

Interesting trends in Science & Technology in 2019!

Here are some interesting things that happened in Science & Technology in 2019!

<https://youtu.be/67d0juTqjA>

How cool is this Augmented Reality art walk?!

Imagine looking up to the sky and seeing a jumble of words appear and drift away, appearing it would seem, out of thin air! But that is just one of the wonders that take place during a series of guided walks created under by Apple Inc under their augmented reality [AR]T concept.

Apple partnered with cutting-edge art museum, New Museum, who chose prestigious artists such as John Giorno, Nick Cave, Nathalie Djurberg, Hans Berg, Cao Fei, Carsten Höller and Pipilotti Rist, who each created a unique augmented reality work to blend into the environment of the tour. The whole park therefore became a large canvas!

Each walk begins at an Apple Store and guests are given an iPhone (the art only works with phones provided on the tour) and a pair of headsets. The walk in New York goes through Central Park where at certain places, works show up on the screen against the backdrop of the park. For example, with John Giorno's work, the path that you walk on becomes a rainbow or with Nick Cave's piece, you get to choose a virtual creature who walks along with you, making it a very interactive experience!

The tours are free and will soon be available in San Francisco, London, Paris, Hong Kong and Tokyo.



Written by: Pereena Lamba. Pereena is a freelance writer, editor and creative consultant. She is also co-author of *Totally Mumbai*.

Minecraft Earth: Welcome to a shared Augmented Reality experience



Credit: Minecraft

Calling all Minecraft fans! Microsoft, the makers of Minecraft, have revealed their next big push for the game: Augmented Reality. Remember Pokemon Go? Where augmented reality superimposed Pokemon stuff onto your own surroundings. You had to use the phone and catch Pokemon on the street, or in your bathroom, or somewhere else in your world.

Microsoft has just released a trailer of Minecraft Earth, their new version juiced up with augmented reality. This allows players to use their phones and collect blocks and resources in their neighbourhoods, go home and build something with these blocks, individually or collaboratively with your friends. You can even find parks where peoples' creations are up for display, and drop your own creations into areas for people to experience. The creators say that they have covered the entire planet in Minecraft!

Pokemon Go was a big craze at one point, and The Verge magazine says it had 20 million users. With this move, Microsoft is upping the game for the 91 million Minecraft users it has out there! It looks pretty cool, check it out!

When will it be out? Apparently they will start rolling out their 'beta' or test version this summer. We can't wait!

Written by: Sunaina Murthy

Marshmello's Massive Music Moment



There are music concerts held all over the world in unusual places. In Tennessee, USA they have a blues concert in underground caves. In Sweden, they have a show inside a limestone quarry. And California, being California (!), has gigs in a cemetery in Los Angeles. But DJ Marshmello's new concert venue has definitely taken it to another level – he performed a gig inside the game Fortnite!



Credit: Dexerto.com

Marshmello, whose real name is Christopher Comstock, has already marked himself as being pretty unique by wearing a marshmallow-shaped hat on his head when he is performing. So it is no surprise that when he played a 10-minute set inside the Fortnite game, it became their biggest event. Gamers 'attended' the concert through their avatars in the game. For Marshmello it was his biggest audience ever as 10 MILLION people jumped into the game to experience his concert! Social media trackers said he added over 200,000 new followers to his already significant 18 million-plus followers on Instagram. His concerts in the real world also got a huge boost with more people looking for tickets after the virtual show. The Fortnite concert was a stroke of marketing brilliance.

He tweeted that he had created history by performing in the first-ever virtual concert though he had to correct himself later. There have been other virtual concerts before this one. Another popular game, Second Life, has had heavy-weights U2 and the much-acclaimed Royal Liverpool Philharmonic Orchestra put on concerts within the game. Minecraft held the huge music Fire festival in 2019. There have been other non-musical events too. Bite Communications hosted a virtual press conference and Second Life has also had a virtual wedding.

These virtual games and platforms have two features that make them draw in crowds – they are free, and they are available across devices from mobile phones to various gaming stations. While there may be space for some of these ideas, there is always another opinion about how 'real' is 'virtual'. Does a virtual concert have the same feel as a real one? What about the fun of going with a gang of friends and dancing and singing together? Moreover, there is a constant debate about how violence and the combat-themed game draws in very young viewers.

As Marshmello's concert proves, there is a definite audience for such events. Is this the future of all things? What next? Virtual schools? Virtual holidays? Virtual workplaces? Who knows? For now, I'm going to have lunch and bite into a very real delicious burger!



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Virtual Reality is being used by doctors to treat us better. Find out how...

What is Virtual Reality?



A site called explainthatstuff.com says that **real reality is the world we live in.**

Virtual reality then, **is a world that we immerse ourselves in, with the use of technology.** It is a collaborative, 3 dimensional world that is generated by technology but is one where you truly feel like you are experiencing everything around you. It feels real, but actually you are wearing a headset and maybe some gloves and are in a room, either precariously balancing on a beam or on a rollercoaster or something like that! Check out this video to see what we mean.

Credit: 360 VR Video

This requires hardware and software. The hardware you wear is a wraparound headset – it blocks out the real world completely – and a set of gloves. You also need a computer.

Hardware companies:

Some of the biggest headset makers: Oculus Rift (owned by Facebook), Morpheus VR (Sony Playstation), HTC Vive, and Google Cardboard.

[Here's where you can buy some of these headsets on Amazon!](#)

The software creates the many worlds that are computer generated and can give you so many different experiences. The software interacts with the hardware and sensors so that you feel like you are actually flying or falling and completely experience the world that you are meant to be in.

How big is the market for VR? A report by Zion Market Research says that it was \$2.62 billion in 2016 and that it will become close to \$27 billion in 2022! Other reports have other numbers. It doesn't really matter – the point is that people think it is going to be HUGE!

So what can we use this for?

Gaming: Of course it will be amazing to play games in Virtual Reality. Imagine being immersed in your Minecraft world, on

the soccer field with Ronaldo, or battling Darth Vader and flying the Millennium Falcon! While gaming is one big application of VR, there are others that are very promising.

Training: to fly aircraft, drive race cars, and develop other skills that require training

Education: Why go to school or college? You can take lessons in VR! Of course you will miss out on hanging out with your friends and break time, so maybe just reserve it for those times you want to take a class that is offered in another country but you can't make it all the way there?

Defense: simulating scenarios and training troops and machines on what to do in various circumstances.

Medicine: There are some very cool applications in the field of medicine. And this is supposed to become a big growth area for VR. Here are some of the things that VR companies are focusing on in medicine:



Photo Credit: EchoPixel Tech

Surgery: there are companies that have designed software suites that allow doctors to put CT scans, X rays, and other images into the computer and then the software creates a 3D rendering of the body. For tricky procedures, the surgeons can then go 'inside' the body and decide what the best way to help the patient might be. They can then figure out a surgical path that has the least chance of harm and the best chance of care.

Medical students can also use this for **training** for difficult procedures.

There are also companies that have created software that can help patients to **ease their pain**. Burn victims or other people who are badly hurt can put these on while the doctors are tending to them, and be immersed in a world that distracts them from the pain. **Experiencing something called SnowWorld which is set in ice, has been shown to dramatically reduce the amount of pain the patients are feeling!**



Photo Credit: geekwire.com

Most of these applications are early in development and entrepreneurs are working closely with doctors to try and design the best solutions for patients.

Write to us and let us know what you think of all this and watch this space for more on VR.

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