



Exponential Technology Report

5 August 2020

Lance Pepler

Idea Storm



Idea Storm

The Contributors

The **Exponential Technology Report** showcases the latest news on the explosion of Exponential Technologies.

Here are the contributors:



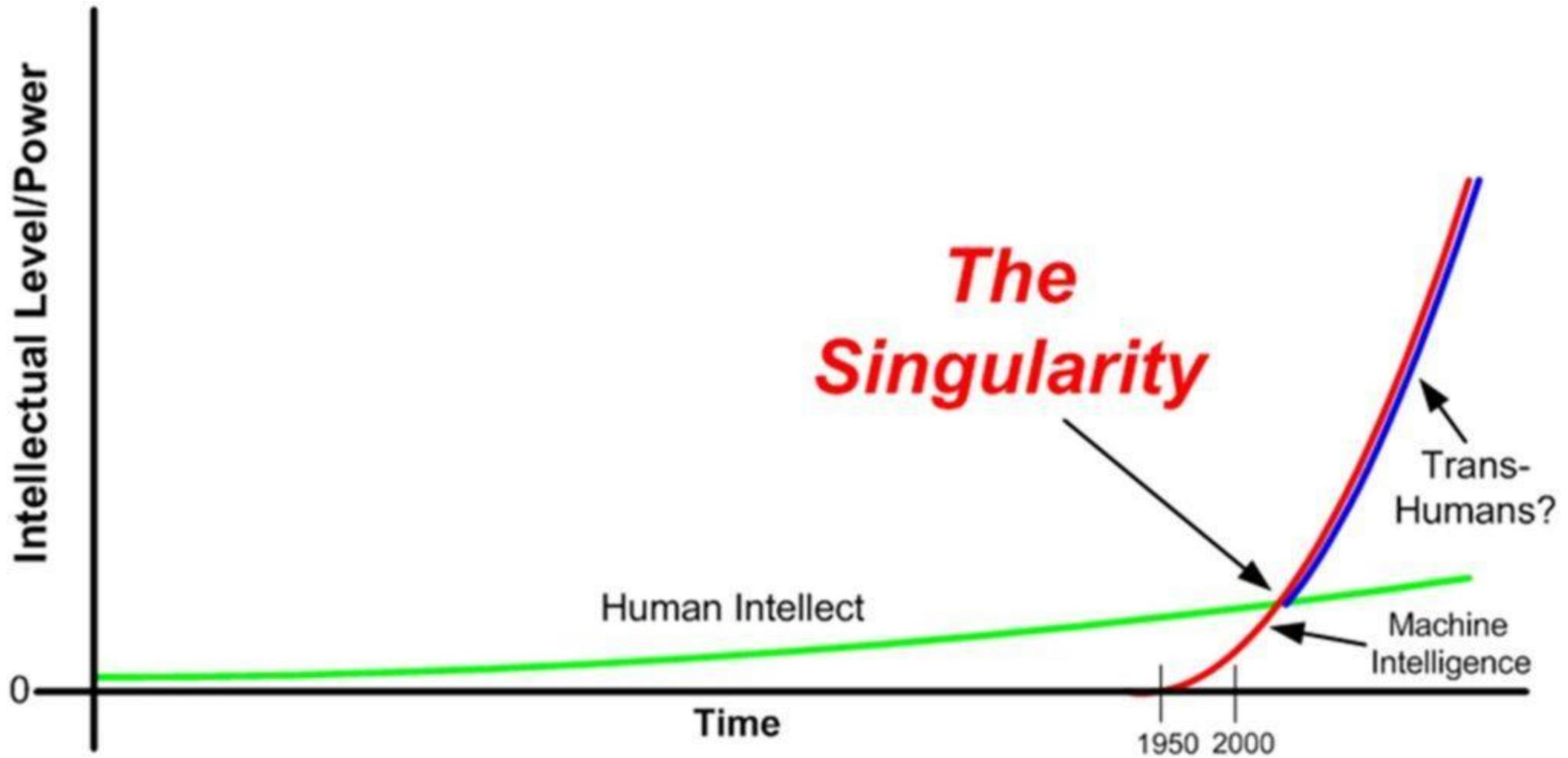
The Exponential Technologies

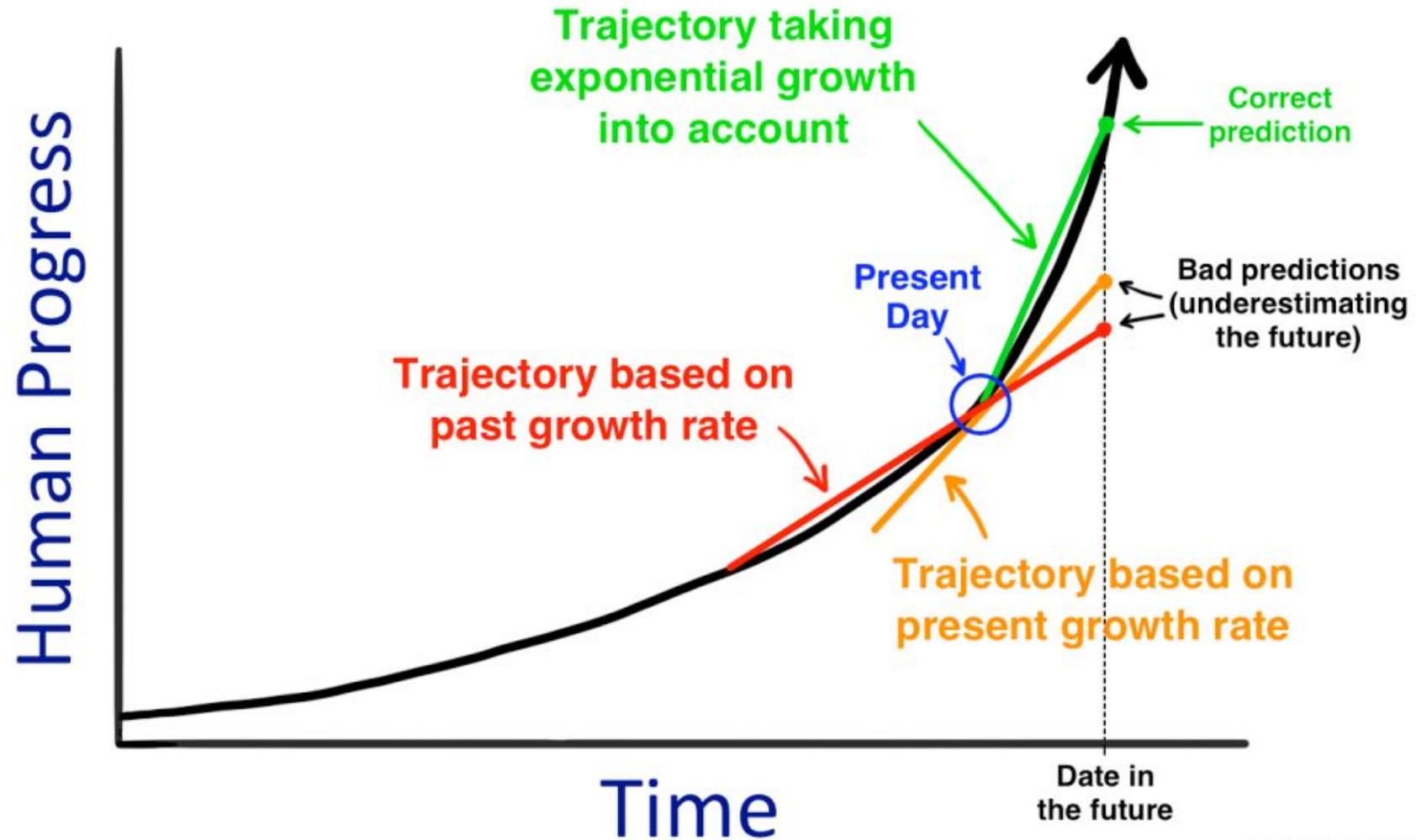


- 3D printing and digital fabrication
- Artificial intelligence (AI)
- Augmented and virtual reality (AR, VR)
- Autonomous vehicles
- Blockchain
- Data Science
- Digital biology and biotechnology
- Digital medicine
- Drone technology
- Internet of things
- Nanotechnology
- Networks and computing systems
- Quantum computing
- Robotics
- Solar

Exponential Technology Growth Projections

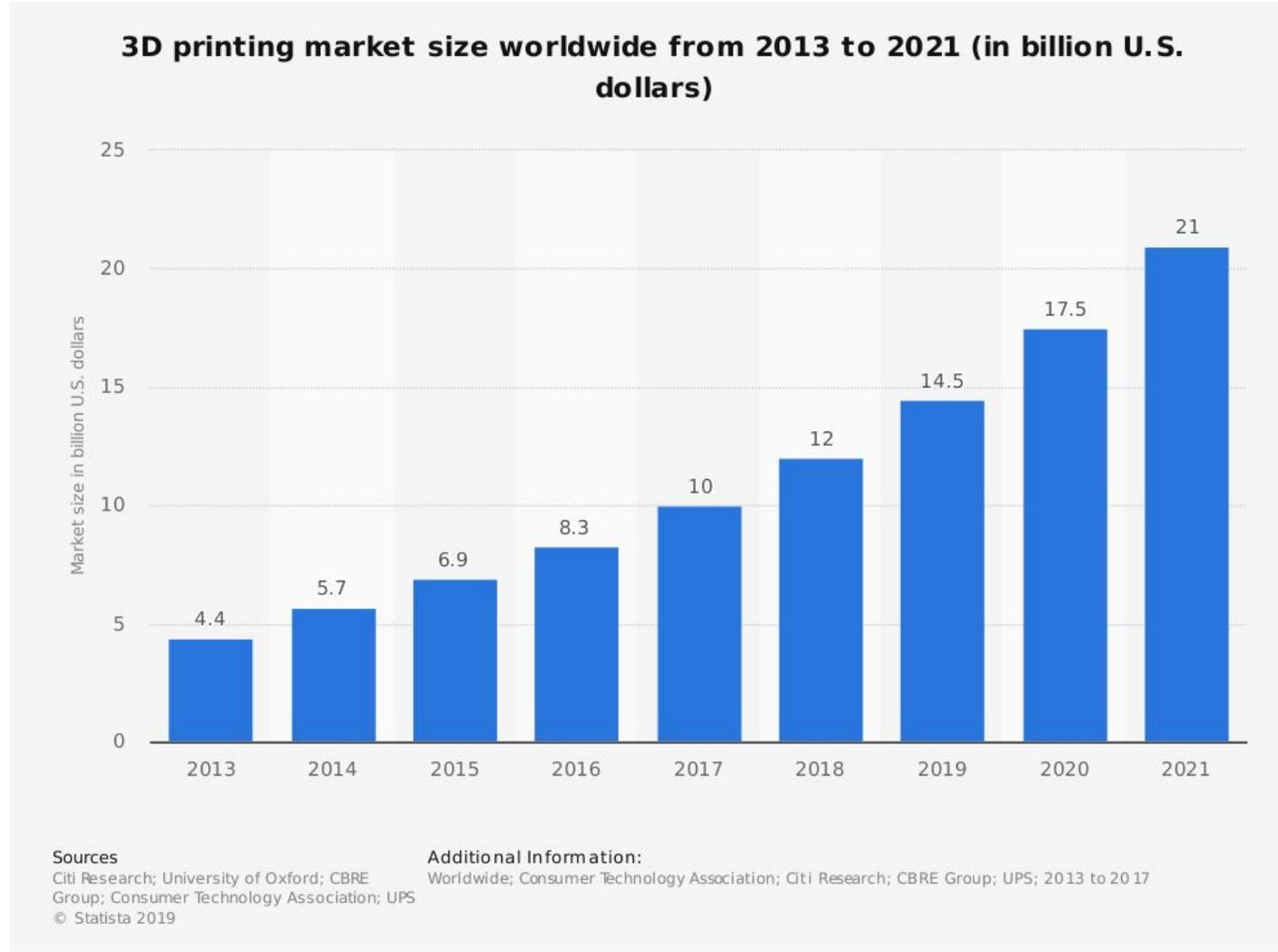
Artificial Intelligence (AI)



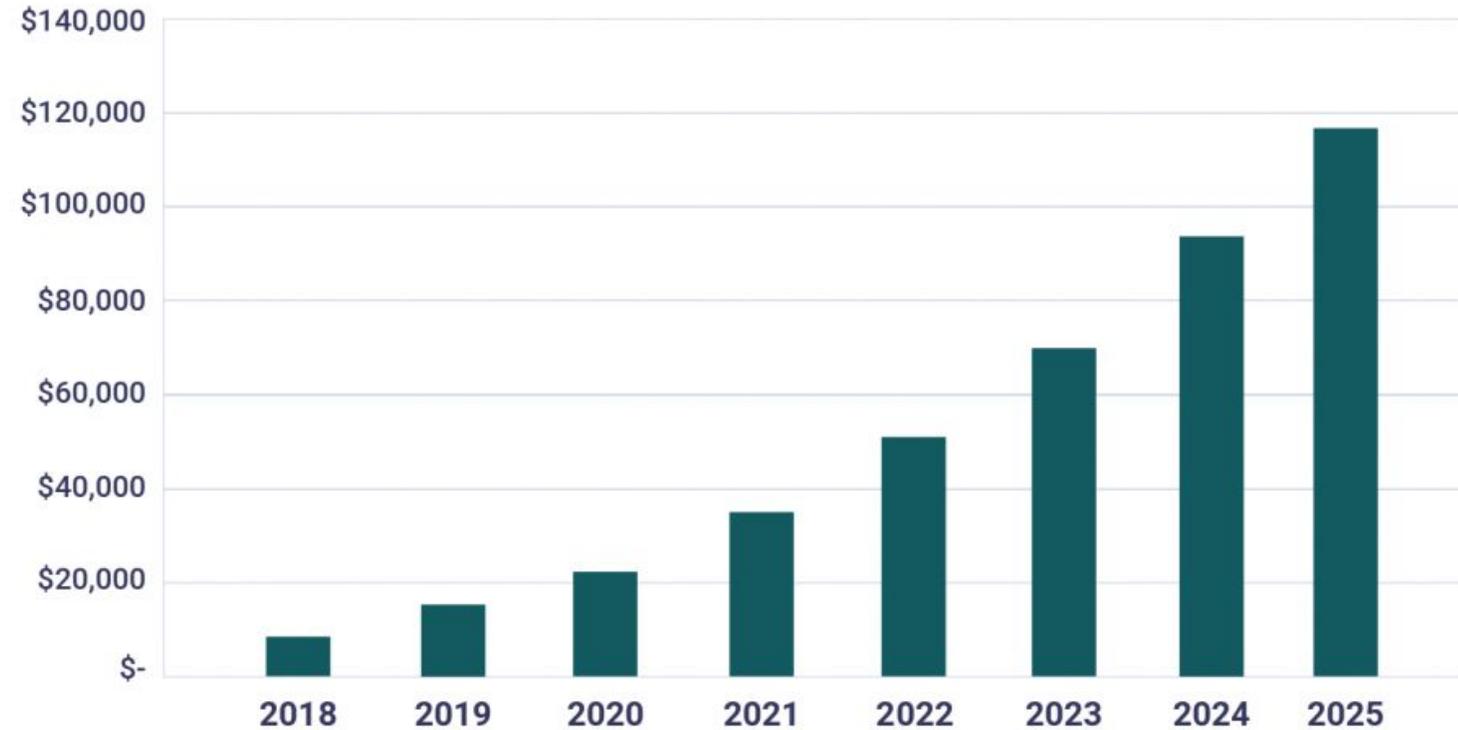


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3D Printing and Digital Fabrication

