

# Long way before AI takes over human jobs

Los Angeles:

Artificial intelligence (AI) systems have a long way to go before they can take over tasks and jobs traditionally performed by people, say scientists who highlighted the severe limitations of deep learning computer networks.

Researchers at University of California, Los Angeles (UCLA) in the US conducted various experiments which showed that it is easy to fool the deep learning neural networks.

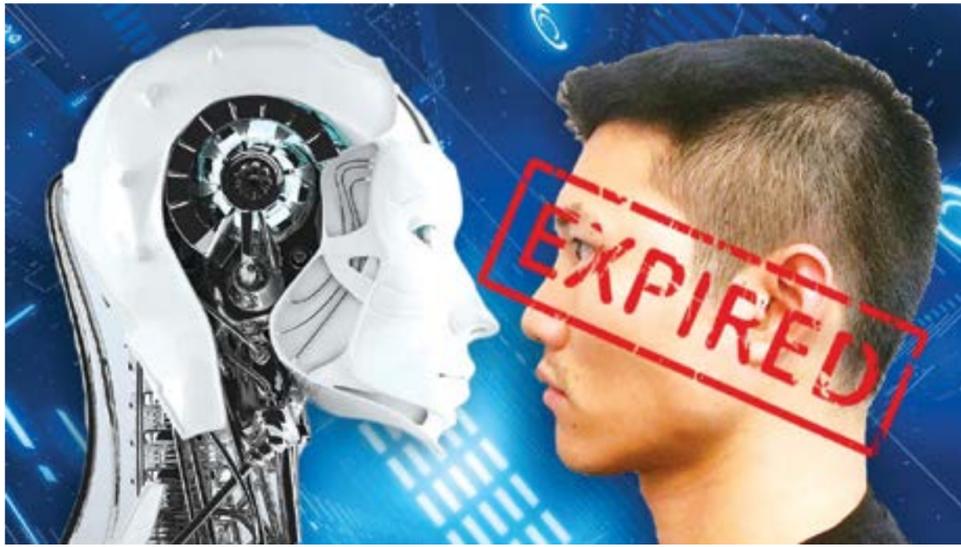
"The machines have severe limitations that we need to understand," said Philip Kellman, a UCLA professor and senior author of the study published in the journal PLOS Computational Biology. According to Kellman, machine vision has drawbacks.

In the first experiment, researchers showed colour images of animals and objects to one of the best deep learning networks, called VGG-19.

However, the images had been altered. For example, the surface of a golf ball was displayed on a teapot; zebra stripes were placed on a camel; and the pattern of a blue and red argyle sock was shown on an elephant.

VGG-19 ranked its top choices and chose the correct item as its first choice for only five of 40 objects.

"We can fool these artificial systems pretty easily. Their learning mechanisms are much less sophisticated than the human mind," said



Hongjing Lu, a UCLA professor.

In the second experiment, the psychologists showed images of glass figurines to VGG-19 and to a second deep learning network, called AlexNet. VGG-19 performed better on all the experiments in which both networks were tested.

Both networks were trained to recognise objects using an image database called ImageNet. However, both networks did poorly, unable to identify the glass figurines. Neither VGG-19 nor AlexNet correctly identified the figurines as their first choices.

Most of the top responses were puzzling to the researchers, such as VGG-19's choice of "website" for "goose" and "can opener" for "polar bear." On average, AlexNet ranked the correct answer 328th out of 1,000 choices.

"The machines make very different errors from humans," Lu said.

In the third experiment, the researchers showed 40 drawings outlined in black, with images in white, to both VGG-19 and AlexNet. These first three experiments were meant to discover whether the devices identified objects by their shape.

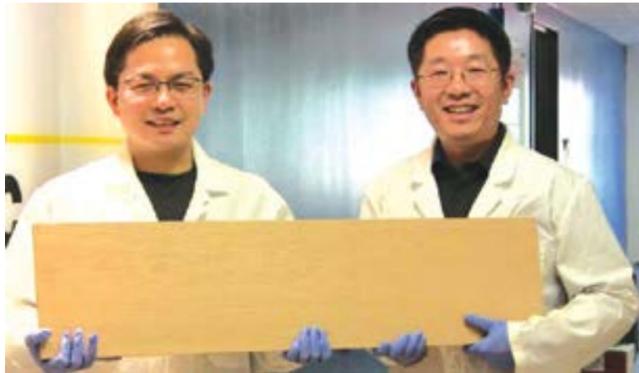
The networks again did a poor job of identifying such items as a butterfly, an airplane and a banana.

Researchers concluded that while humans see the entire object, the artificial intelligence networks identify fragments of the object.

