so you have something to discuss with individuals. Endeavour to abstain from anything that is excessively disputable, say politics, religious issues, however, to discuss different news stories that might be of intriguing. It tends to be an incredible method to begin a discussion and can enable you to stick to nonpartisan subjects.

Distinguish and Replace Negative Thoughts:

If you have a heap of negative thoughts about your social relationship, it could turn into self-fulfilling prophecies. For instance, if a person thinks he is an introvert and extremely clumsy and I will humiliate myself," may sit in the corner at a meeting. Accordingly, he may leave the gathering feeling that he should be extremely awkward claiming nobody conversed with him. Distinguish negative thoughts that are moving you down. Supplant them with more reasonable thought, like "I can influence discussion and me to can meet new individuals." Try not to enable yourself to harp on the thought that isn't useful! Great social skills are basic for persuasive communication. Awesome social skills don't come effectively, you must hone yourself and truly attempt these tips by chatting with others.

IIT Hyderabad to host workshop on affordable housing for all

Hyderabad: Indian Institute of Technology Hyderabad is hosting a workshop on 'Affordable Housing for all using sustainable constructional materials' on Oct 27.

It is joint initiative of the Structural Steel Research Group from the Department of Civil Engineering, IIT Hyderabad with the Building Materials and Technology Promotion Council (BMTPC) under the aegis of Ministry of Housing and Urban Development, Government of India.

The workshop intends to bridge the gap between the researchers from academia and the professionals involved in sustainable growth of the nation.

Speaking about the importance of this workshop, Dr. Mahendrakumar Madhavan, Associate Professor, Structural Steel Research Group, Department of Civil Engineering, IIT Hyderabad, said, "The workshop is aimed to fulfill the Government's vision of Housing for all Indians by 2022 through the use of sustainable constructional materials such as steel. A number of eminent speakers from the construction sector will share their expertise with the participants."

The workshop intends to update the current curriculum at both undergraduate and postgraduate level to disseminate the knowledge of using sustainable materials in the constructional industry. Professors, Industrial Engineers, Research Scholars and students are expected to participate besides various industry representatives.

The present challenging situation necessitates a shift in paradigm to look for alternate materials that are green (eco-friendly) economical and has high ductility to prevent a catastrophic collapse in extreme events.

One such solution to tackle this pressing problem is the use of prefabricated structures using sustainable material such as Cold-Formed Steel or

Registration will close on Oct 23 and can be done on the following link: <https://sites.google.com/view/housingforall-iithyderabad/registration>.

Further information about the workshop can be obtained from: <http://www.iith.ac.in/ahfa>

Structural steel. Cold-Formed Steel (CFS) is light-weight, easy to handle, cost effective, dimensionally constant and can be fabricated with ease to a wide range of profiles and sizes with nearly no material wastage. An excellent alternative to traditional materials, the manufacture of CFS sections are subjected to rigorous quality control at the mill thereby reducing the risk associated with the quality of the structural material used in construction.

The majority of the work is being done in a controlled environment (shop), it takes less than half the time to build compared to conventional materials thereby making it an ideal choice for rapid deployment during emergency situations. Moreover, steel is 100 per cent reusable material and is environment-friendly resulting in Green construction.

The objective of this workshop is to create awareness and provide steel based alternate solutions to provide housing for all which is perhaps one of the most formidable challenges before the nation.



Warehouse Management

In the fiercely competitive world of business, warehousing has emerged as a major necessity and it plays an important role in enhancing organisational profits by providing various services, including storing of goods, receiving goods, picking items from a particular locality, and shipping goods to a stated destination. The importance of warehouse management can also be understood from the fact that organisations devise their strategies based on their warehousing capacity and investment in warehouses.

Due to the inherent advantages associated with warehouses, large numbers of companies have showed interest in maintaining their own warehouses. This is leading to demand for warehouse management professionals for coordinating the incoming goods, the subsequent storage and tracking of the goods, and finally, the distribution of the goods to their proper destinations.

Warehouse management is especially critical to the agriculture sector due to its role in addressing crop losses which is a must if India is to effectively address malnutrition and hunger. Agri-solutions firms are adopting robust warehouse management practices where the focus is on scientific practices, process-oriented methodologies and big data analytics to improve operational efficiency thereby bringing down inflation and end farmers' woes. These firms have taken the lead in adopting best warehouse management practices and processes for a robust supply chain management in agriculture. Growth in the e-commerce market is also fueling dramatic changes in the demand for warehouse management services. For example, many online retailers have found themselves needing to accelerate order fulfillment and shipping, interconnect operations across multiple locations, including brick-and-mortar stores, websites and mobile apps to maintain their competitive place in the industry. This requires organisations to gain a greater degree of control and transparency across their supply chains so that they can not only keep up with demand, but move items into and out of the warehouse at the rapid pace required within the industry.