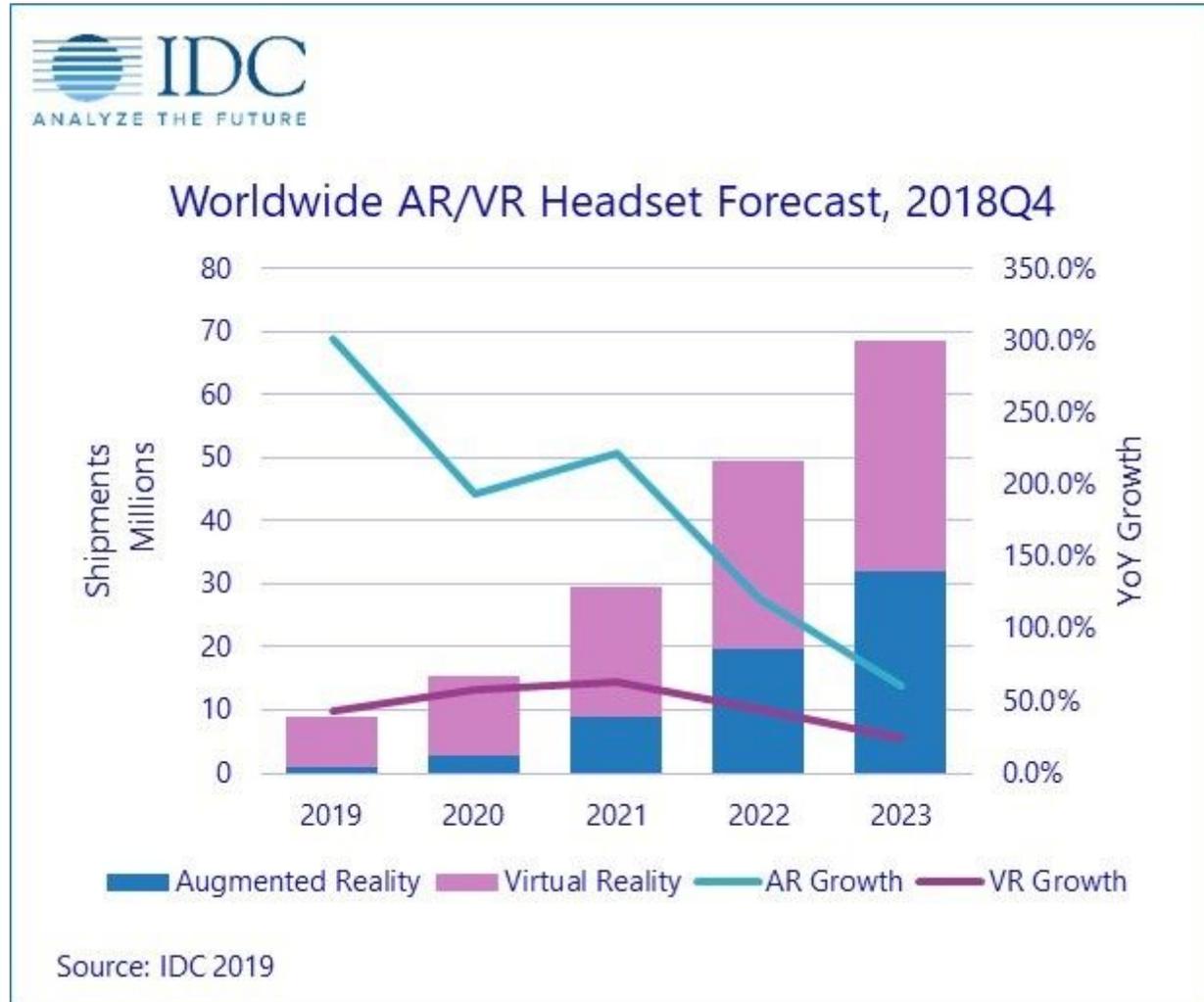


Annual AI Software Revenue, World Markets: 2018–2025

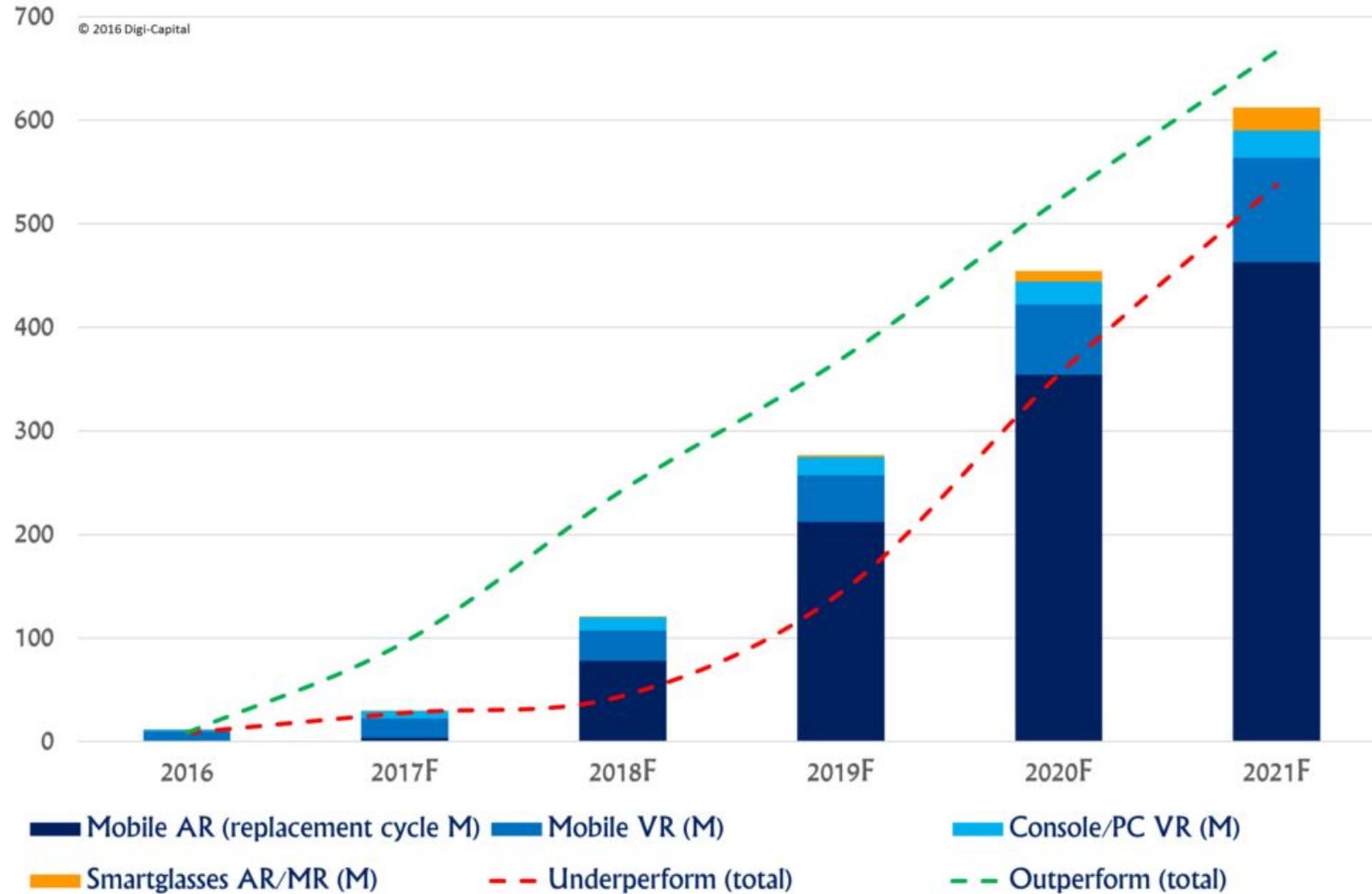


Source: Tractica, Artificial Intelligence Market Forecast 2019

Augmented and Virtual Reality (AR, VR)

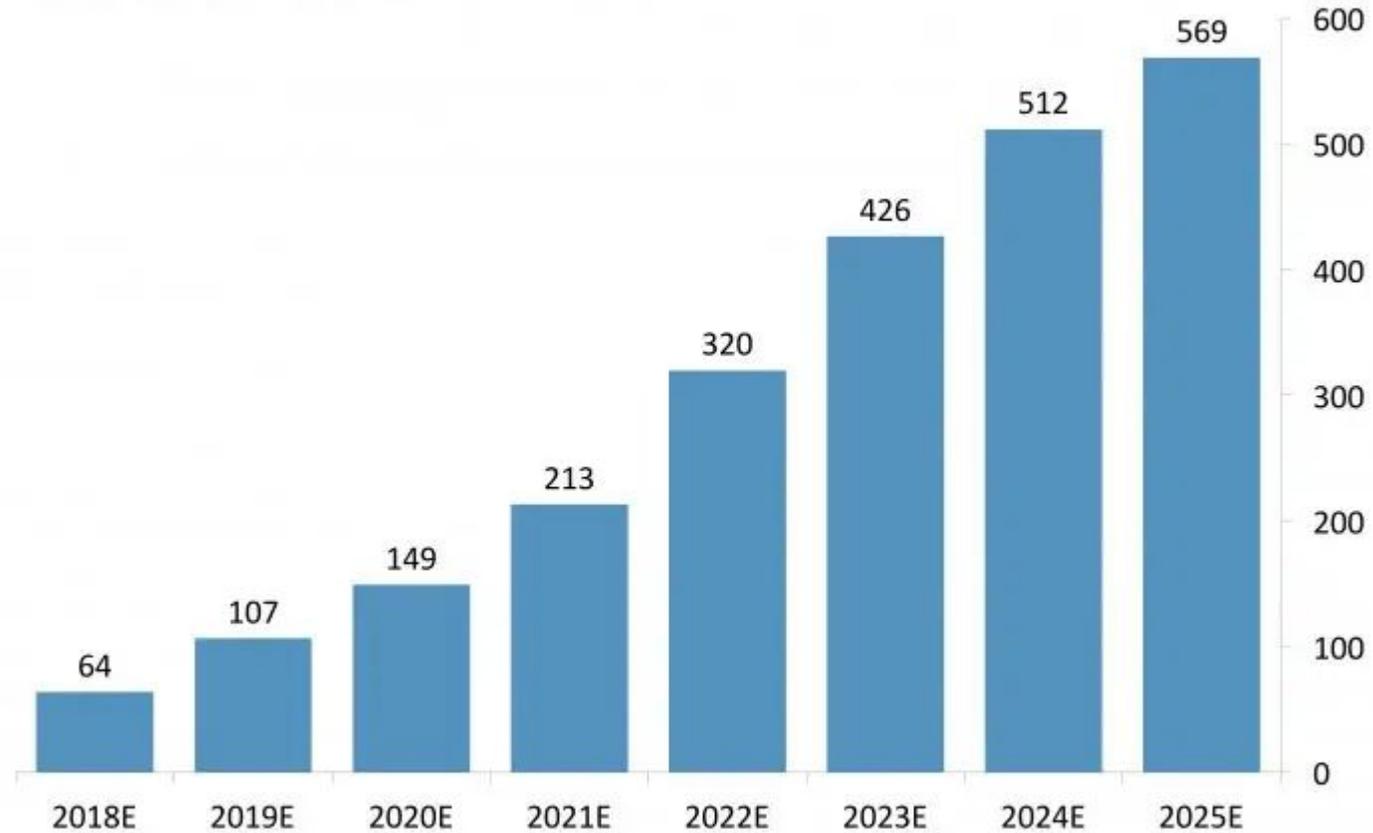


Augmented and Virtual Reality (AR, VR)



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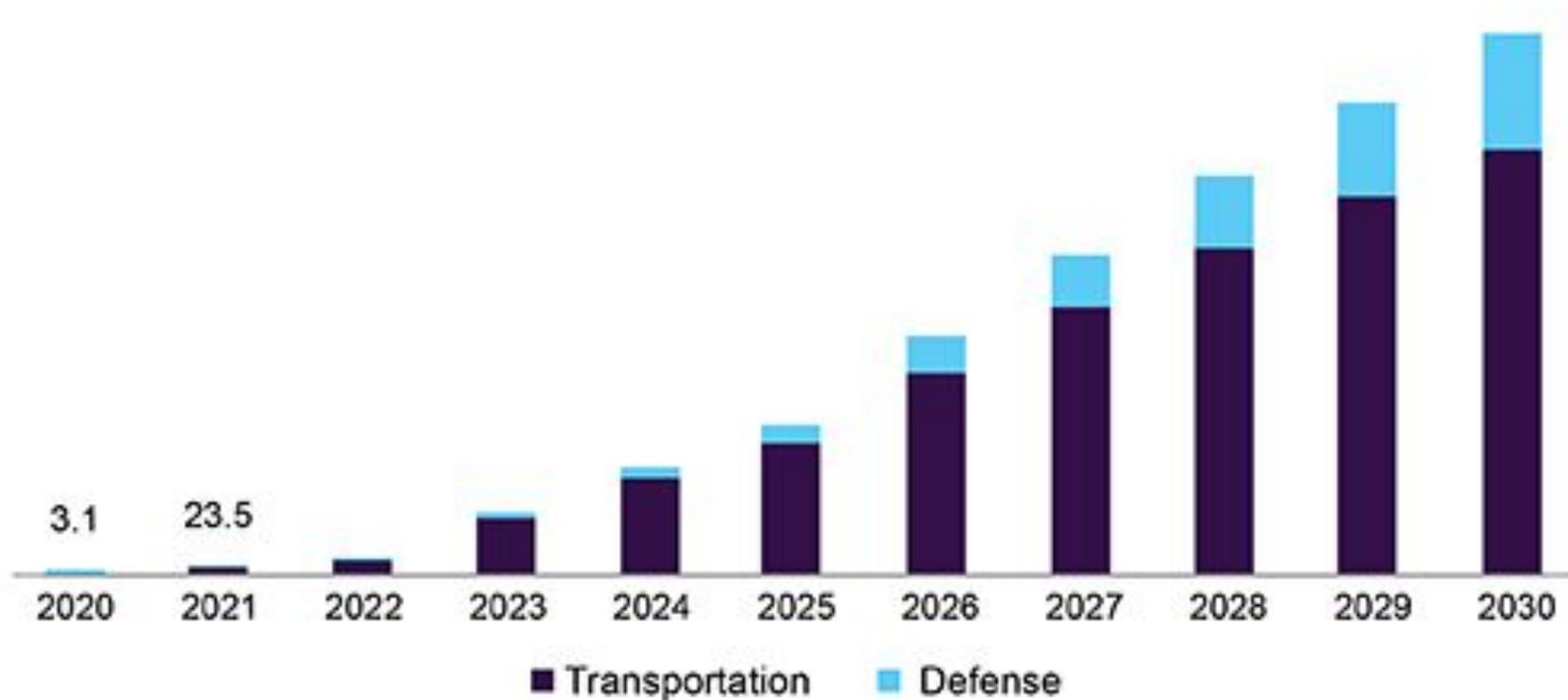
FORECAST: Fully Autonomous Car Shipments
US, 2018-2025, Thousands



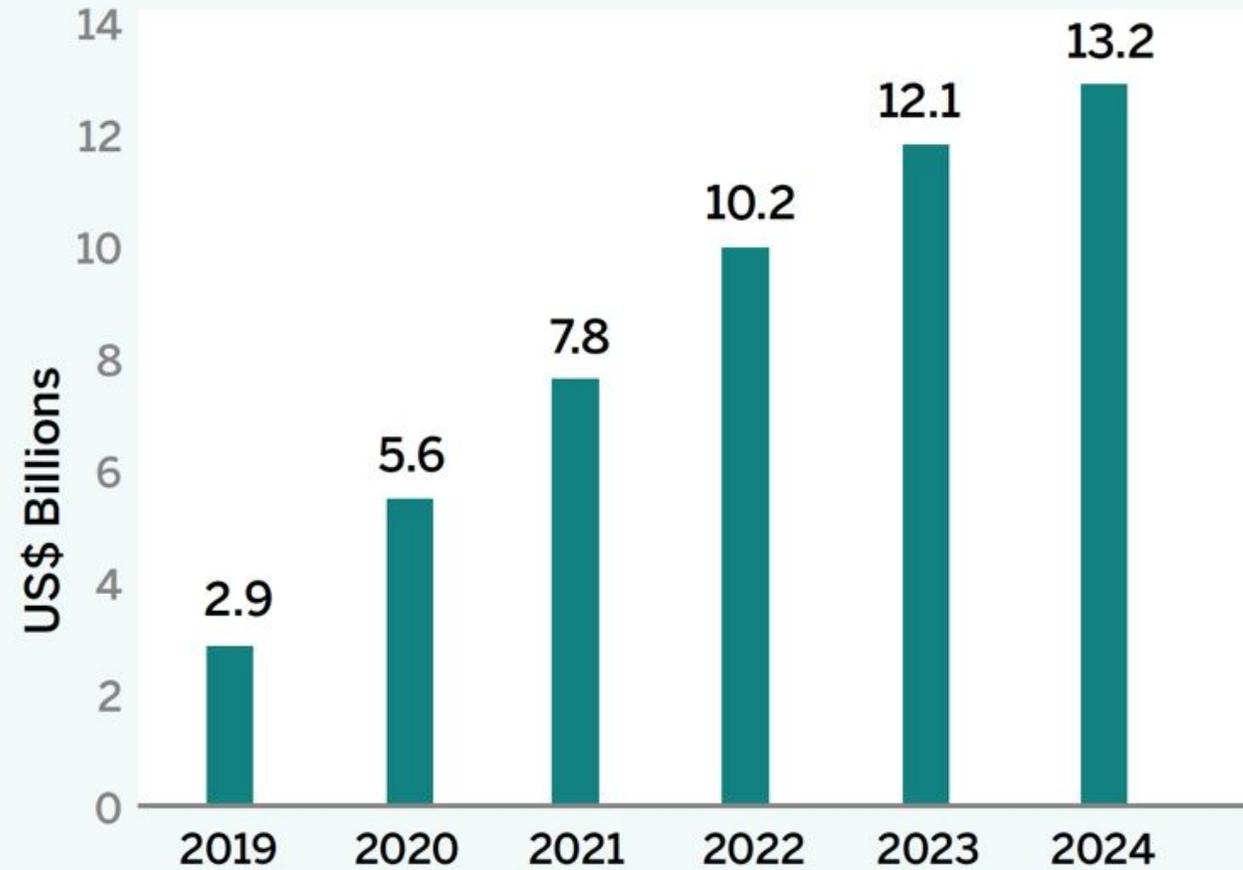
Source: BI Intelligence Estimates, 2017

BI INTELLIGENCE

North America self driving cars & trucks market size, by application, 2020 - 2030 (Thousand Units)