"This study shows these systems get the right answer in the images they were trained on without considering shape," Kellman said.

"For humans, overall shape is primary for object recognition, and identifying images by overall shape doesn't seem to be in these deep learning systems at all," he said.

There are dozens of deep learning machines, and the researchers think their findings apply broadly to these devices.



## Metallic wood stronger, lighter than titanium developed

Washington:

Scientists have designed a novel 'metallic wood' that is stronger, but at least four times lighter, than titanium.

High-performance golf clubs and airplane wings are made out of titanium, which is as strong as steel but about twice as light.

These properties depend on the way a metal's atoms are stacked, but random defects that arise in the manufacturing process mean that these materials are only a fraction as strong as they could theoretically be.

Researchers at the University of Pennsylvania in the US and the University of Cambridge in the UK have built a sheet of nickel with nanoscale pores that make it as strong as titanium but four to five times lighter.

The empty space of the pores, and the self-assembly process in which they are made, make the porous metal akin to a natural material, such as wood.

Just as the porosity of wood grain serves the biological function of transporting energy, the empty space in the researchers' "metallic wood" could be infused with other materials.

Infusing the scaffolding with anode and cathode materials would enable this metallic wood to serve double duty: a plane wing or prosthetic leg that is also a battery, researchers said.

"The reason we call it metallic wood is not just its density, which is about that of wood, but its cellular nature," said James Pikul, an assistant professor at University of Pennsylvania.

"We have areas that are thick and dense with strong metal struts, and areas that are porous with air

gaps. We're just operating at the length scales where the strength of struts approaches the theoretical maximum," Pikul said.

The struts in the researchers' metallic wood are around 10 nanometres wide, or about 100 nickel atoms across. Other approaches involve using 3D-printing-like techniques to make nanoscale scaffoldings with hundred-nanometre precision, but the slow and painstaking process is hard to scale to useful sizes.

"We've known that going smaller gets you stronger for some time, but people haven't been able to make these structures with strong materials that are big enough that you'd be able to do something useful," Pikul said.

"Most examples made from strong materials have been about the size of a small flea, but with our approach, we can make metallic wood samples that are 400 times larger," he said.

Replicating the production process at commercially relevant sizes is the team's next challenge. Unlike titanium, none of the materials used by the researchers are particularly rare or expensive on their own, but the infrastructure necessary for working with them on the nanoscale is currently limited.

Once that infrastructure is developed, economies of scale should make producing meaningful quantities of metallic wood faster and less expensive, researchers said. Once the researchers can produce samples of their metallic wood in larger sizes, they can begin subjecting it to more macroscale tests. A better understanding of its tensile properties, for example, is critical.

## Researchers create tendril-like soft robot that can climb

Researchers at IIT-Istituto Italiano di Tecnologia created the first soft robot mimicking plant tendrils: it is able to curl and climb, using the same physical principles determining water transport in plants. The research team is led by Barbara Mazzolai and results have been published recently. In the future this tendril-like soft robot could inspire the development of wearable devices, such as soft braces, able to actively morph their shape.

Barbara Mazzolai was listed in 2015 among the 25 most influential women in robotics by RoboHub, and in 2012 she coordinated the EU-funded project "Plantoid" that brought to the first plant robot worldwide. The research team includes Edoardo Sinibaldi and Indrek Must. It is a small yet well-assorted team, based on complementary backgrounds: Must is a materials technologist with a PhD in engineering and technology, Sinibaldi an aerospace engineer with a PhD in applied mathematics, Mazzolai a biologist with a PhD in microsystems engineering.

Researchers took inspiration from plants and their movement. Indeed, being unable to escape (unlike animals), plants have associated their movement to growth, and in



doing so they continuously adapt their morphology to the external environment. Even the plants organs exposed to the air are able to perform complex movements such as, for example, the closure of the leaves in carnivorous plants or the growth of tendrils in climbing plants, which are able to coil around external supports (and uncoil, if the supports are not adequate) to favor the growth of the plant itself.

The researchers studied the natural mechanisms by which plants

exploit water transport inside their cells, tissues and organs to move, and then they replicated it in an artificial tendril. The hydraulic principle is called "osmosis" and is based on the presence of small particles in the cytosol, the intracellular plant fluid.

Starting from a simple mathematical model, researchers first understood how large a soft robot driven by the aforementioned hydraulic principle should be, in order to avoid too slow movements. Then, giving the robot the shape of

a small tendril, they achieved the capability of performing reversible movements, like the real plants do.