Enterprise Blockchain market growth, 2019-2024



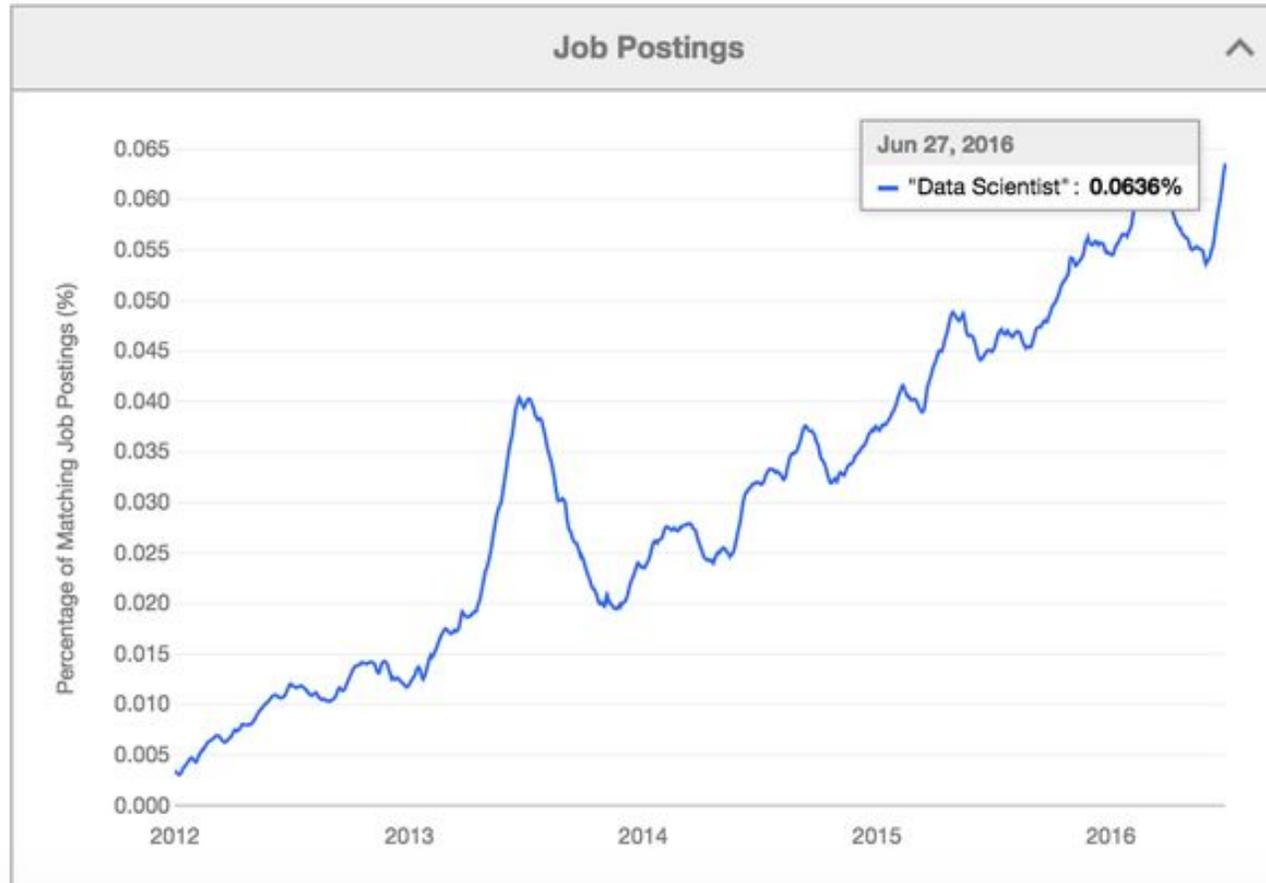
"Data Scientist" Job Trends

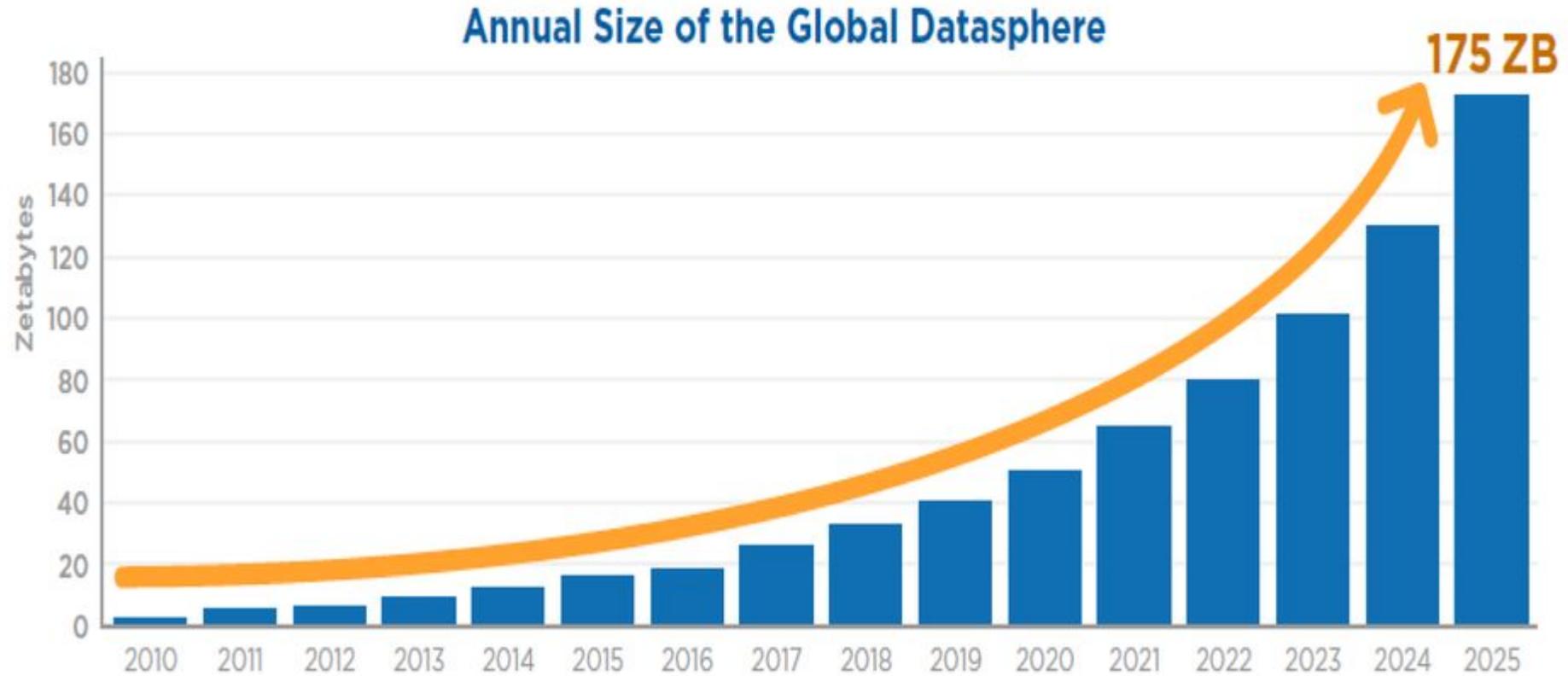
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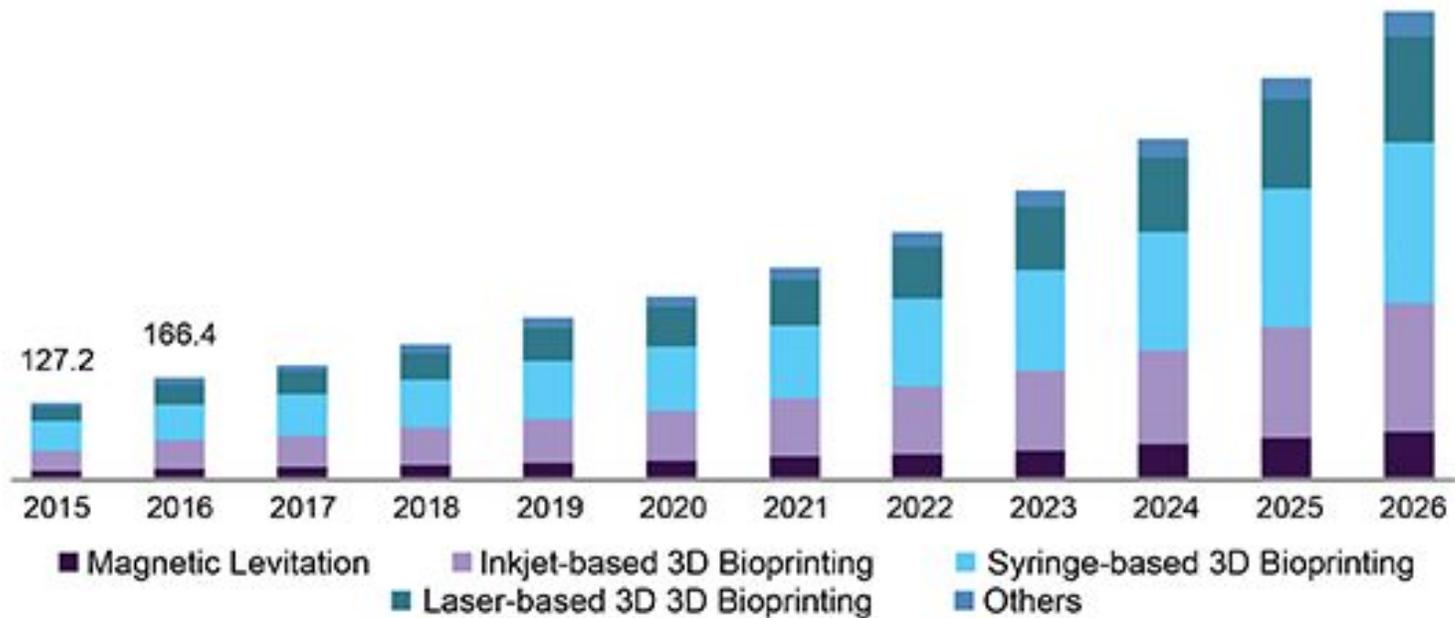
Scale: Absolute | Relative





Source: Data Age 2025, sponsored by Seagate with data from IDC Global DataSphere, Nov 2018

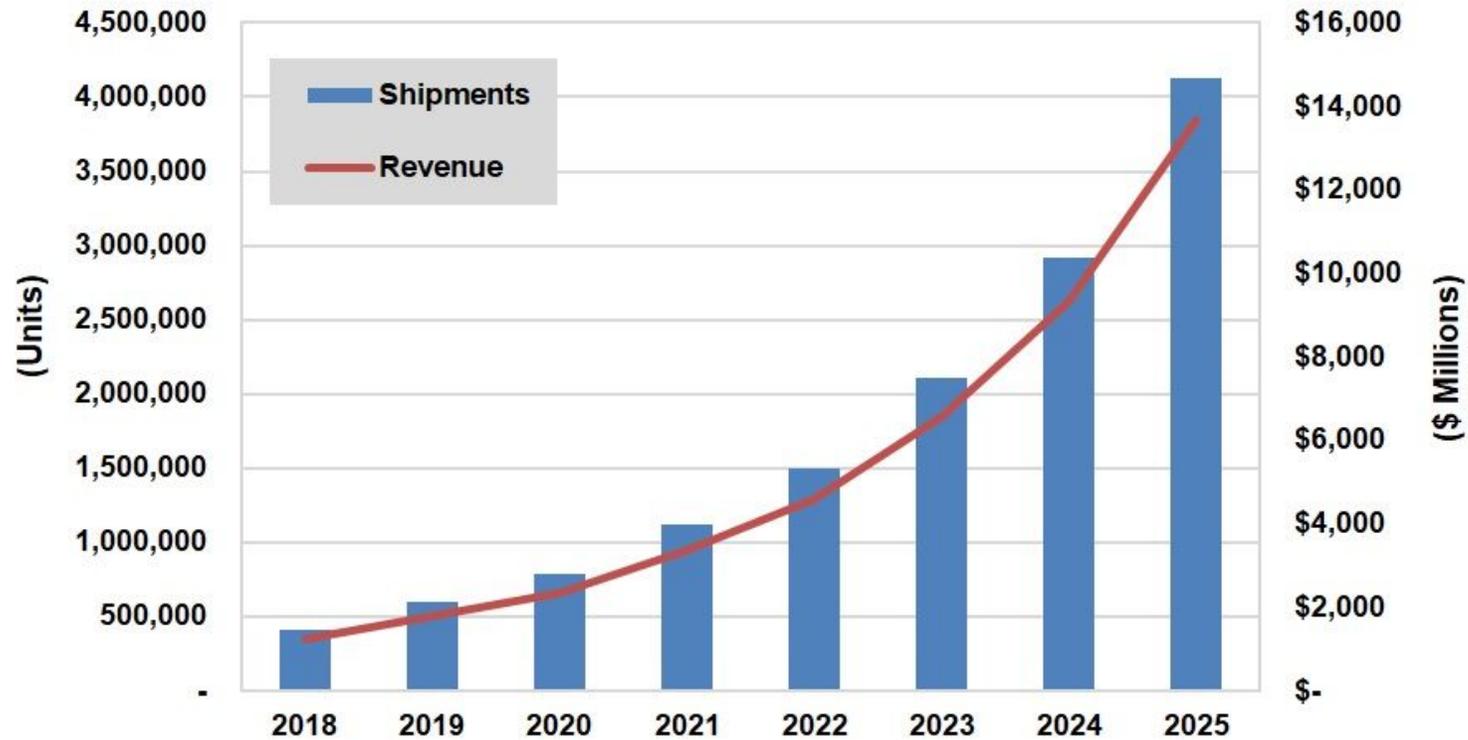
U.S. 3D bioprinting market size, by technology, 2015 - 2026 (USD Million)



Source: www.grandviewresearch.com



Commercial Drone Hardware Shipments and Total (Hardware + Services) Revenue, World Markets: 2018-2025



Source: Tractica



Source: MarketsandMarkets Analysis

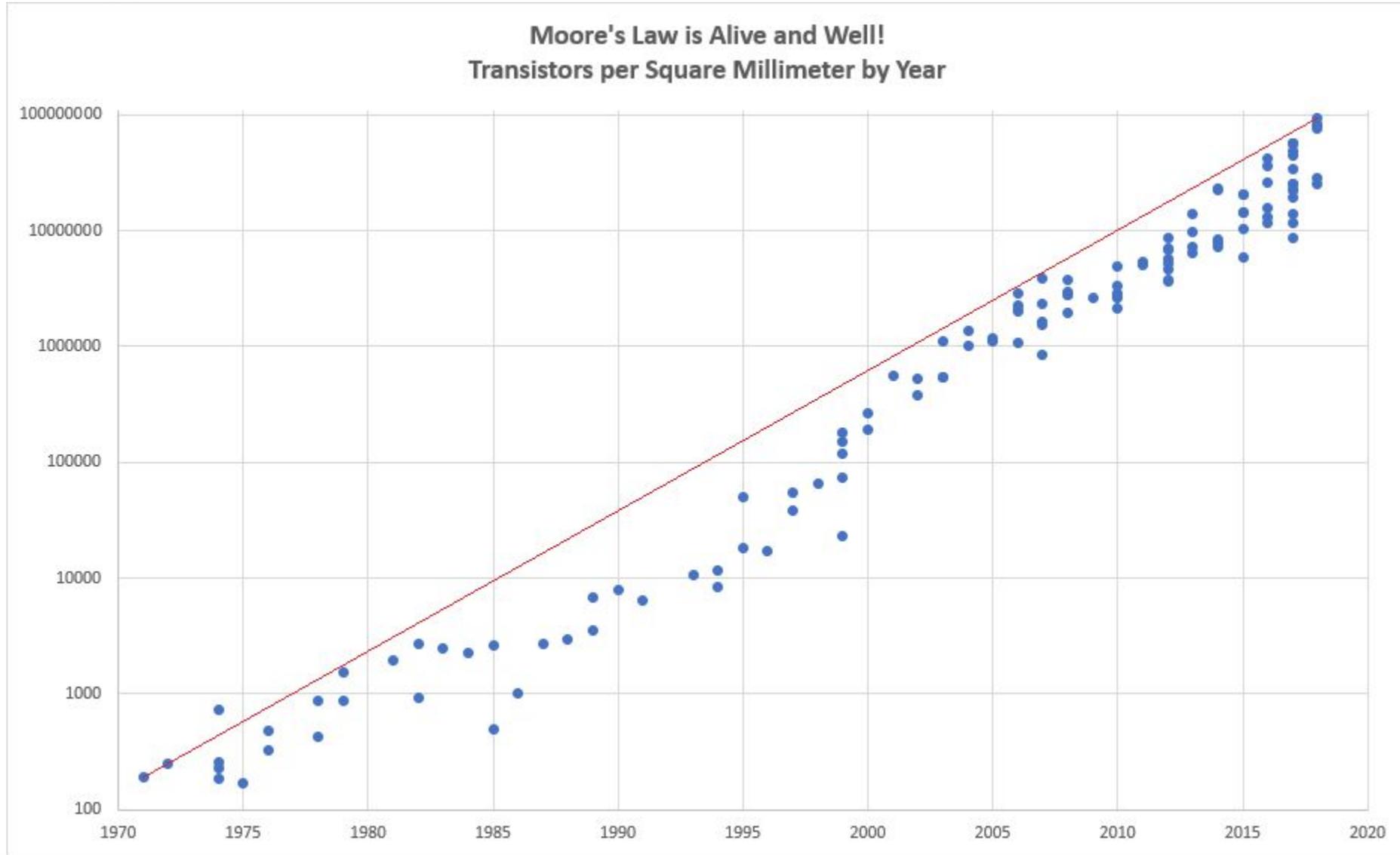


1971 - 2,300 transistors at \$1 each

2017 - 4.4 billion transistors at less than a millionth of a penny each

2025 - 72 qubits

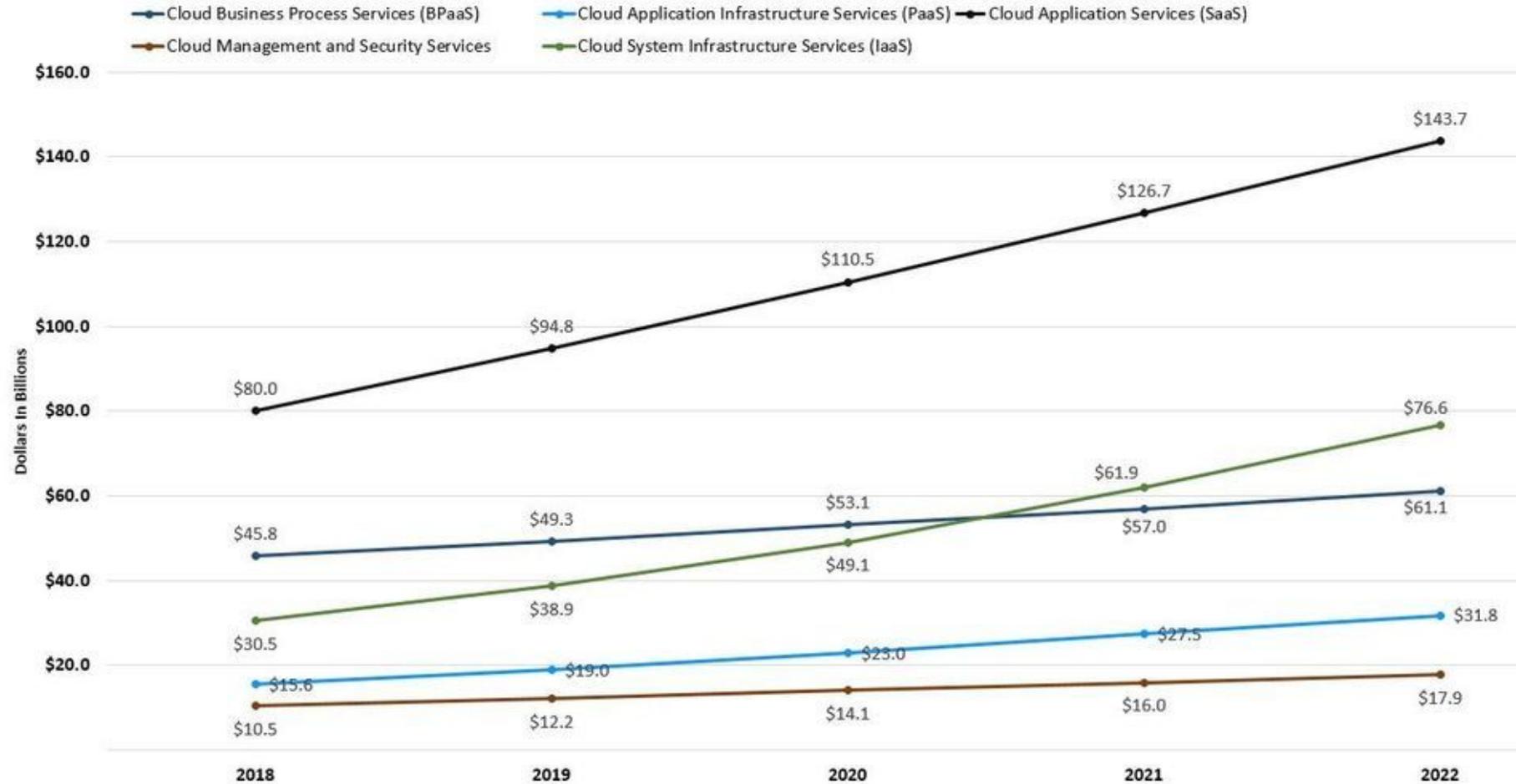
Nanotechnology



Networks and Computing Systems

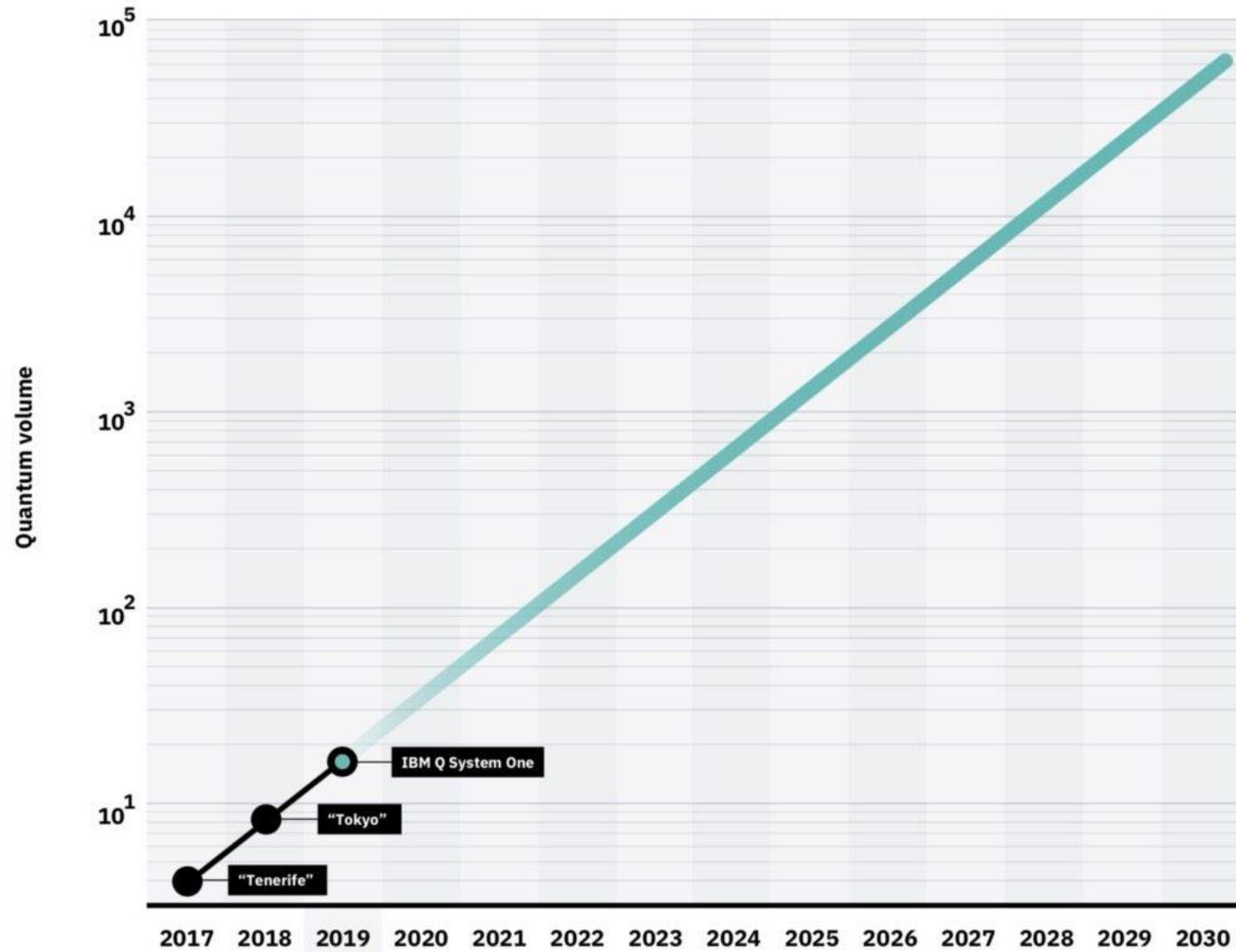
Worldwide Public Cloud Service Revenue Forecast, 2018 - 2022