The soft robot is made of a flexible PET tube, containing a liquid (with electrically charged particles (ions). By using a 1.3 Volt battery these particles are attracted and immobilized on the surface of flexible electrodes at the bottom of the tendril; their movement causes the movement of the liquid, whence that one of the robot. To go back, it is enough to disconnect the electric wires from the battery and join them.

The possibility of exploiting osmosis to activate reversible movements has been demonstrated for the first time. The fact of having succeeded by using a common battery and flexible fabrics, moreover, suggests the possibility of creating soft robots easily adaptable to the surrounding environment, thus with potential for enhanced and safe interactions with objects or living beings.

Possible applications will range from wearable technologies to the development of flexible robotic arms for exploration. The challenge of imitating plants' ability to move in changing and unstructured environments has just begun.

## Computer chip vulnerabilities discovered

A Washington State University research team has uncovered significant and previously unknown vulnerabilities in high-performance computer chips that could lead to failures in modern electronics.

The researchers found they could damage the on-chip communications system and shorten the lifetime of the whole computer chip significantly by deliberately adding malicious workload.

Led by Partha Pande, assistant professor in the School of Electrical Engineering and Computer Science, they reported on the work during the recent 2018 IEEE/ACM International Symposium on Networks-on-Chip.

Researchers have been working to understand the vulnerabilities of computer chips as a way to prevent malicious attacks on the electronics that make up everyday life. Some consumer electronics vendors, such as Apple and Samsung, have been accused of exploiting vulnerabilities in their own electronics and sending



software updates that intentionally slow down earlier phone models to encourage consumers to purchase new products.

Previous researchers have studied computer chip components, such as the processors, computer

memory and circuits for security vulnerabilities, but the WSU research team found significant vulnerabilities in the sophisticated communications backbone of high-performance computer chips.

"The communications system

is the glue that holds everything together," said Pande. "When it starts to malfunction, the whole system is going to crumble."

High-performance computers use a large number of processors and do parallel processing for big data applications and cloud computing, and the communications system coordinates the processors and memory. Researchers are working to increase the number of processors and incorporate high-performance capabilities into hand-held devices.

The researchers devised three "craftily constructed deleterious" attacks to test the communications system. This additional workload enhanced electromigration-induced stress and crosstalk noise. The researchers found that a limited number of crucial vertical links of the communication system were particularly vulnerable to fail. Those links connect the processors in a stack and allows them to talk with each other.

# Apple disables Group FaceTime

A report on The Verge says Apple has temporarily disabled its Group FaceTime feature in iOS and macOS. The feature has been disabled on the server side, and this appears to fix the problem for many users. The privacy bug let others users listen in to the audio of the other party, even if the call was not picked up.

Apple's FaceTime video and audio-calling feature has a major privacy bug, which could allow users to listen to the other end without the incoming call being accepted or rejected, according to a report from 9to5Mac. Apple has also responded to the issue promising a fix for this problem with a software update later in the week. The company just rolled out iOS 12.1.3 last week.

In an official statement, an Apple spokesperson said, "We're aware of the

issue and we have identified a fix that will be released in a software update later this week."

As the report points out, the FaceTime privacy bug is a major problem because it could allow anyone to listen to another iOS user. It also appears that the recipient is unaware that the other party is listening, though the FaceTime call does ring.

The report adds that they managed to reproduce the bug with an iPhone X calling an iPhone XR and that the problem

impacts any pair of iOS devices running iOS 12.1 or later.

All one has to do while making an iPhone FaceTime call is to add their own number while the call is dialing, by swiping up from the bottom and tap on the add person option.

This would create a group call, and the audio of the person one has called can be heard even if they have not accepted the call. The report adds that in the FaceTime interface it looks like the other person has joined the group chat, but the call is still ringing.

As the report points out, this could potentially allow users to listen to any other iPhone user's call. The problem also appear to be there when a call is made to a Mac from an iPhone. It also appears that the user's video feed can be spied on by the other caller.



## 3D-printed soft robots to mimic creatures living on water

Washington : Scientists have developed 3D-printed flexible mesh structures that can be used as soft robots which mimic creatures living on water surfaces or can serve as tissue scaffolds for cell cultures.

The flexible mesh structures can be controlled with applied magnetic fields while floating on water, and could grab small objects and carry water droplets, according to the research published in the journal Advanced Materials Technologies.

"This research shows capabilities in the emerging field of combining 3D printing and soft robotics," said Orlin Velev, a professor at the North Carolina State University in the US.

The researchers made an "ink" from silicone microbeads, bound by liquid silicone and contained in water.

The resulting "homo composite thixotropic paste" resembles common toothpaste, which can easily be squeezed out of a tube but then maintains its shape on your toothbrush without dripping.