(Billions of U.S. Dollars) Source: Gartner April 2, 2019



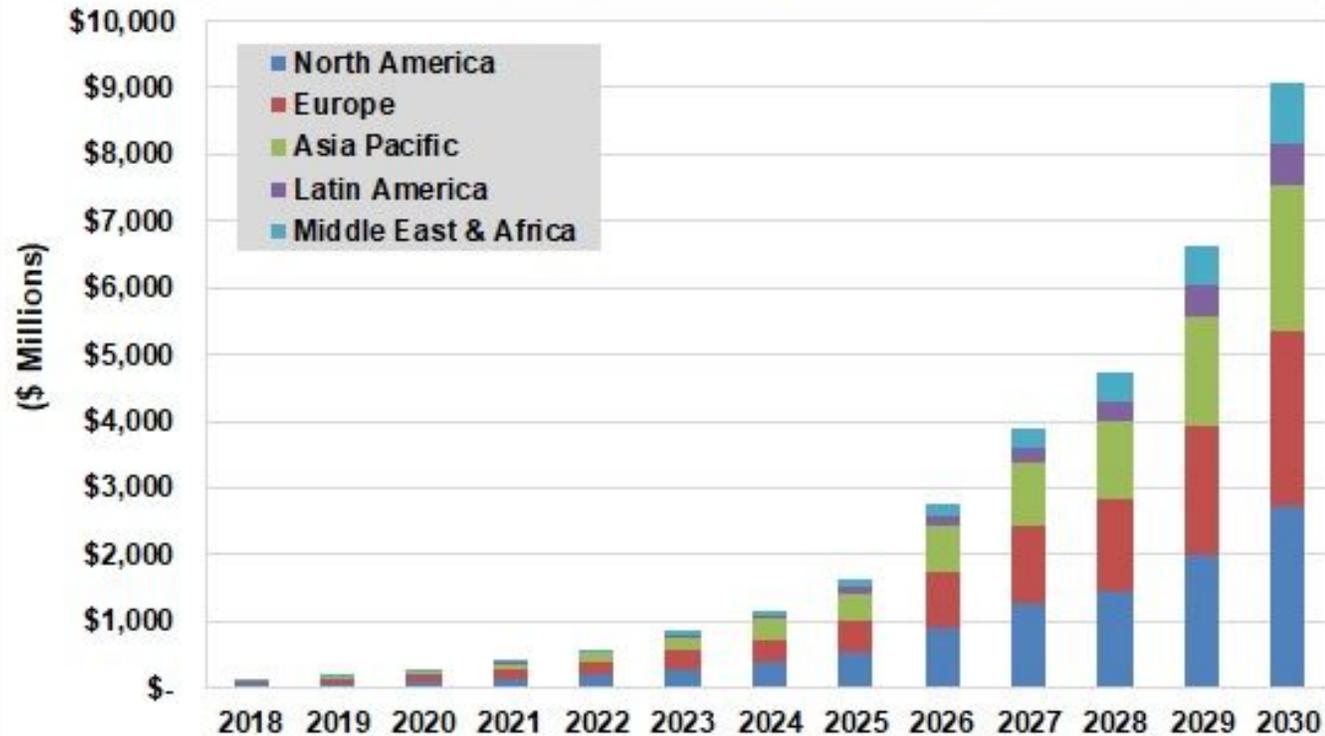
Quantum Computing

Exponential Forecast for Growth of Quantum Processing Power





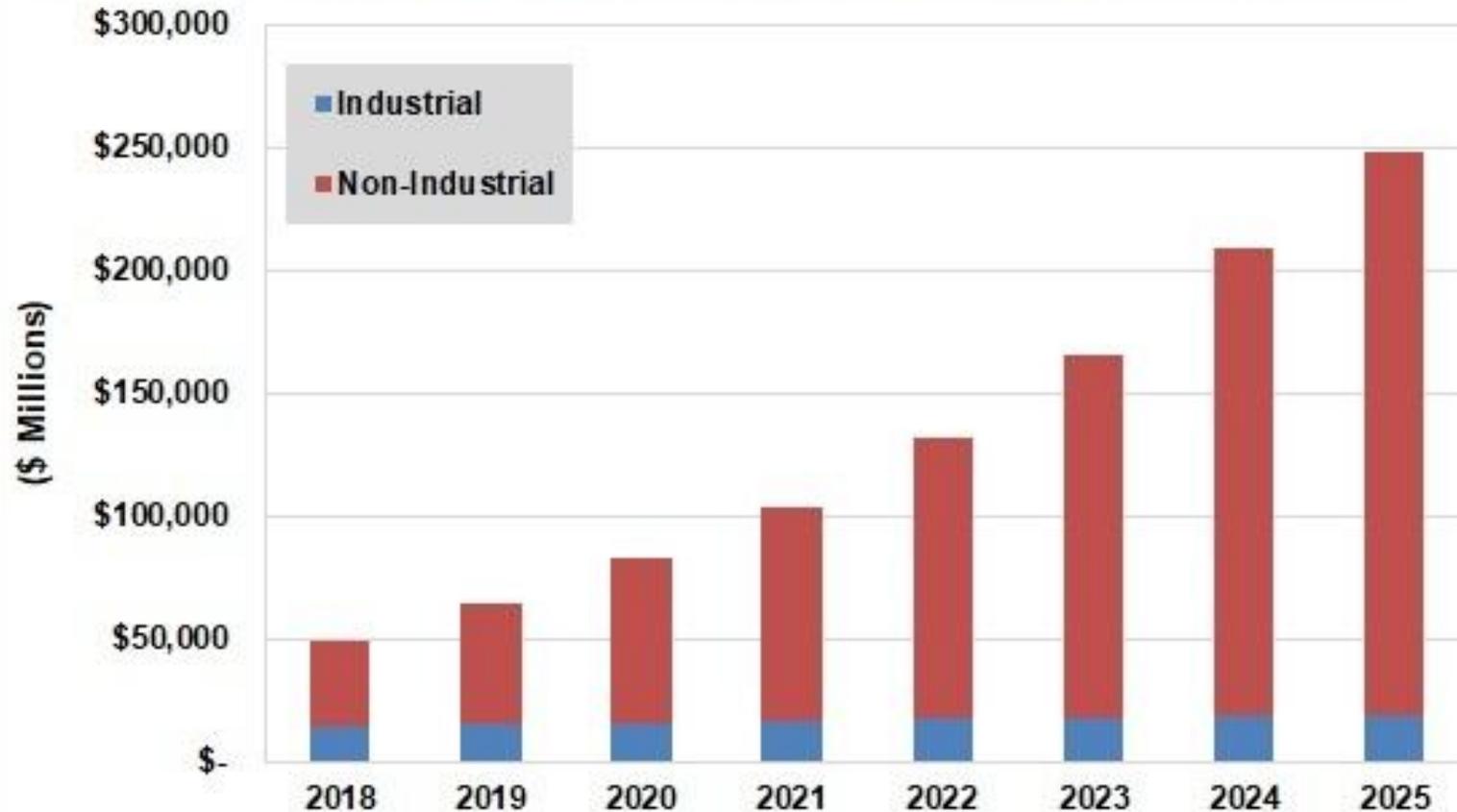
Total Enterprise Quantum Computing Revenue by Region, World Markets: 2018-2030



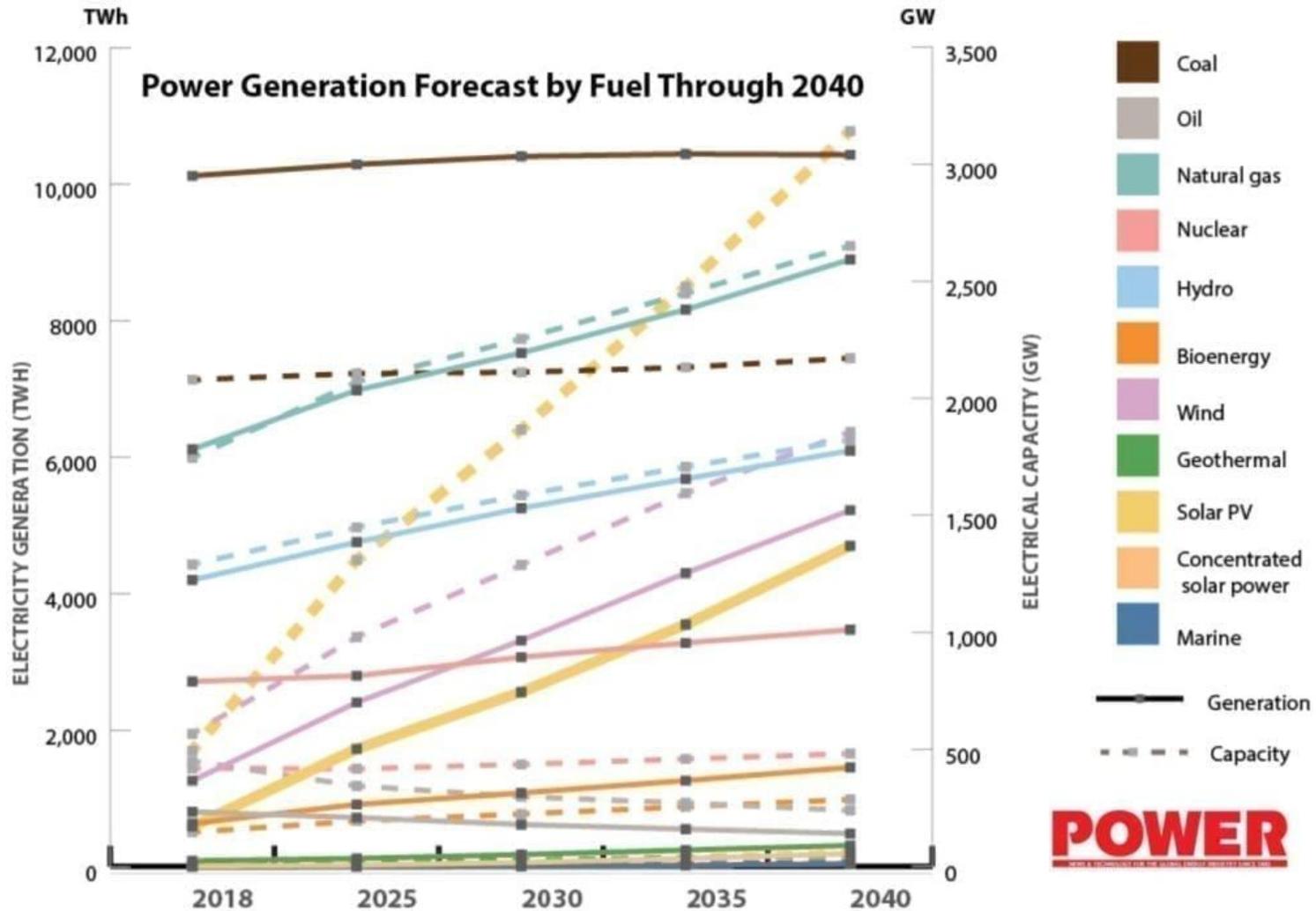
Source: Tractica



Total Industrial and Non-Industrial Robotics Revenue, World Markets: 2018-2025



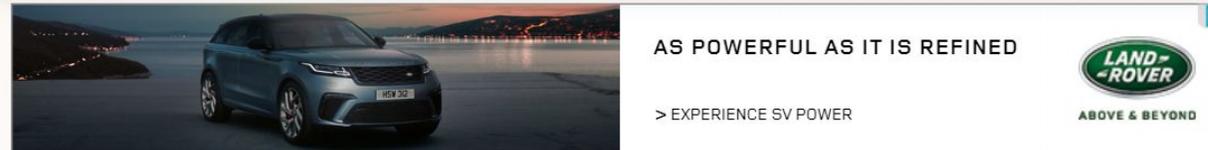
Source: Tractica



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SA is home to the world's largest 3D printer

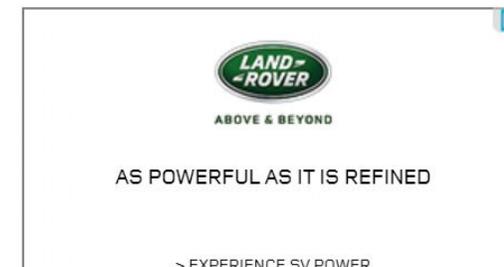


With state-of-the-art 3D printer – the largest in the world – the CSIR plans to secure contracts with international aircraft makers

26 SEPTEMBER 2019 - 05:00 by NAFISA AKABOR



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NOAH SHELDON

Artificial Intelligence

China has started a grand experiment in AI education. It could reshape how the world learns.

In recent years, the country has rushed to pursue “intelligent education.” Now its billion-dollar ed-tech companies are planning to export their vision overseas.

Augmented and Virtual Reality (AR, VR)



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By [Mark Wycislik-Wilson](#) 2 days ago [Future Tech](#)

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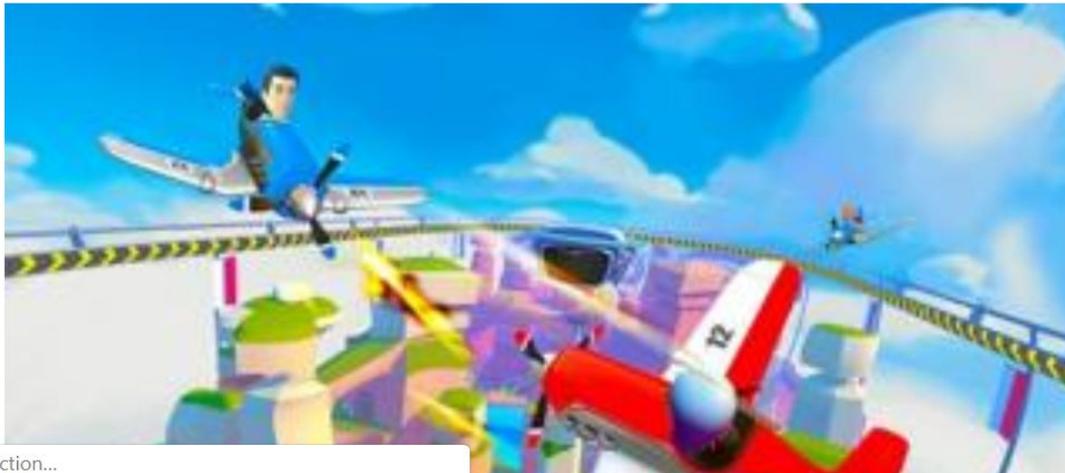
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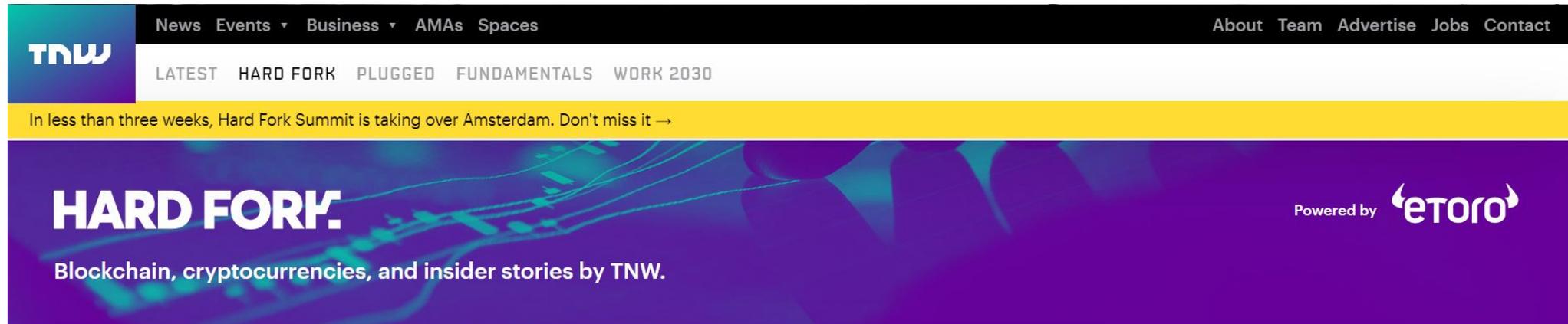
TRANSPORTATION 09.09.2019 12:30 PM

Cities Are Trying—Again—to Plan for Autonomous Vehicles

The bloom is off the rose for self-driving tech among urban transportation officials, who are planning for a future with fewer private cars.



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The screenshot shows the top navigation bar of the TNW website. The left side features the TNW logo and a menu with 'News', 'Events', 'Business', 'AMAs', and 'Spaces'. The right side has links for 'About', 'Team', 'Advertise', 'Jobs', and 'Contact'. Below the navigation is a secondary menu with 'LATEST', 'HARD FORK', 'PLUGGED', 'FUNDAMENTALS', and 'WORK 2030'. A yellow banner below that reads 'In less than three weeks, Hard Fork Summit is taking over Amsterdam. Don't miss it →'. The main banner is purple with the text 'HARD FORK.' in large white letters, followed by 'Blockchain, cryptocurrencies, and insider stories by TNW.' and 'Powered by eToro'.