The researchers used a 3D printer to shape the paste into mesh-like patterns. The patterns are then cured in an oven to create flexible silicone structures that can be controlled - stretched and collapsed - by the application of magnetic fields.

This self-reinforced paste allows us to create structures that are ultra-soft and flexible.

The structures are also auxetic, which means that they can expand and contract in all directions. With 3D printing, we can control the shape before and after the application of the magnetic field.

# Israeli device to protect swimmers from drowning

Israeli startup Coral Detection Systems unveiled at the Consumer Electronics Show in Las Vegas last week a product that it says is able to quickly detect drownings in swimming pools and alert rescuers.

The product, Coral Manta, which the company calls "the first of its kind," is a hexagonal-shaped device, the same shape as the large flattened manta ray fish it's partly named after, powered by solar panels covering its surface. When positioned at the edge of a swimming pool, the device monitors the pool via a built-in underwater video camera that uses computer vision and artificial intelligence to detect movement.

The device monitors the pool 24/7 and uses artificial intelligence to analyze real-time video captured by the camera. In case of drowning or dangerous circumstances, the device sounds an alarm to alert people in the vicinity to help the victim and simultaneously sends an alert to the pool's owners via their smartphones.

Immediate response is essential, since four to five minutes without oxygen can cause irreversible brain damage for children, and

for adults that time decreases to three to four minute, the company's website explains. In most cases, when people drown they sink to the bottom quickly, just seconds after they have stopped breathing. Coral Manta is programmed to identify such situations and sets off escalating alarms within seconds, the website says.

In case of false alarm, users just have to tell Coral Manta to ignore the alert through the smartphone or tablet app.

When the daylight absorbed is not enough to charge the batteries, Coral Manta can be plugged in for a couple of hours to be recharged, the website says.

Coral Manta can be used for both above-ground and in-ground pools, and is meant to substitute for pool alarms that need to be turned off when the pool is not in use as well as other precautionary solutions like pool covers and fences, or devices like wrist bands which need to be worn by every single swimmer, the company's website explains.

The device's own sensors and illumination can also be used in the nighttime to see and track swimmers who are underwater.



## Electric vehicles to get 800km on single charge

Washington Scientists say they have developed several two-dimensional (2D) materials which may enable electric vehicles to clock up to 800 kilometres on a single charge.

Lithium-air batteries, which

are still in the experimental stages of development, can store 10 times more energy than currently used lithium-ion batteries, and they are much lighter, said researchers from the University of Illinois at Chicago (UIC) in the US.

Lithium-air batteries could be even more efficient and provide more charge with the incorporation of advanced catalysts made from two-dimensional materials, they said.

Catalysts help increase the

rate of chemical reactions inside batteries, and depending on the type of material from which the catalyst is made, they can help significantly boost the ability of the battery to hold and provide energy.

"We are going to need very high-energy density batteries to power new advanced technologies that are incorporated into phones, laptops and especially electric vehicles," said Amin Salehi-Khojin, an associate professor at UIC.

A number of their 2D materials, when incorporated into experimental lithium-air batteries as the catalyst, enabled the battery to hold up to 10 times more energy than lithium-air batteries containing traditional catalysts.

The researchers synthesised 15 different types of 2D transition metal dichalcogenides or TMDCs.

The researchers experimentally studied the performance of 15 TMDCs as catalysts in an electrochemical system mimicking a lithium-air battery.

"In their 2D form, these TMDCs have much better electronic properties and greater reactive surface area to participate in electrochemical reactions within a battery while their structure remains stable," said Leily Majidi, a graduate student at UIC.

"Reaction rates are much higher with these materials compared to conventional catalysts used such as gold or platinum," Majidi said.

"The 2D TMDCs and the ionic liquid electrolyte that we used acts as a co-catalyst system that helps the electrons transfer faster, leading to faster charges and more efficient storage and discharge of energy," he said.

# Intel showcases new 3D camera for robot

The Intel RealSense Tracking Camera T265, developed by the firm's R&D team in Haifa, uses an "inside-out tracking" mechanism that enables the camera to understand the environment without relying on external sensors. The technology will enable agricultural robots to navigate obstacles in distant fields without GPS, and industrial robots or drones in warehouses or remote outdoor areas to find their way using just their camera.

US tech giant Intel Corp. has unveiled a new 3D camera that is meant to allow machines to know where they are, without the use of sensors or GPS (Global Positioning System).

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The T265 uses a vision processing unit developed by the firm which directly handles

all the data processing necessary for the machine to track its way. This makes the camera a low-power solution that developers can put into their existing or new products where "rich visual intelligence" is needed, Intel said in a statement on January 23.