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Article | [Open Access](#) | Published: 03 October 2019

Towards precision medicine: interrogating the human genome to identify drug pathways associated with potentially functional, population- differentiated polymorphisms

Maulana Bachtiar, Brandon Nick Sern Ooi, Jingbo Wang, Yu Jin, Tin Wee Tan, Samuel S. Chong & Caroline G. L. Lee ✉

The Pharmacogenomics Journal (2019) | [Download Citation ↓](#)

Abstract

Introduction

Materials and methods

Results

Discussion

Code availability

UPS has won approval to run the first drone delivery airline in the US



BUSINESS INSIDER | TRENDING

Watch: South Africa's first crop-spraying drones can legally fly from today – saving farmers millions

Jay Caboz , Business Insider SA
Sep 30, 2019, 04:25 PM



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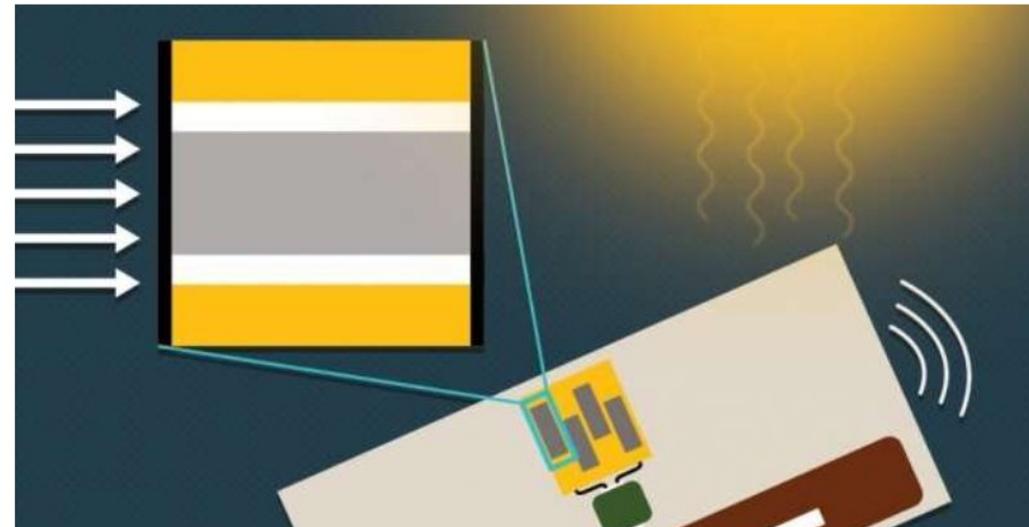


🕒 SEPTEMBER 27, 2019

Photovoltaic-powered sensors for the 'Internet of Things'

by Rob Matheson, Massachusetts Institute of Technology

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🕒 SEPTEMBER 30, 2019 **FEATURE**

SwarmTouch: A tactile interaction strategy for human-swarm communication

by Ingrid Fadelli , Tech Xplore



October 2019



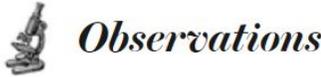
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Creativity and AI: The Next Step

Combining two types of machine intelligence could open new frontiers of art

By Arthur I. Miller on October 1, 2019

Watch the world's biggest 3D printer make a 25-foot boat

By Darren Allan 21 hours ago Printers And Scanners

5,000-pound boat named '3Dirigo' is the largest object ever printed



Home > News > Printers and scanners

Huge 3D printers could produce Mars-bound rockets soon

By Darren Allan a day ago Printers And Scanners

Machine learning tricks will theoretically mean rockets can be made on Mars, eventually



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The project stands almost 10 metres tall and requires half as many people to build as conventional construction



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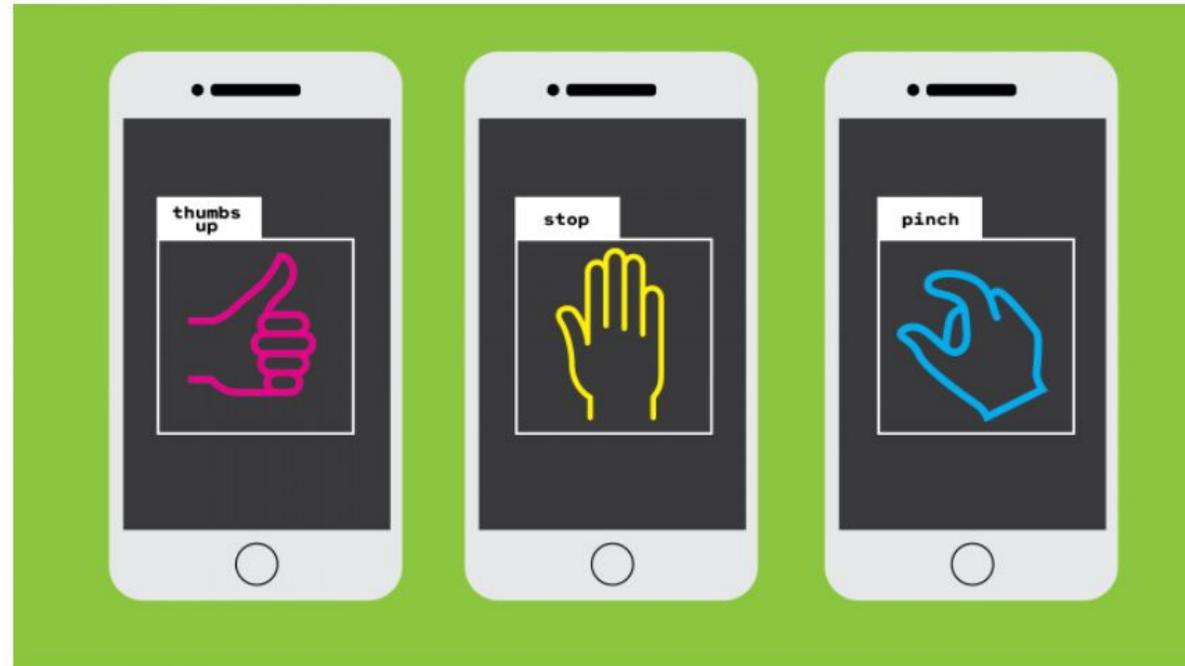


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Artificial Intelligence Could Be a \$14 Trillion Boon to the Global Economy—If It Can Overcome These Obstacles

Artificial Intelligence Oct 11

Powerful computer vision algorithms are now small enough to run on your phone



Researchers have shrunk state-of-the-art computer vision models to run on low-power devices.

Growing pains: Visual recognition is deep learning's strongest skill. Computer vision

Future



Kelsey Warner
Oct 16, 2019

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World's first artificial intelligence university to open in Abu Dhabi

► The Mohamed bin Zayed University of Artificial Intelligence is accepting applications for its first masters and PhD programmes to begin in September 2020



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By [David Meyer](#) October 17, 2019



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Kirsten Korosec @kirstenkorosec / 12:38 am SAST • October 10, 2019

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By [Julia Horowitz](#) and [Sherisse Pham](#), [CNN Business](#)

Updated 1431 GMT (2231 HKT) October 15, 2019



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Technology of Business editor

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Darrell Etherington @etherington / 7:44 pm SAST • October 28, 2019

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Blockchain / Cryptocurrency

Should central banks issue digital currency? Suddenly, it's an urgent question.

Stable digital currencies—and particularly Facebook's plans to launch one—have central bankers playing defense.

by **Mike Orcutt**

Oct 3, 2019

A Revolutionary Blockchain Solution for Cross-Border Business

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OpenExO →

Oct 11, 2019, 18:18 ET

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MIAMI, Oct. 11, 2019 /PRNewswire/ -- We were fortunate enough to catch up with Salim Ismail, a serial entrepreneur who has helped companies like TD Ameritrade, Black & Decker, HP, and Visa move leadership, culture, and management thinking three years ahead in just ten weeks by implementing his methodology for exponential growth.

In our discussion with Salim, we learned about his blockchain-related venture, OpenExO. [OpenExO](#) gives individuals, businesses, and governments the tools they need to succeed in today's world by immersing them in a community of thought-leaders, innovators, futurists, coaches, speakers, and entrepreneurs that help them grow exponentially—just like the companies Salim has assisted.

The wheels may be coming off Facebook's digital currency project Libra



Facebook's digital currency plans took a major hit today as Visa, Mastercard, eBay, and Stripe have followed PayPal's example and backed out of the nonprofit Facebook set up to manage the currency.

Bitcoin surveillance helped feds take down a massive child abuse site



BREAKING NEWS CHINA

China's President Xi Jinping wants the country to 'take the leading position' in blockchain

October 25, 2019, 7:00AM EDT · 1 min read



by Celia Wan



Paralysed man moves in mind-reading exoskeleton

By James Gallagher
Health and science correspondent

🕒 4 October 2019

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Make like a leaf: Researchers developing method to convert carbon dioxide

by University of Sydney

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**International
Space Station**

First meat grown in space lab 248 miles from Earth

Israeli company successfully cultures bovine cells on International Space Station

**Rebecca
Smithers**

Mon 7 Oct 2019
14.30 BST



▲ Bovine cells onboard the International Space Station were grown into small-scale muscle tissue using a 3D printer. [Shutterstock](#)



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Super-precise new CRISPR tool could tackle a plethora of genetic diseases

The system allows researchers more control over DNA changes, potentially opening up conditions that have challenged gene-editors.

Heidi Ledford

MATT SIMON

SCIENCE 10.22.2019 08:00 AM

Scientists Are Literally Spinning Up Lab-Grown Meat

Researchers take inspiration from cotton candy to make a gelatin scaffolding, which could help realize the dream of more sustainable steaks and chicken breasts.



China's stealth drones and hypersonic missiles surpass – and threaten – the U.S.

Despite starting technologically well behind America, China has developed new systems faster and more cheaply to fend off the U.S. in East Asia.



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Rogue drones to be targeted by new hi-tech 'detect and destroy' unit set up by Home Office

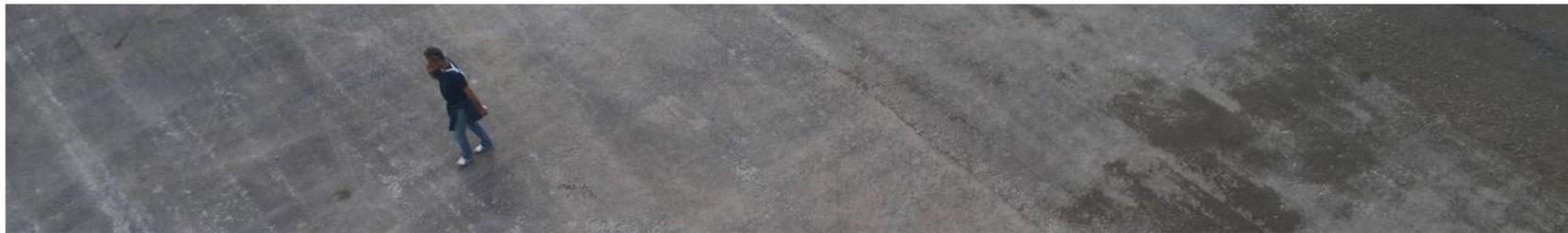


■ OCTOBER 30, 2019, 6:01 AM GMT+2

The Drone Wars Are Already Here

- The skies of Syria, Yemen, and Libya swarm with armed and dangerous unmanned aerial vehicles. And the technology is spreading farther and farther afield.

By Gwen Ackerman, Selcan Hacaoglu, and Mohammed Hatem



Business



Will the rise of IoT and slowing of Moore's Law contribute to climate change?

DEAN TAKAHASHI @DEANTAK OCTOBER 19, 2019 8:45 AM



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Donald Trump said in August his administration would 'take a very long look' at contract, after public swipes at Amazon

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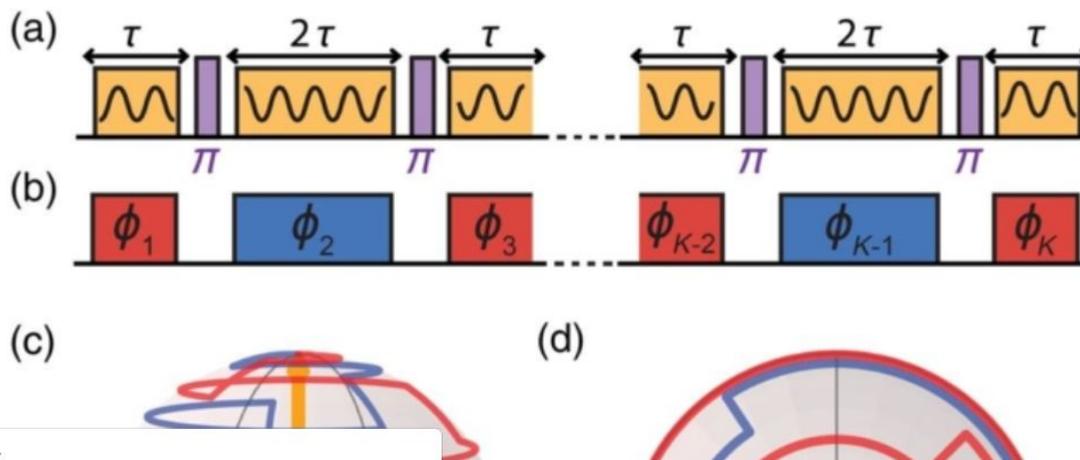
quantum computing



QUANTUM COMPUTING | RESEARCH UPDATE

10-qubit register breaks new ground in quantum computing

02 Oct 2019 Arso Ivanovic

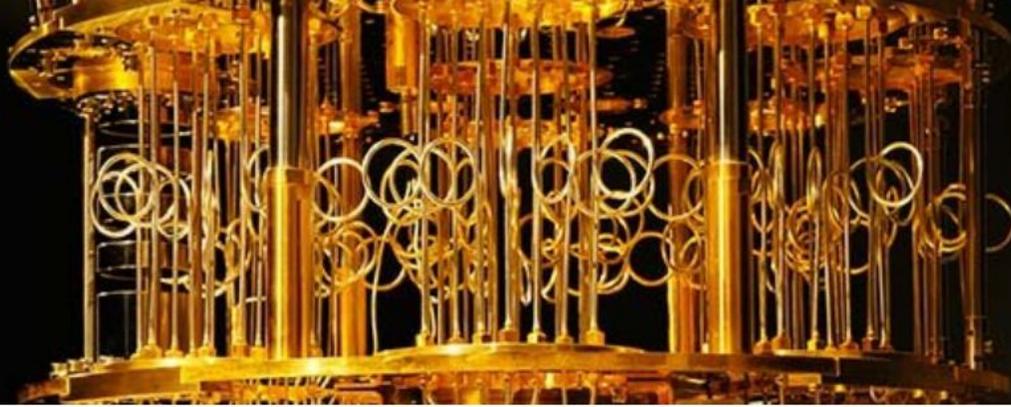


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Barclays demonstrates proof-of-concept quantum clearing algorithm

Barclays and IBM researchers publish paper on a quantum computing algorithm for securities transaction trading



Technology

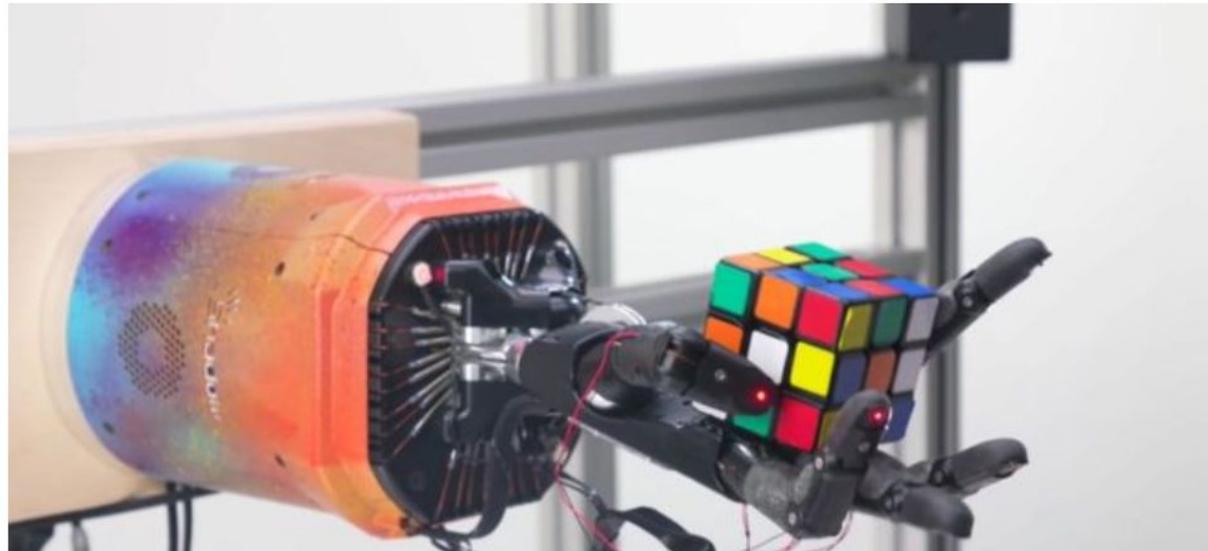
Robot hand solves Rubik's cube, but not the grand challenge



Dave Lee
North America technology reporter

🕒 15 October 2019

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MIT develops a way for robots to grasp and manipulate objects much faster

Darrell Etherington @etherington / 3 days

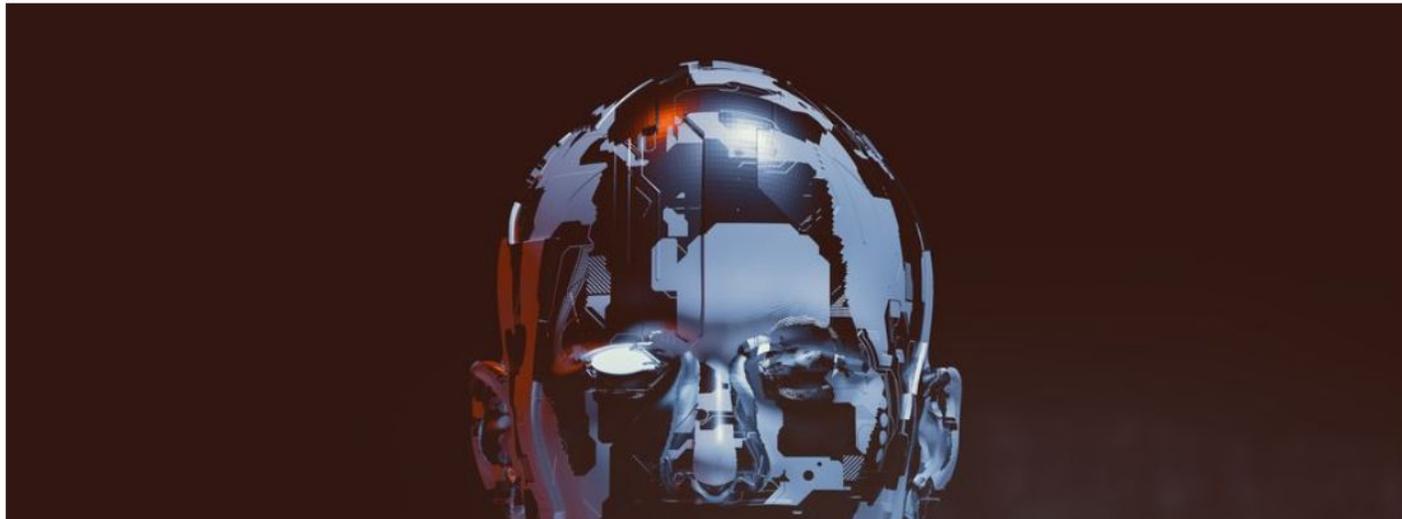


Want \$125k? Just Donate Your Face to Some Humanoid Robots

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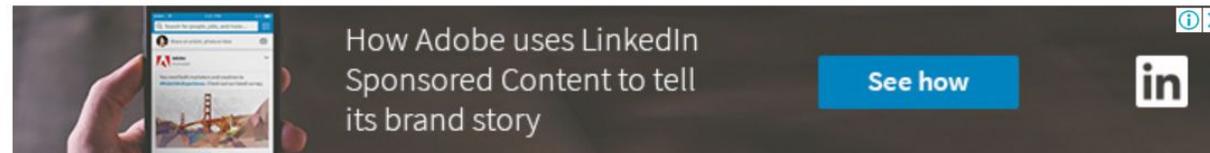


By [Courtney Linder](#) Oct 18, 2019





MWC19 Los Angeles: First-ever humanoid robot powered by cloud artificial intelligence



 by **N.F. Mendoza** in **Artificial Intelligence** on October 23, 2019, 2:37 PM PST

CloudMinds XR-1 5G humanoid robots perform intricate manual tasks at the Sprint exhibit at MWC19 Los Angeles.

Who needs to use that delicate tiny sewing staple, when there's now a robot that can thread a needle for you? CloudMinds XR-1, 5G Humanoid Robots with vision-controlled grasping tech and intricate manual tasks, interacted with guests at the [Sprint](#) exhibit at the [Mobile World Congress 2019 Los Angeles \(MWC19\)](#) in Los Angeles

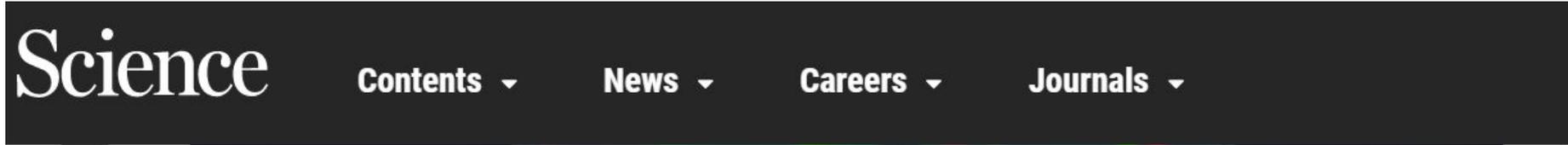
WHITE PAPERS, WEBCASTS, A

 Tech Pro Research: IT Guide to Deep Learning
White Papers from TechRe

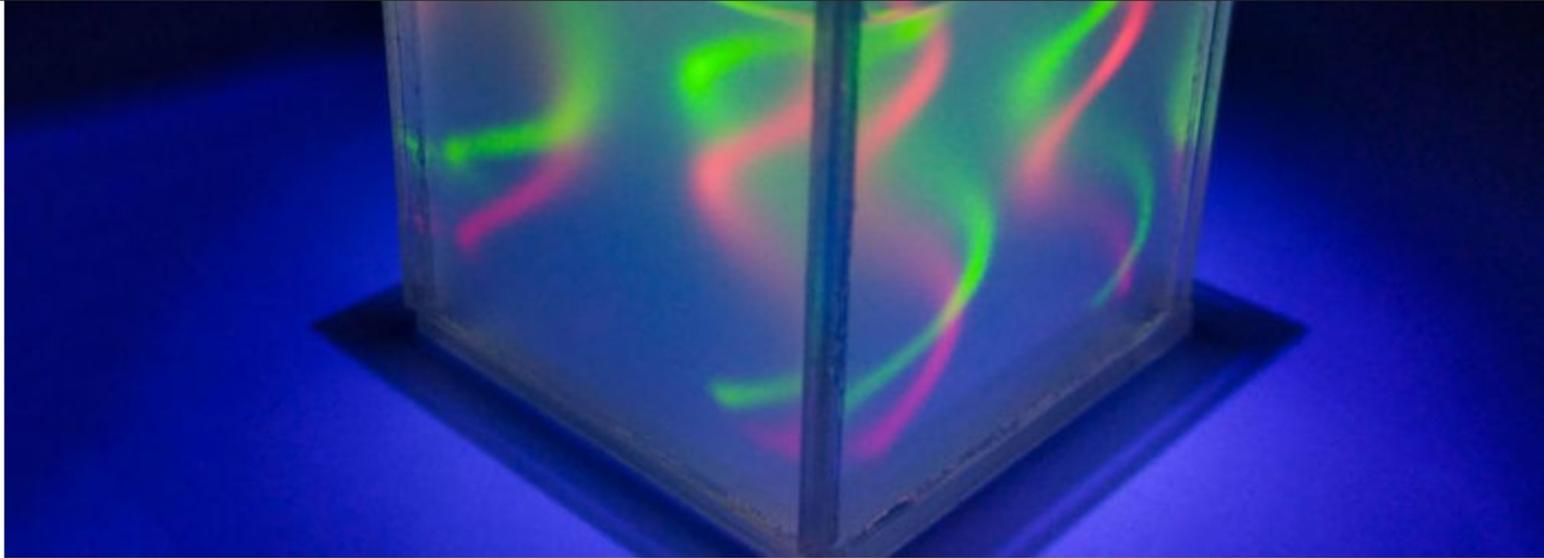
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November 2019



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G. LUO ET AL., *ADVANCED MATERIALS* (2019) 1904631

Liquid-in-liquid printing method could put 3D-printed organs in reach

By Ian Randall | Nov. 1, 2019 , 4:30 PM

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The Observer
3D printing

How do you like your beef... old-style cow or 3D-printed?

Gareth Rubin

@GarethRubin

Sun 10 Nov 2019
06.18 GMT



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NEWS

Researchers 3D-Printed Plastic Cubes With Complex Patterns That Make them Bulletproof



Andrew Liszewski

Thursday 11:40AM • Filed to: RESEARCH ✓



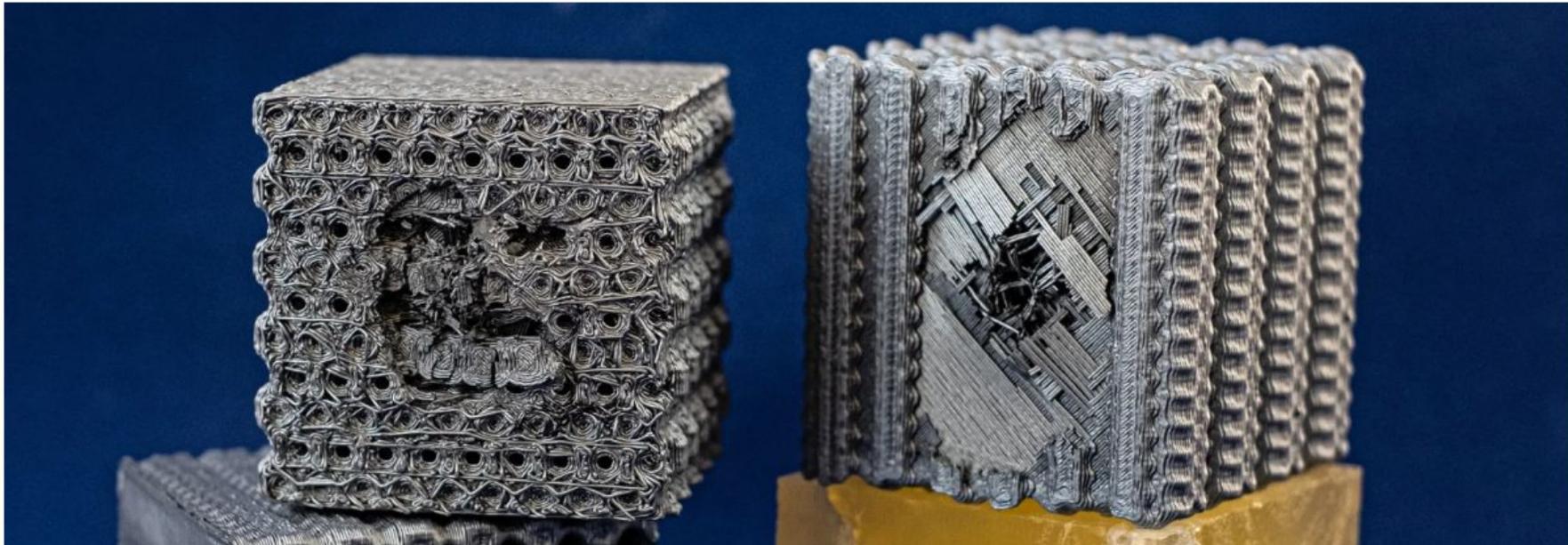
85.9K



52



2



TECH

The Future of 3D Printing Is (Literally) Massive

The University of Maine leads the way with an innovative use of technology



Opinion
Artificial
intelligence (AI)

AI is making literary leaps - now we need the rules to catch up

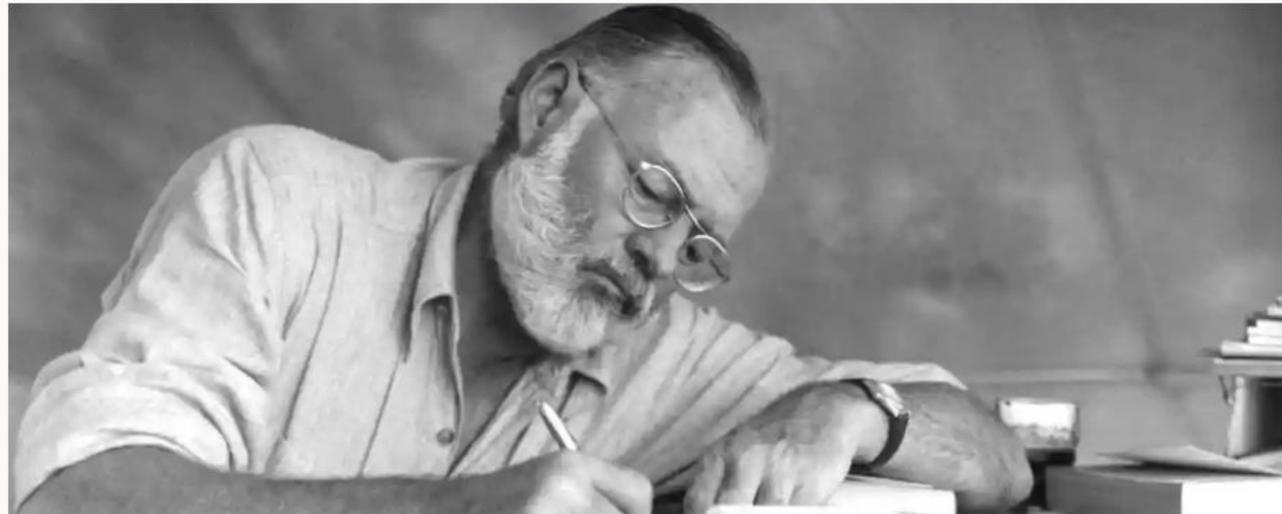
John Naughton

Sat 2 Nov 2019
16.00 GMT



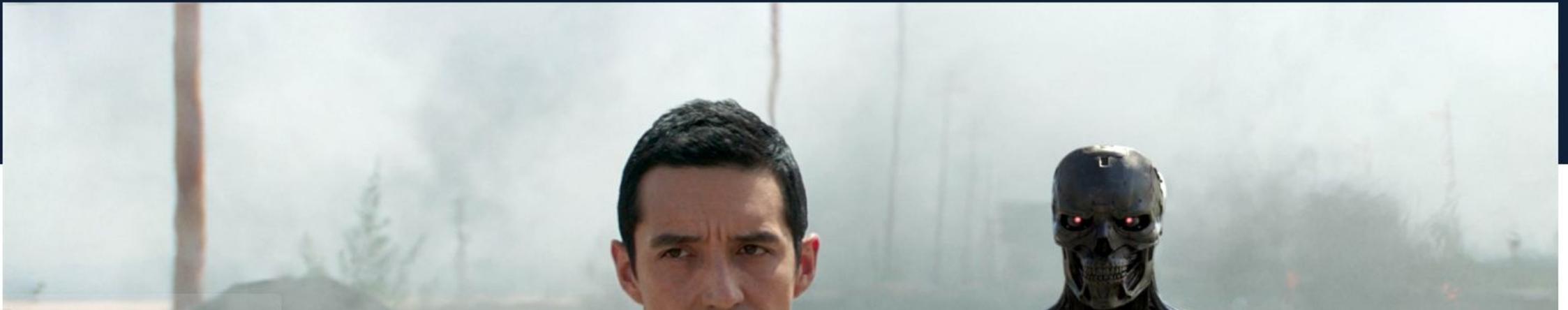
68 | 106

A row over the release of a new language-learning model highlights how ethics and the law are lagging behind



'Terminator' at 35: How AI and the militarization of tech has evolved

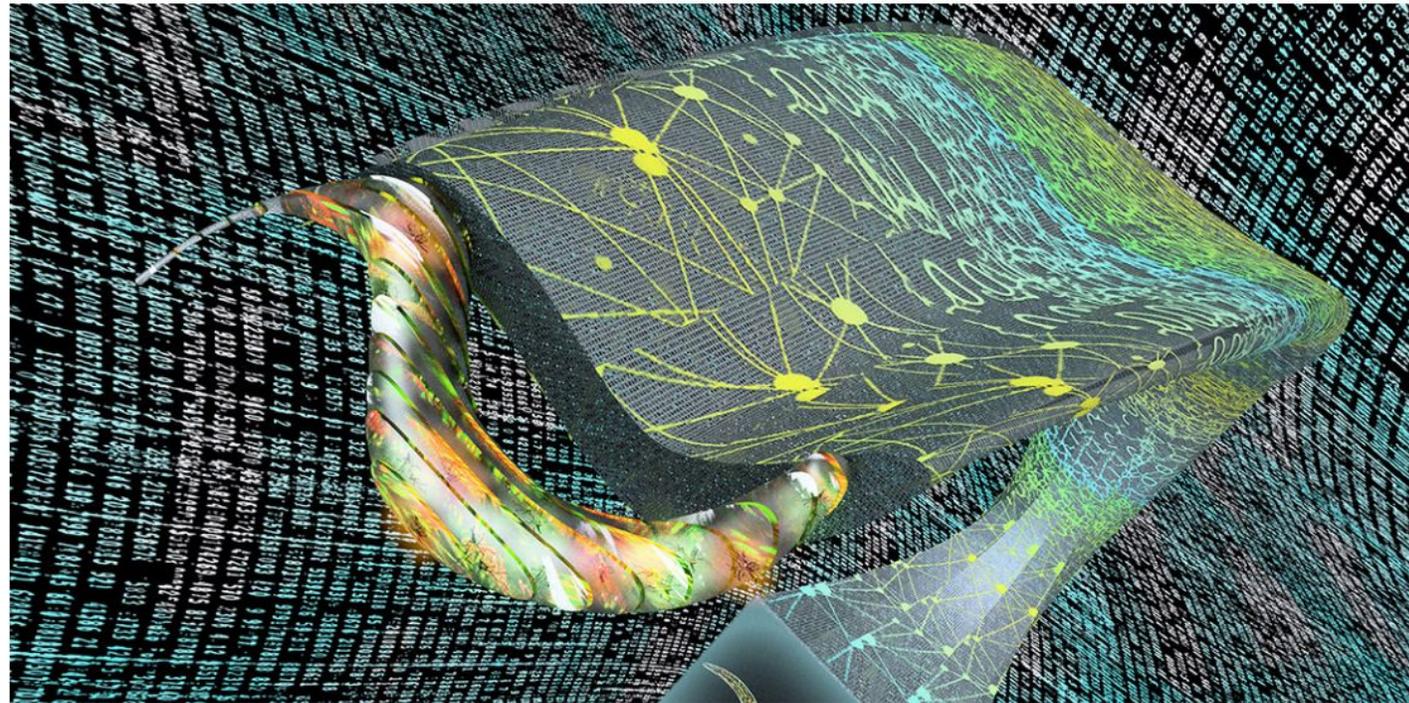
Scientists scoff at the idea that AI poses an existential threat, but military applications of the technology pose concern.



Artificial Intelligence Converts 2D Images Into 3D Using Deep Learning [Video]

TOPICS: Artificial Intelligence Imaging Machine Learning UCLA

By WAYNE LEWIS, UCLA NOVEMBER 9, 2019



Forbes

Billionaires Innovation Leadership Money Business Small Business Life

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20,373 views | Nov 11, 2019, 12:31am

13 Mind-Blowing Things Artificial Intelligence Can Already Do Today



Bernard Marr Contributor 
Enterprise & Cloud

f By now, most of us are aware of artificial intelligence (AI) being an increasingly present part of our everyday lives. But, many of us would be quite

t surprised to learn of some of the skills AI already knows how to do. Here are 13 mind-blowing skills artificial intelligence can already do today.

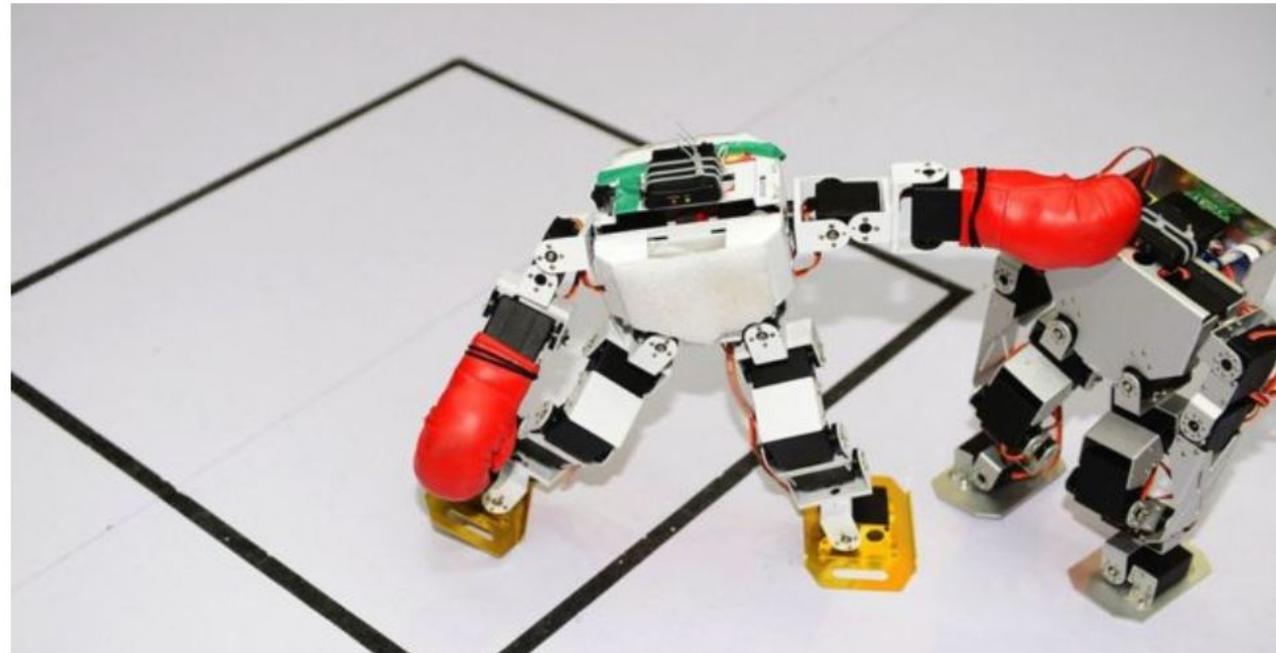
in

Is China gaining an edge in artificial intelligence?