The T265 complements Intel's RealSense D400 series cameras, and the data from both devices can be combined for advanced applications like occupancy mapping, improved 3D scanning and advanced navigation and collision avoidance in GPS-restricted environments, the statement said.





## Dextre

Dextre, also known as the Special Purpose Dexterous Manipulator (SPDM), is a two armed robot, or tele-manipulator, which is part of the Mobile Servicing System on the International Space Station (ISS), and does repairs otherwise requiring spacewalks. It was launched March 11, 2008 on mission STS-123.

Dextre is part of Canada's contribution to the ISS

and is named to represent its dexterous nature. Dextre is the third Canadian robotic arm used on the ISS, preceded by the Space Shuttle's Canadarm and the large Canadarm2. Dextre was designed and manufactured by MacDonald Dettwiler (MDA).

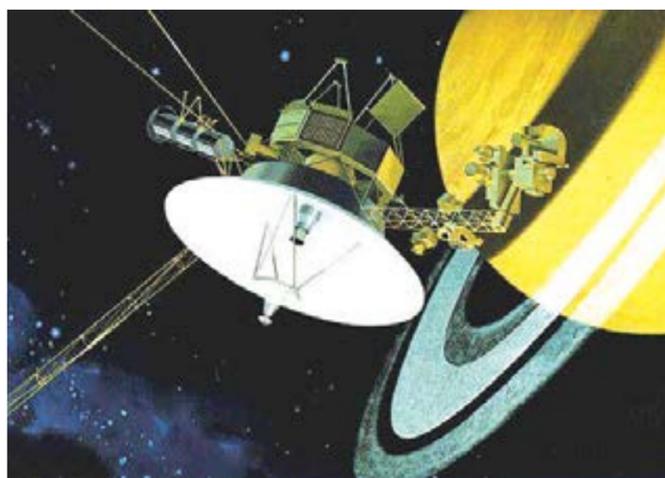
In the early morning of February 4, 2011, Dextre completed its first official assignment which consists of unpacking two pieces for Kounotori 2 while the on-board crew was sleeping.

# Amazing robots ruling space

## Robonaut 2

Researchers at NASA's Johnson Space Center (JSC), in collaboration with General Motors and Oceanearing, have designed a state-of-the-art, highly dexterous, humanoid robot: Robonaut 2 (R2). R2 is made up of multiple component technologies and systems -- vision systems, image recognition systems, sensor integrations, tendon hands, control algorithms, and much more. R2's nearly 50 patented and patent-pending technologies have the potential to be game-changers in multiple industries, including logistics and distribution, medical and industrial robotics, and beyond.

A legless robot that lives on the International Space Station, has a camera on its head, and doesn't need constant supervision. Nope, not creepy at all. Robonaut 2, which was launched up to the ISS in 2011, had performed experiments in a stationary position inside the craft.



## Voyager 1

Voyager 1 is a space probe launched by NASA on September 5, 1977. Part of the Voyager program to study the outer Solar System, Voyager 1 was launched 16 days after its twin, Voyager 2. Having operated for 41 years, 4 months and 26 days as of January 31, 2019, the spacecraft still communicates with the Deep Space Network to receive routine commands and to transmit data to Earth. At a distance of 145.11 astronomical units (2.1708×10<sup>10</sup> km; 1.3489×10<sup>10</sup> mi) (21.708 billion kilometers; 13.489 billion miles) from Earth as of January 1, 2019, it is the most distant human-made object from Earth.

The probe's objectives included flybys of Jupiter, Saturn, and Saturn's largest moon, Titan. While the spacecraft's course could have been altered to include a Pluto encounter by forgoing the Titan flyby, exploration of the moon, which was known to have a substantial atmosphere, took priority. Voyager 1 studied the weather, magnetic fields, and rings of the two planets and was the first probe to provide detailed images of their moons.

## Juno

Juno is a NASA space probe orbiting the planet Jupiter. It was built by Lockheed Martin and is operated by NASA's Jet Propulsion Laboratory.