By Natalie Sherman
Business reporter, New York

🕒 12 November 2019

[f](#) [💬](#) [🐦](#) [✉️](#) [Share](#)





11,595 views | Nov 22, 2019, 09:00am

Top Artificial Intelligence (AI) Predictions For 2020 From IDC and Forrester



Gil Press Contributor 
Enterprise & Cloud

I write about technology, entrepreneurs and innovation.

-  **IDC** and **Forrester** issued recently their predictions for artificial intelligence (AI) in 2020 and beyond. While external “market events” may make
-  companies cautious about AI, says Forrester, “courageous ones” will continue to invest and expand the initial “timid” steps they took in 2019.

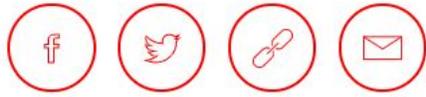
Robot debates humans about the dangers of artificial intelligence



TECHNOLOGY 24 November 2019

By [Donna Lu](#)





NOVEMBER 22ND 19 __ DAN ROBITZSKI __ FILED UNDER: ARTIFICIAL INTELLIGENCE

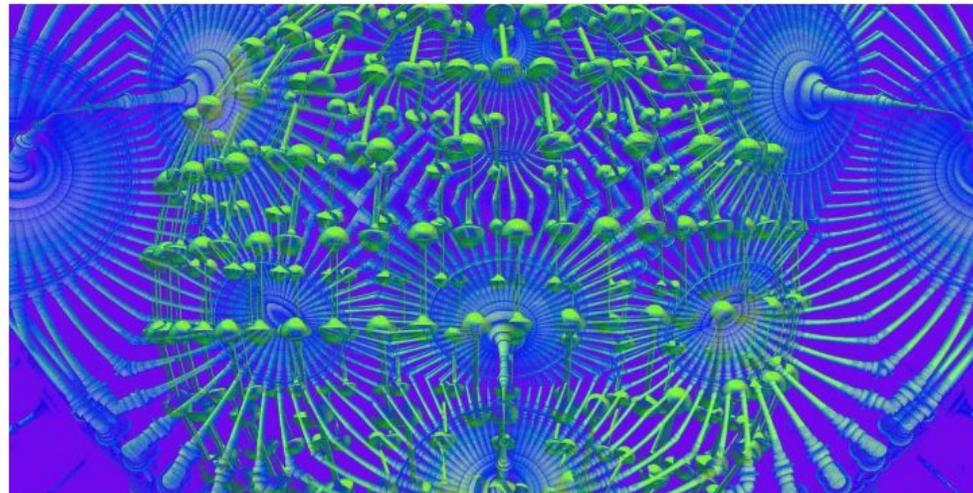
Extra Help

A new machine learning algorithm could probe the quantum behavior of molecules, giving chemists a better ability to design new compounds from scratch.

The AI system, with the ridiculous-sounding name “SchNOrb,” can look deeper into the structure and behavior of molecules than previous chemist-assisting algorithms, *Inverse* reports. Though SchNOrb — “SchNet for Orbitals” — hasn’t been deployed within academia yet, it could help scientists develop brand

ROBOT INTERN

AI IS LEARNING QUANTUM MECHANICS TO DESIGN NEW MOLECULES



11,756 views | Nov 27, 2019, 03:07am

The Artificial Intelligence Industry and Global Challenges



Fabian Westerheide Contributor
COGNITIVE WORLD Contributor Group

AI

Fabian J. G. Westerheide, CEO of AI for Humans, is an international expert on Artificial Intelligence strategy, entrepreneur and venture capitalist.

f Whoever controls the strongest artificial intelligences controls the world.

t Artificial intelligence is the most important technology of the 21st century. It is therefore important to understand global ambitions and movements.

in In this article I examine the global artificial intelligence industry and in this context consider the aspects of politics, data, economy, start-ups, financing, research and infrastructure.

I will only briefly discuss the current superpowers China and the USA, as I

<https://www.doublerific.com>

Google update makes Chrome ready for web-based VR

Web developers can create VR content for smartphones and head-mounted displays.



Georgina Torbet, @georginatorbet
11.01.19 in [Internet](#)

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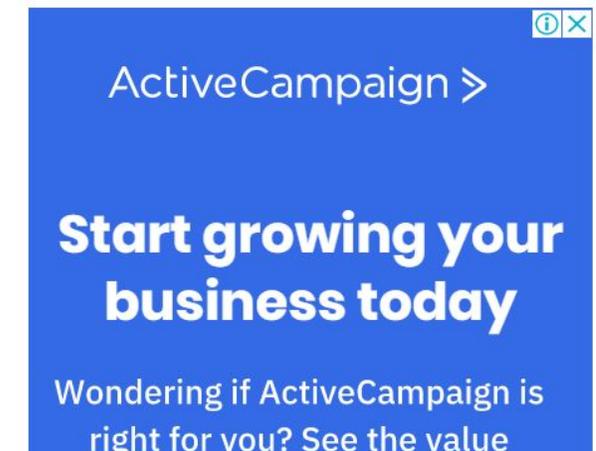
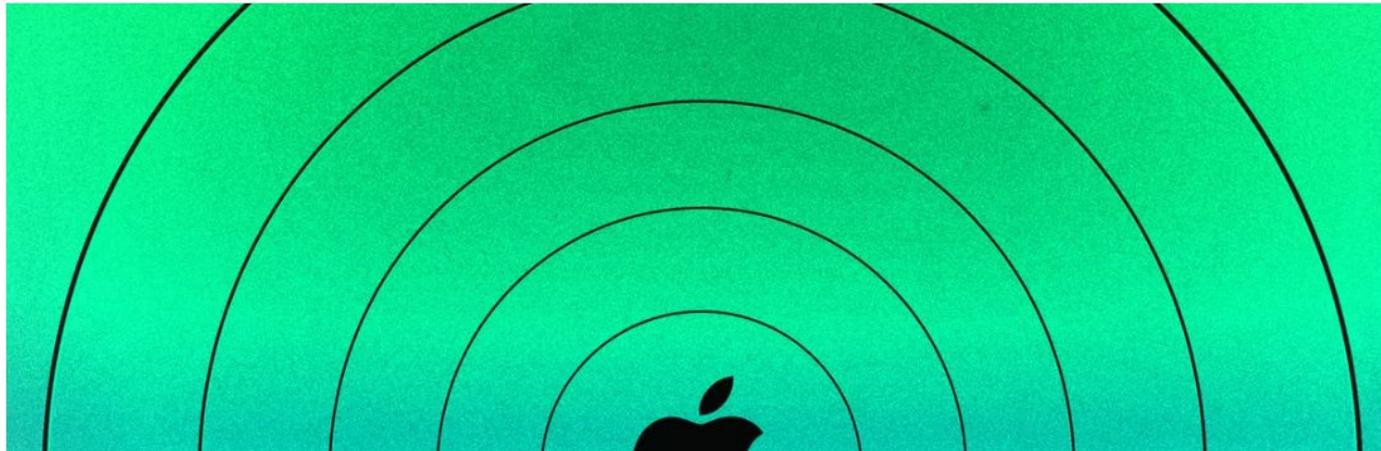
APPLE | TECH | AUGMENTED REALITY

Apple reportedly plans 2022 release for first AR headset, followed by AR glasses in 2023

Apple managers say AR glasses could supplant the iPhone in a decade

By James Vincent | Nov 11, 2019, 9:02am EST

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TECH

Alphabet's self-driving car project Waymo is shuttering its Austin operations

PUBLISHED FRI, NOV 8 2019•2:45 PM EST | UPDATED FRI, NOV 8 2019•3:46 PM EST



William Feuer
@FEUERWILLIAM



Jennifer Elias
@JENN_ELIAS

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KEY POINTS

- Waymo, Alphabet's self-driving car project, is shuttering its operations in Austin, Texas. It will affect about 10 employees and an undisclosed number of contractors.
- Employees will be offered a relocation opportunities or transition pay if they decide not to relocate.



2,253 views | Nov 14, 2019, 08:48am

Here's How Quantum Computer Supremacy Will Impact Self-Driving Cars



Lance Eliot Contributor 
Transportation

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EAST TECH WEST

Self-driving trucks likely to hit the roads before passenger cars

PUBLISHED FRI, NOV 22 2019 • 12:24 AM EST



Evelyn Cheng
@CHENGEVELYN

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KEY POINTS

- “Overall the funding situation for us (has) definitely cooled (down) a little bit, but definitely not dried up,” James Peng, co-founder and CEO of Pony.ai, said Tuesday at CNBC’s East Tech West conference in the Nansha district of Guangzhou, China.



Bitcoin Spikes As China Embraces Blockchain



Crypto Confidential Forbes Staff
Newsletters



1,513 views | Nov 7, 2019, 09:00am

Bitcoin And Blockchain Job Hunts Drop 53% Over Past Year



Benjamin Pirus Contributor

Crypto & Blockchain

I write about enterprise blockchain and cryptocurrency in finance and regulation.

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Blockchain just had a field day in China

E-tail giant Alibaba used blockchain technology to power a record-smashing \$30 billion day of sales. And more—in this week's da bing: A weekly wrap up of crypto in China

By [Shuyao Kong](#)

6 min read • Nov 16, 2019

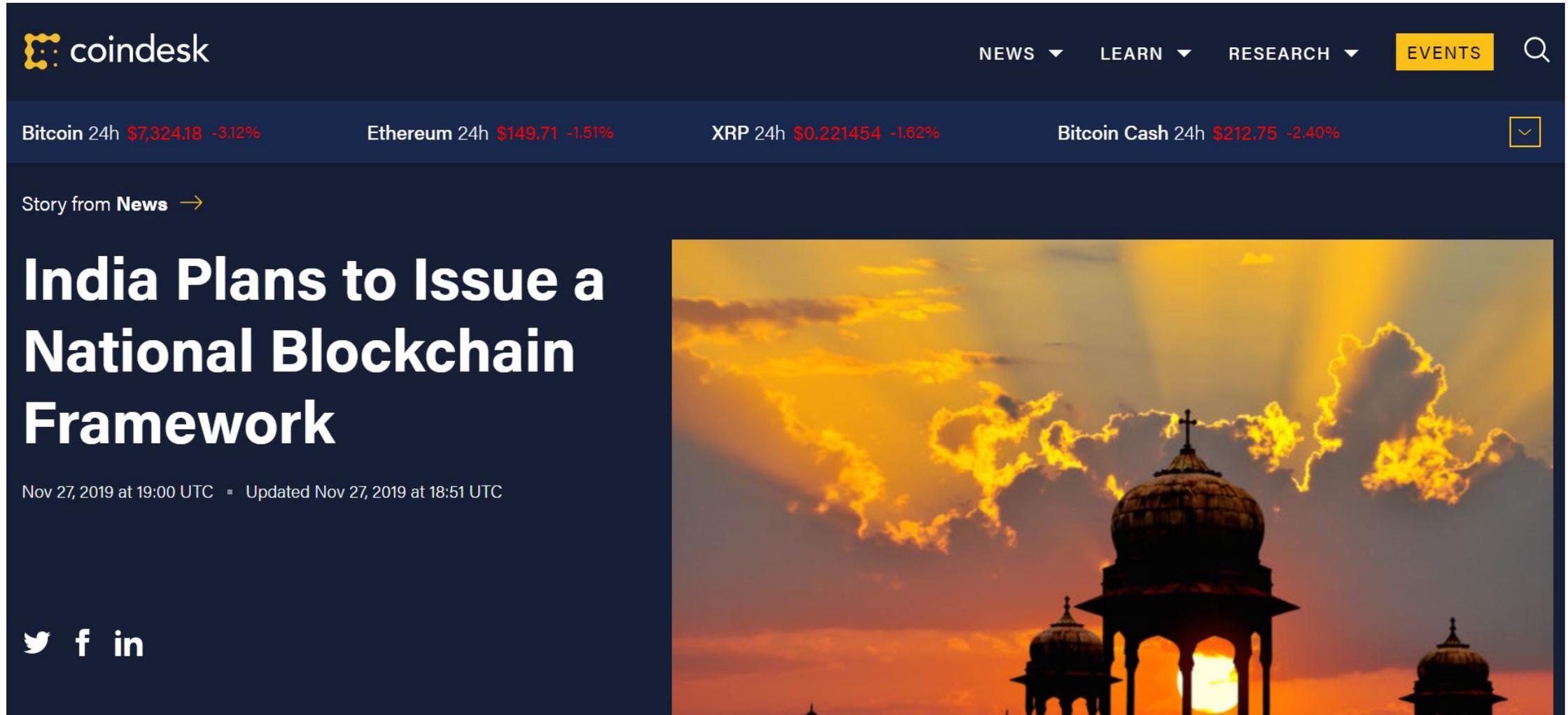


Bitcoin 24h **\$7,220.40** +0.85%

Ethereum 24h **\$148.37** +0.27%

Story from **Business** →

EU Launches Estimated €400M Blockchain, AI Fund to Avoid Lagging US, China



The screenshot shows the Coindesk website interface. At the top left is the Coindesk logo. To the right are navigation links for NEWS, LEARN, RESEARCH, and EVENTS. Below the navigation is a dark blue bar displaying cryptocurrency prices: Bitcoin 24h at \$7,324.18 (-3.12%), Ethereum 24h at \$149.71 (-1.51%), XRP 24h at \$0.221454 (-1.62%), and Bitcoin Cash 24h at \$212.75 (-2.40%). The main content area features a large headline: "India Plans to Issue a National Blockchain Framework". Below the headline is the publication date and time: "Nov 27, 2019 at 19:00 UTC" and "Updated Nov 27, 2019 at 18:51 UTC". At the bottom left of the article are social media icons for Twitter, Facebook, and LinkedIn. On the right side of the article is a large image of a sunset over a domed building, likely a temple or historical site in India.

82,918 views | Nov 29, 2019, 09:31am

HSBC Moves \$20 Billion From Paper to Blockchain In One Of The Biggest Financial Deployments



Darryn Pollock Contributor 
Crypto & Blockchain

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in





Meet the pigs that could solve the human organ transplant crisis

LAETITIA VANCON

Biotechnology

Meet the pigs that could solve the human organ transplant crisis

On a farm in Bavaria, German researchers are using gene editing to create pigs that could provide organs to save thousands of lives.

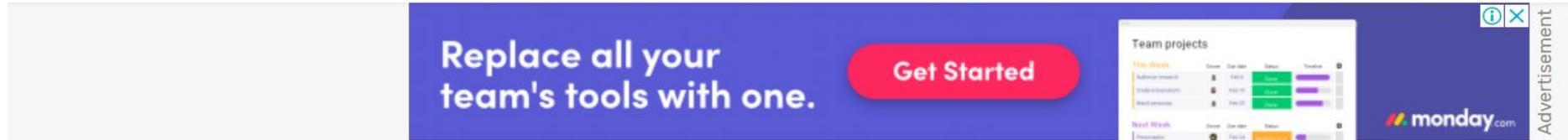
by **Karen Weintraub**

Nov 1, 2019

Biotechnology Tipped to Revolutionize Uganda's Agriculture

November 13, 2019





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Team projects

Task	Owner	Due date	Status	Priority
Address meeting	John	2019-11-20	Done	High
Update presentation	Jane	2019-11-21	In Progress	Medium
Send proposal	Mike	2019-11-22	Not Started	Low

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BIOTECH INDUSTRY ► TECHNOLOGY

5 Ways Food Biotechnology Has Changed Our World



Biotech Industry

TECHNOLOGY

BUSINESS

SALES AND MARKETING

BUFFERS AND MEDIA

BY [THERESA PHILLIPS](#)  • Updated November 20, 2019

Developments in food biotechnology have exerted an impact on how food is produced, packaged, tested, and preserved. Many of the changes have meant indisputable enhancements for our safety and our health, while others are more controversial. While some advances, such as the use of plastic wraps, may seem like simple advances in the world of food production and consumption, others appear to be a lot more technological. Below is a break down of five biotechnology advances



BEST PRODUCTS ▾ REVIEWS ▾ NEWS ▾ VIDEO ▾ HOW TO ▾ SMART HOME ▾ CARS ▾ DEALS ▾

Drones will swarm our skies when these 3 things happen

Drone makers have to convince us that airborne burritos and transplant organs are worth the noise and privacy invasion.



Stephen Shankland  November 10, 2019 5:00 AM PST



Drone company Iris Automation makes first-of-its-kind FAA-approved 'blind' drone flight

PUBLISHED TUE, NOV 12 2019 8:00 AM EST | UPDATED TUE, NOV 12 2019 9:56 AM EST



Jacob Douglas
@JACOBMDOUGLAS

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KEY POINTS

- The first FAA-approved long-distance drone flight using no ground-based radar or visual observer took place recently in Kansas.
- The flight is a step toward making commercial drone flights routine across the U.S.
- Iris Automation, which created the onboard drone collision-avoidance system, said routine flights may happen in a matter of months.



Drone pilot fined \$20,000 after fly-away DJI Phantom 3 lands at McCarran Airport in Las Vegas

Haye Kesteloo - Nov. 24th 2019 4:35 pm ET

FEATURE



TECH \ ROBOT

This transforming drone can be fired straight out of a cannon 4

A faster way to get your quadcopter in the air

By [James Vincent](#) | Nov 21, 2019, 6:24am EST

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 Design of a Ballistically-Launched Foldable Multirotor

50 mph  Watch later  Share

GOOD DEALS

The Verge Guide to Black Friday

These are the best Black Friday deals on Apple iPad, AirPods, MacBook, iPhone, and

Drone users must now register and complete theory test

The legislation aims to tackle drone-related incidents such as the one which caused chaos at Gatwick Airport last year.



Enda Brady

News correspondent @SkyEnda

🕒 Saturday 30 November 2019 03:57, UK

DRONES



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Forrester: The 5 IoT predictions paving the way for 2020



Catching Up On The Latest In IoT Intelligence, 2019



Louis Columbus Contributor 
Enterprise & Cloud

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MIT Technology Review

Biotechnology

**A natural biomolecule has
been measured acting like
a quantum wave for the
first time**

Home > Technology > Science

Soft robots of the future may depend on new materials that sense damage and self-heal

Robots used to be restricted to heavy lifting or fine detail work in factories, but that is changing.

 by **The Conversation** — 2019-11-11 12:27 in Science



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Watch a herd of MIT's Mini Cheetah robots frolic in the fall leaves

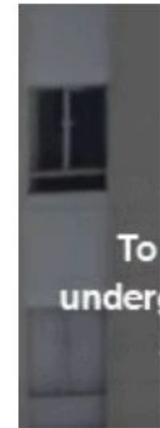
Backflips, soccer and creepy dances are part of the fun.