The spacecraft was launched from Cape Canaveral Air Force Station on August 5, 2011 (UTC), as part of the New Frontiers program, and entered a polar orbit of Jupiter on July 5, 2016 (UTC; July 4 U.S. time), to begin a scientific investigation of the planet. After completing its

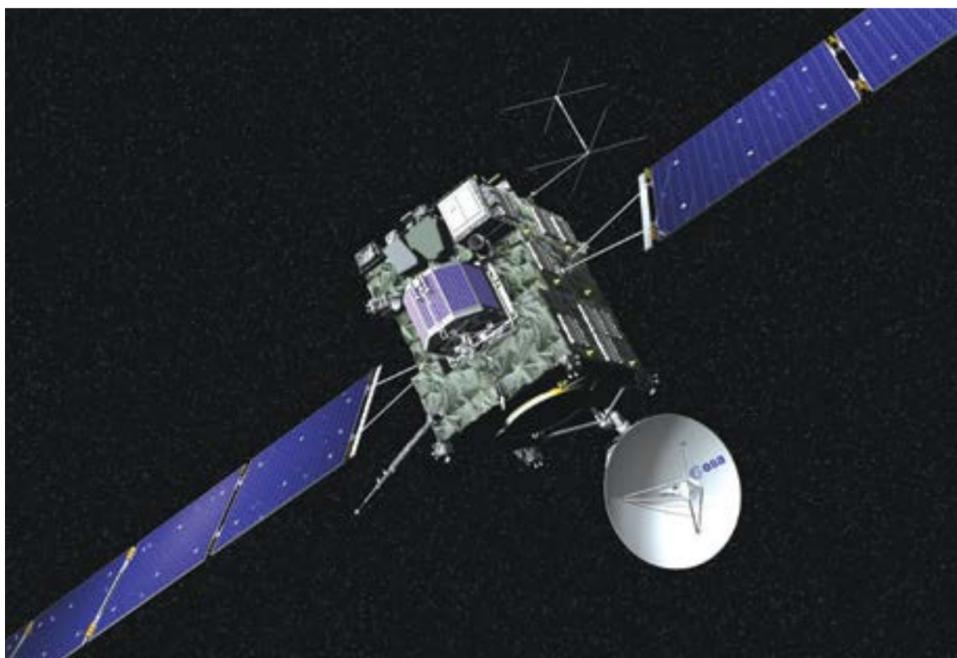


mission, Juno will be intentionally deorbited into Jupiter's atmosphere.

Juno's mission is to measure Jupiter's composition, gravity field, magnetic field, and polar magnetosphere.

It will also search for

clues about how the planet formed, including whether it has a rocky core, the amount of water present within the deep atmosphere, mass distribution, and its deep winds, which can reach speeds up to 618 kilometers per hour (384 mph).



## Rosetta

Rosetta was a space probe built by the European Space Agency launched on 2 March 2004. Along with Philae, its lander module, Rosetta performed a detailed study of comet Churyumov-Gerasimenko. During its journey to the comet, the spacecraft flew by Mars and the asteroids 21 Lutetia and 2867 Steins. It was launched as the third cornerstone mission of the ESA's Horizon 2000 programme, after SOHO / Cluster and XMM-Newton.

On 6 August 2014, the spacecraft reached the comet and performed a series of manoeuvres to eventually orbit the comet at distances of 30 to 10 kilometres (19 to 6 mi). On 12 November, its lander module Philae performed the first successful landing on a comet, though its battery power ran out two days later. Communications with Philae were briefly restored in June and July 2015, but due to diminishing solar power, Rosetta's communications module with the lander was turned off on 27 July 2016. On 30 September 2016, the Rosetta spacecraft ended its mission by hard-landing on the comet in its Ma'at region.

## Opportunity

Opportunity, also known as MER-B (Mars Exploration Rover - B) or MER-1, is a robotic rover active on Mars since 2004. Launched on July 7, 2003 as part of NASA's Mars Exploration Rover program, it landed in Meridiani Planum on January 25, 2004, three weeks after its twin Spirit (MER-A) touched down on the other side of the planet. With a planned 90 sol duration of activity (slightly more than 90 earth days), Spirit functioned until getting stuck in 2009 and ceased communications in 2010, while Opportunity was active as of June 10, 2018 when a dust storm forced it to hibernation. It has operated 5337 sols since landing, having exceeded its operating plan by 14 years, 279 days (in Earth time). Opportunity has operated for over 55 times its designed lifespan. As of June 10, 2018 when contact was lost, the rover had traveled a distance of 45.16 kilometers (28.06 miles).



## Curiosity

Curiosity is a car-sized rover designed to explore Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL). Curiosity was launched from Cape Canaveral on November 26, 2011, at 15:02 UTC aboard the MSL spacecraft and landed on Mars on August 6, 2012, 05:17 UTC. The Bradbury Landing site was less than 2.4 km (1.5 mi) from the center of the rover's touchdown target after a 560 million km (350 million mi) journey. The rover's goals include an investigation of the Martian climate and geology; assessment of whether the selected field site inside Gale Crater has ever offered environmental conditions favorable for microbial life, including investigation of the role of water; and planetary habitability studies in preparation for human exploration.



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

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# Taking care of Failures

I am shocked by the ongoing happenings at the IIT (M) Campus, in a month a 23-year-old and a 35-year-old PhD Student has decided to end their lives, two years back 4 students did likewise in this equivalent grounds. As per IIT Among a few pointers including aggressive environment, facade of aloofness and general lack of concern and money related issues, and the expert's observe, there's the extra inconvenience of the contorted gender direction proportion. As a fresher, you joke about it until the point when it quits being amusing, and as a senior, you simply leave to your destiny, however, the reality remains that absence of adequate collaboration with the contrary gender can add to generally speaking pressure. Writing about the different reasons driving students to submit to suicide, IIT Madras Alumni observes: "The desire could be very high when one enters an IIT but coping is overwhelming."

Some key actualities about suicide are extremely disturbing; According to the information distributed by the WHO, almost 8,00,000 individuals bite the dust because of suicide consistently, which is one individual at regular intervals Suicide is the second driving reason for death among 15-29-year-olds all around 79 per cent of suicides happened in low and centre pay nations. In 2016 Suicide represented 1.4 per cent of all passing around the world, making it the eighteenth driving reason for death in 2016 Failure in examinations prompted 2,413 suicides by understudies in 2016 - or seven consistently - representing 25 per cent of understudy suicides. The National Crime Records Bureau (NCRB) in its 2015 information made a stunning disclosure that in India, one understudy perpetrates suicide consistently. Disappointment and frustration are unavoidable parts of life, yet troublesome and testing to manage it. We as whole face minutes when we don't accomplish our objectives notwithstanding our earnest attempts. We may not secure our desire position or a perfect partner. The means, would this be able to proceed? Precluding the truth from securing an alarming circumstance, or abstaining from contemplating it by any stretch of the imagination, exacerbates it or keeps you stuck when you could be taking a shot at taking care of the issue. The gap between how you needed things to work out and how they really panned lead to despondency and grieve. Resisting the urge to panic may stifle things down. Set aside the opportunity to associate with your sentiments compassionately. Recording your emotions or conversing with a beloved friend can help.

Whatever be your circumstance, you generally have options and skills to manage it. Consider different circumstances you adapted too effectively and how you may apply similar aptitudes to this circumstance. In case you're being abused, talk up or leave. On the off chance that you can't leave at the present time, chip away at winding up increasingly autonomous or finding different chances. This century presents us with new substances, including new occupation creation and more challenge for section into the IIT's. There are no certifications, and you may need to take elective courses to your objectives. It might take months or years to land the position you truly need or gain the pay you think you merit. Additionally, even the best connections have their down minutes and even your "perfect partner" is imperfect. One can't encounter achievement alone in his life. An achievement will show us just the same old thing new in our life. The disappointment does it. Without cutting stone won't turn into a figure without consuming gold won't sparkle. One can feel the essence of progress just in the event that he falls flat. Rehashed disappointments may influence you to lose your self-assurance. Yet, don't influence your brain to do that. Acknowledge



what is correct and what's going on gets rather what you lost. Numerous individuals as opposed to doing this get baffled and submit suicide.

The awfulness of a youngster passing on in view of overpowering sadness or disappointment is annihilating to family, companions, and network. Guardians, kin, schoolmates, mentors, and neighbours may be left thinking about whether they could have accomplished something to keep that youngster from swinging to suicide. Becoming familiar with what may lead an adolescent to suicide may help forestall further catastrophes. Despite the fact that it's not constantly preventable, it's dependably a smart thought to be educated and make a move to encourage a pained youngster. The explanations for a high schooler's suicide or endeavoured suicide can be intricate. In spite of the fact that suicide is moderately uncommon among youngsters, the rate of suicides and suicide endeavours increments incredibly amid pre-adulthood. Suicide is the third-driving reason for death for 15-to 24-year-olds, as indicated by the Centres for Disease Control and Prevention (CDC), after accident and murder. It's additionally believed that no less than 25 endeavours are made for each finished high school suicide.

The danger of suicide increments significantly when children and teenagers approach home, and almost 60% of all suicides in the United States are submitted with a weapon. That is the reason any weapon in your home

ought to be emptied, and kept out of the scope of youngsters and teenagers. Overdose utilizing over-the-counter, solution, and non-physician endorsed prescription is likewise an exceptionally normal strategy for both endeavouring and finishing suicide. It's critical to screen cautiously all meds in your home. Likewise, know that youngsters will "exchange" diverse physician recommended drugs at school and convey them or store them in their locker or rucksack.

Suicide rates contrast among boys and girls. Women do consider and endeavour suicide about twice as frequently as men and will in general endeavour suicide by overdosing on medications or cutting themselves. However young men kick the bucket by suicide around multiple times as regularly young ladies, maybe on the grounds that they will, in general, utilize progressively deadly strategies, for example, guns, hanging, or bouncing from statures. It tends to be difficult to recollect how it felt to be a youngster, got in that hazy area among youth and adulthood. Of course, it's a period of huge probability; however, it likewise can be a time of pressure and stress. There's a stress to fit in socially, to perform scholastically, and to act capably.

Be caring to yourself.

At the point when things don't work out, it may not be on the grounds that you did anything incorrectly. You might be turned down for a vocation in case you're not the best counterpart for an organization's needs. The individual you are attracted to possibly adore avoidant, as of now in a relationship, or a narcissist. While it's critical to take a gander at the circumstance to perceive what you can realize, embrace a merciful mentality, as opposed to making a decision about yourself cruelly, so you don't stall out in disgrace.

Psychological Intervention can infuse confidence and dissuade students from taking radical decisions. In spite of the fact that there is no single psychological reason behind committing suicide, there are frequently various distinctive psychological signs which are experienced by the individuals who might have self-destructive considerations or might be seen by those near somebody who might have suicidal musings. Coming up with the most discernible mental indications of suicide—despite the fact that somebody encountering these side effects, or supposedly experiencing these side effects, isn't really intending to submit suicide.

Social withdrawal alludes to the propensity for individuals with suicidal musings to socially pull back from their family, companions, and other social exercises. They may feel reluctant to go to parties or even to converse with family or companions. They may even skirt work or quit work so as to keep away from social connection there. Withdrawal is some of the time a path for the brain to mentally separate itself from connections which may ruin the fulfilment of self-destructive contemplations or a suicide endeavour plan.

For the tenure of this life, you will encounter a progression of a disappointment however remember that nobody gets past this existence without bawling. A few people dissatisfactions are more critical than others, yet everybody encounters them, and some deal with disappointments better than other people.

Frustration, disappointment, and difficulties – everybody encounters these enthusiastic impediments now and again, yet you can't lose seeing you and your qualities. If you allow yourself to be frustrated by these hindrances, it implies you don't have the discernment expected to deal with setback or dissatisfactions.

## Where parents, students learn in same school

Ambala: Students and parents share the same bench at a school in Fejpur village of Yamunanagar district.

The village with just a government middle school, girls drop out after Class-8 as their parents don't allow them to go to a government high school in Khizarabad town of the district, 9 km from the village.

Due to this, a village resident Jabbar Poswal had started a school in 2015 with Class-9 and 10 at Anagawadi building in the village with an aim to educate drop-outs.

"In beginning, I felt uncomfortable to teach my village elders. Now I have picked up the momentum and enjoy my duty to change the public sentiment towards education. Age factor doesn't matter when it comes to education. I am hoping that the state government will think about education crisis in my village and upgrade the government middle school so that all girls can



complete their education on time," said. teacher Alima a postgraduate in arts

Jabbar said, "24 students passed

their Class-10 exam in 2015 batch through open board. I had started

this to increase literacy rate of our district as we stand at second last position in the tally. After the success of students, their parents had also requested us to join the class."

Samshad (40), and his daughter Nashrin, 16, study in the same class. Nashrin was in Class-8 in 2014 but her parents did not allow her to pursue further education from a government school in Khizarabad town, nine kilometre from the village.

Samshad said scared about her daughter's security, he had not permitted her to go to a nearby village school. After witnessing the success of many village girl students, he had decided to enroll himself along with his daughter.

"After a gap of 25 years I have come back to school and I am very glad about my decision. I had dropped out of school due to my poor financial background. I have a competition with my daughter to get more marks in Class-10 exam which will be held in April," he added.

There are two teachers in the school, one of them Alima is a postgraduate in arts. She said she wants to educate more and more people from her village and nearby areas.

District education officer Anand Chaudhary said two senior secondary schools are just three and five kilometre from Fejpur village. "In nearby two villages, government senior secondary schools are built and fulfilling the right to education rules," he added.

## NEET PG results declared

New Delhi: National Board of Examination (NBE) has declared the results of National Eligibility cum Entrance Test (NEET)- post graduate (PG). Candidates can check their result at the official website of NBE nbe.edu.in or click here to directly view

the result of NEET-PG 2019.

The NBE has also declared the cut offs, which can be checked here.

The candidates can download their scorecard from February 6 onwards.

The NEET PG exam were conducted on January 6, 2019.