Jon Fingas, @jonfingas
18h ago in [Robots](#)

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Here's who will build the Army's heavy common robot

By: **Jen Judson**  1 day ago





TECH • ROBOTICS

How Robots Are Changing the Construction Industry

By [Jennifer Alsever](#) November 23, 2019



GOOGLE TECH ROBOT

Alphabet X's new Everyday Robot project wants to build robots that can learn from the world around them

But right now, they mostly sort trash

By [Jay Peters](#) | Nov 21, 2019, 7:29pm EST

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December 2019



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3D Printing in Oil & Gas Market is Estimated to be Worth \$32 Billion by 2025 - ResearchAndMarkets.com

December 02, 2019 05:25 AM Eastern Standard Time

DUBLIN--(BUSINESS WIRE)--The "3D Printing in Oil & Gas - Thematic Research" report has been added to **ResearchAndMarkets.com's** offering.

"3D Printing in Oil & Gas - Thematic Research"

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The use of additive manufacturing, or 3D printing, is gradually increasing in the Oil and Gas industry. Currently accounting for less than 0.1% of the overall global manufacturing market, which is currently valued at \$12.7 trillion, it is estimated that the 3D printing market will be worth \$32bn by 2025 and over \$60bn by 2030, according to the latest report 3D Printing in Oil & Gas - Thematic Research.

3D printing has emerged as one of the key enabling technologies in driving industrial productivity. Over the years, 3D printing technology has become prominent in different industries and has significantly influenced automotive and aerospace manufacturing. In the Oil and Gas sector, some of the technology's applications include manufacturing spare parts on site, testing new product designs and simplifying inventory management to save costs.

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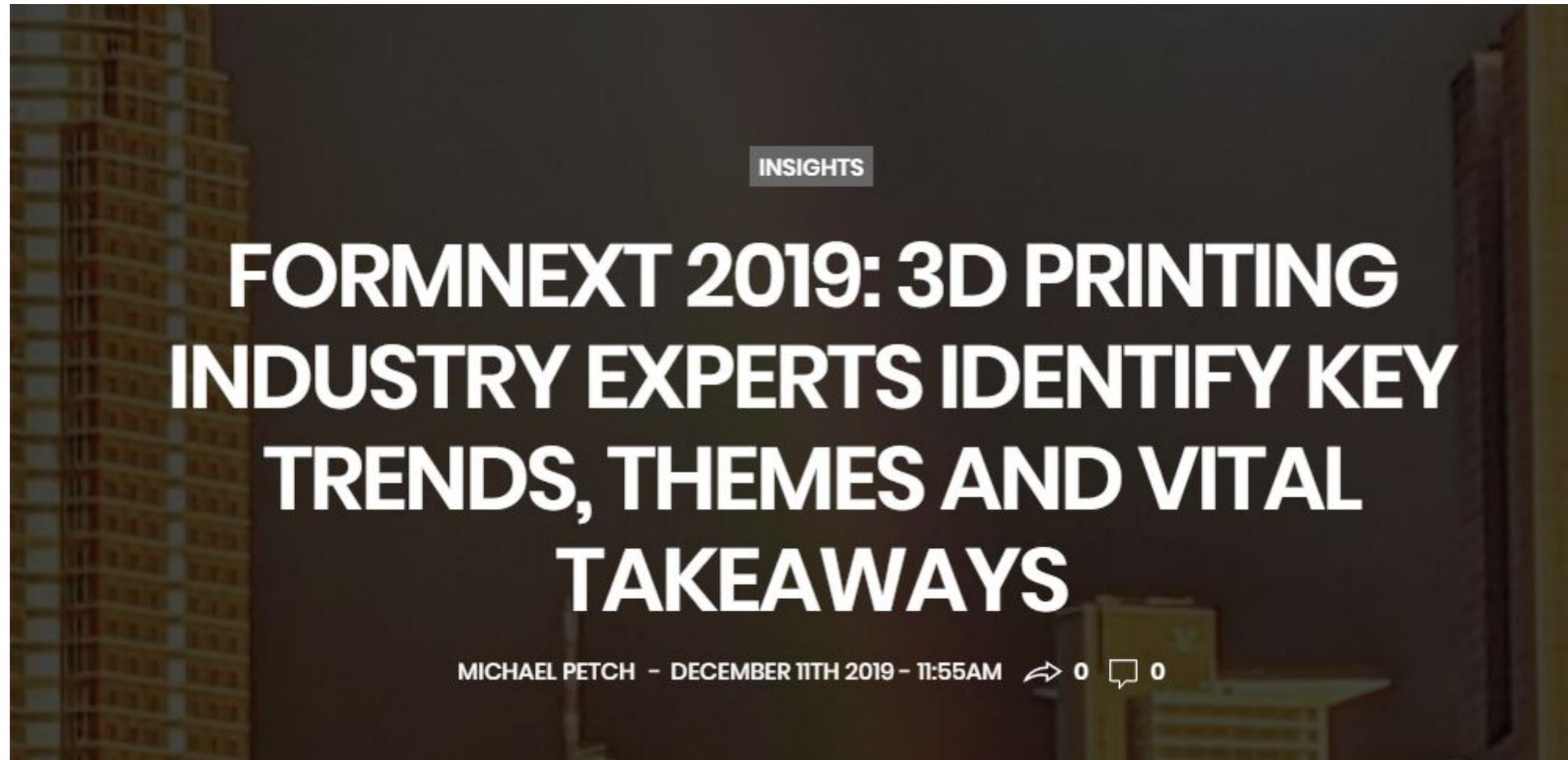
2019 Year in Review: Desktop 3D Printing

December 10, 2019 • by Michael Molitch-Hou • 3D Printers • 3D Printing



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INSIGHTS

FORMNEXT 2019: 3D PRINTING INDUSTRY EXPERTS IDENTIFY KEY TRENDS, THEMES AND VITAL TAKEAWAYS

MICHAEL PETCH - DECEMBER 11TH 2019 - 11:55AM  0  0

3D Printing and Digital Fabrication



All News World

World's First Community of 3D Printed Homes is Set to House Mexico's Poorest Families

By Good News Network - Dec 12, 2019

TNW

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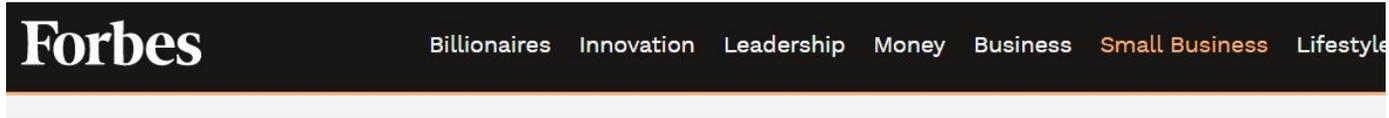
WORK 2030

Amazon unveils musical AI keyboard that teaches humans about machine learning



by IVAN MEHTA — 4 hours ago in PLUGGED





10,664 views | Dec 7, 2019, 09:58pm

This Year's AI (Artificial Intelligence) Breakthroughs



Tom Taulli Contributor 
Entrepreneurs
I write about tech & finance.

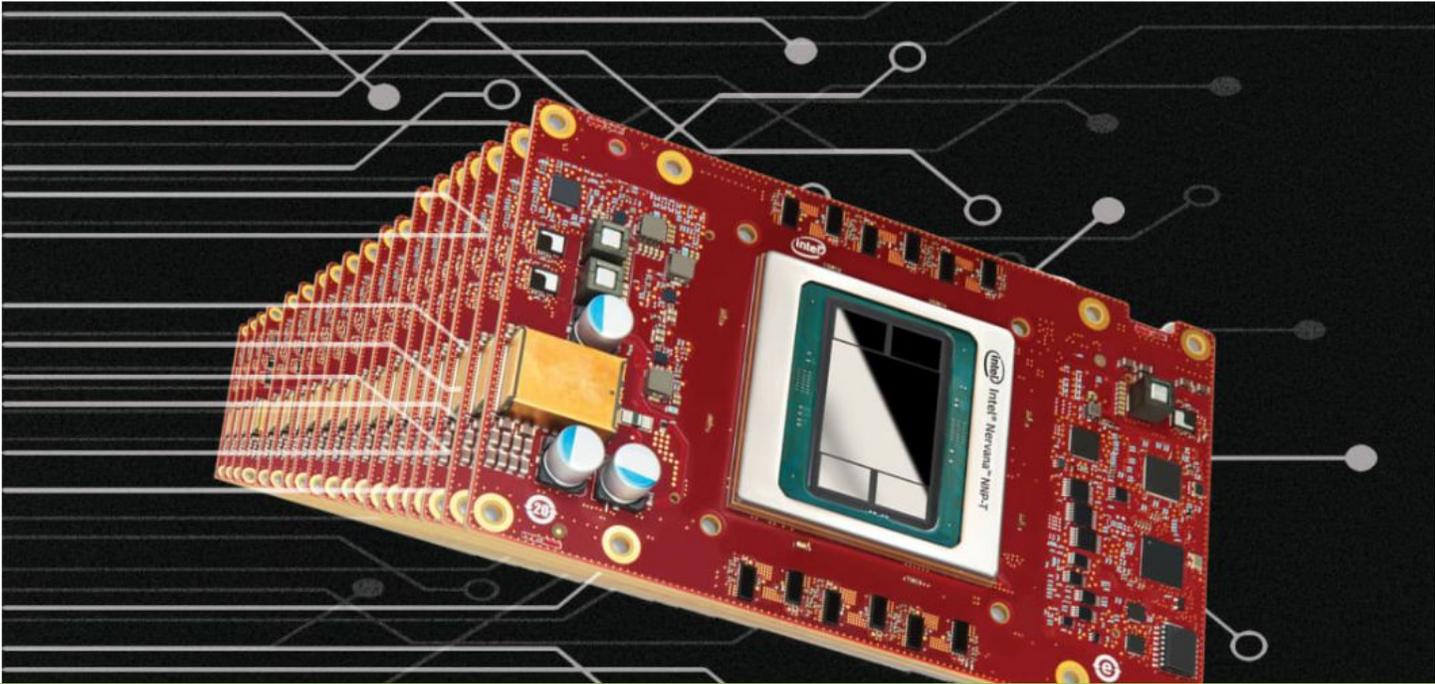


12.07.19 | CONNECTED WORLD

FASTCOMPANY

Inside Intel's billion-dollar transformation in the age of AI

The storied chip maker is dealing with the reality that Moore's Law is slowing just when the demands of AI are asking for more and more computing power.

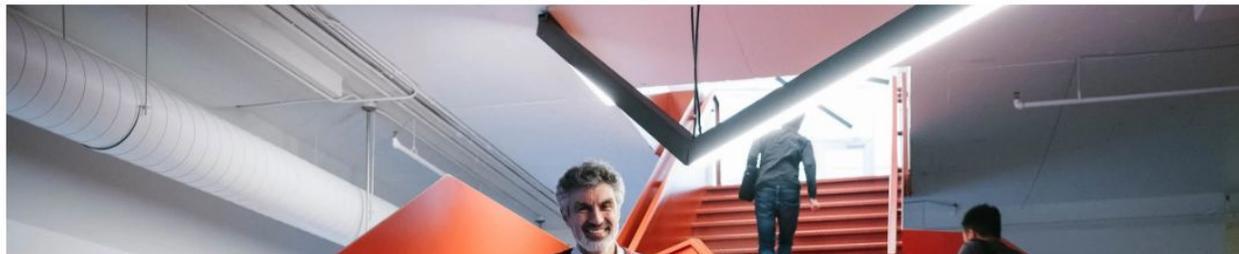


TOM SIMONITE

BUSINESS 12.13.2019 09:00 AM

A Sobering Message About the Future at AI's Biggest Party

Leaders in artificial intelligence warn that progress is slowing, big challenges remain, and simply throwing more computers at a problem isn't sustainable.



TECH \ ARTIFICIAL INTELLIGENCE \

AI R&D is booming, but general intelligence is still out of reach

The 2019 AI Index report gives us a glimpse into AI progress

By [James Vincent](#) | Dec 12, 2019, 12:01am EST

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FUTURE TECH · Published 17 hours ago

Honda preparing to release self-driving car in Japan. Here's how much it costs

Drivers could watch TV while behind the wheel of Legend sedan

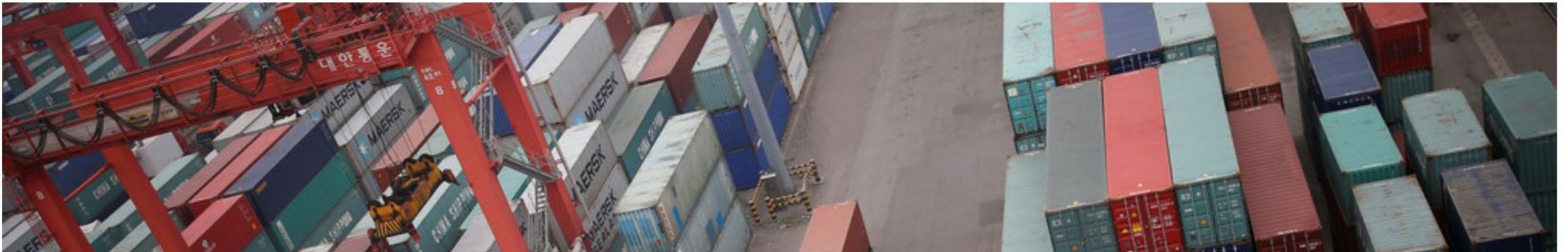
5G REVOLUTION

What the Future of Self-Driving Cars Actually Looks Like

Here's how autonomous driving technology works--and which companies are making it a reality.



Blockchain is becoming key for global trade - but is that a gift for hackers?



December 7, 2019 | *Topic:* Security | *Region:* Middle East | *Blog Brand:* The Buzz | *Tags:* Israel, Drone, War, Military, China

Meet Israel's New MAGNI Micro-Drone: A Game Changer?

A leading expert gives us his take.

by **Seth J. Frantzman**

Elbit Systems in Israel unveiled its MAGNI, a micro unmanned aerial system, that weighs 2.5 kg and is a multi-rotor VTOL so it can be launched from a vehicle and give platoons or squads situational awareness. “We wanted to give infantry a tactical eye-in-the-sky,” says Erez Meir of Elbit’s Multi-Rotor business unit. It is a “revolution” for armed

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Turkey is getting military drones armed with machine guns

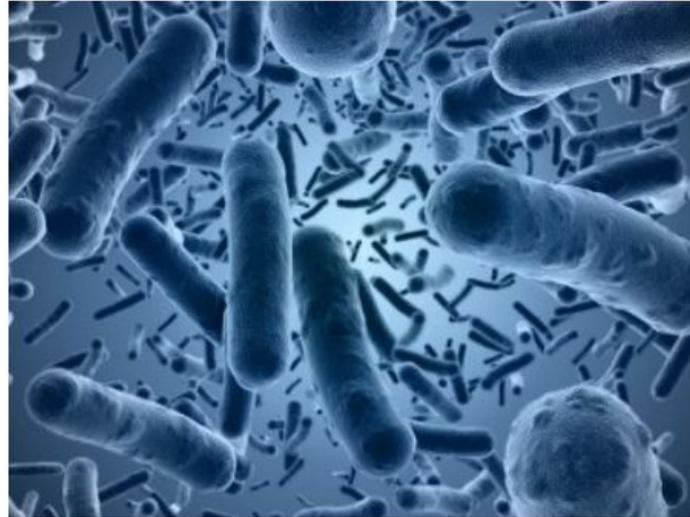


TECHNOLOGY 12 FEBRUARY 2016

for arev.erne.co...

A Bio Internet of Things? Hold That Thought

By Joe McKendrick | December 6, 2019



Bacteria may serve as the most efficient endpoint machines as they communicate effectively and have built-in engines and sensors.

The Internet of Things consists of all sorts of electronic devices and sensors, but doesn't necessarily have to be limited to electronics. Some scientists are pitching the idea that organic matter — bacteria, to be specific — may have potential as IoT nodes.

Two bio-IoT proponents, Raphael Kim and Stefan Poslad at Queen Mary University of London, recently put forth this idea, explored in MIT Technology Review. In a [paper](#) published on the subject, they call it the “Internet of Bio-Nano Things (IoBNT), which involves networking and communication through nanoscale and biological entities.”

These Jaw-Dropping Facts Will Change Your Mind About the Internet of Things

The hype about IoT is real and several companies, including Apple, Ford and Verizon, stand to benefit.

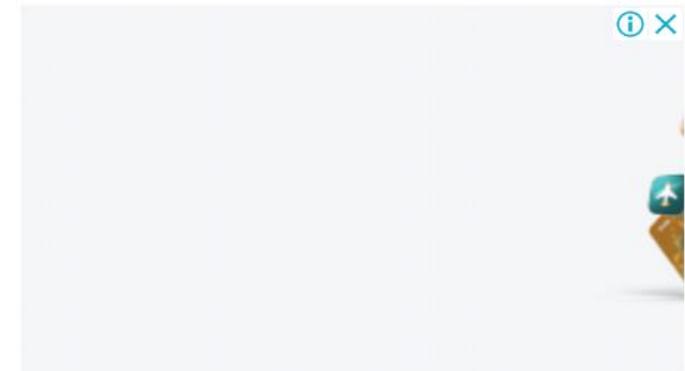


 **Chris Neiger** (TMFNewsie)

 Dec 10, 2019 at 7:16AM

 [Author Bio](#)

The [Internet of Things](#), or IoT for short, has been steadily growing over the past decade or so. This segment of the broader technology sector includes everything from **Apple's** ([NASDAQ:AAPL](#)) smartwatch to Internet-connected farm equipment and **Amazon's** Echo speakers.



Survey Paper | [Open Access](#) | Published: 09 December 2019

Internet of Things is a revolutionary approach for future technology enhancement: a review

[Sachin Kumar](#) , [Prayag Tiwari](#) & [Mikhail Zymbler](#)

[Journal of Big Data](#) **6**, Article number: 111 (2019) | [Cite this article](#)

224 Accesses

Quantum leap: Nanotechnology, from science fiction to reality

Come the 2020s, and some of the nano gear will move from labs into our bodies, home appliances, cars, airplanes, food, solar panels, smart cities and whatever else you can think of. A nanometre is one-billionth of a metre or one-millionth the size of an ant.

By *Shelley Singh*, ET Bureau | Dec 28, 2019, 10.20 PM IST

BCCL



Nanotech will disrupt every sector, be it designing, manufacturing or hi-tech engineering.

If you can control atoms and molecules and assemble them to do specific tasks at the molecular level, you can build systems that can revolutionise the way we live. Building such clever and invisible nano-sized machines is the lofty goal of **nanotechnology**.

The idea has been around for almost four decades but nanotechnology applications in recent years have been mostly passive — like in sunscreen lotions or car bumpers. Come the 2020s, and some of the nano gear will move from labs into our bodies, home

appliances cars airplanes food solar panels smart cities and whatever else you can

Quantum Trends And The Internet of Things



Chuck Brooks Contributor
COGNITIVE WORLD Contributor Group

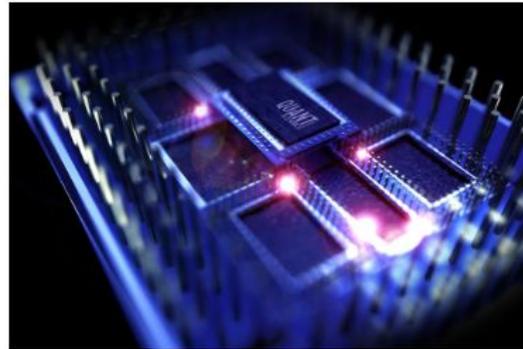
AI

Global Thought Leader in Cybersecurity and Emerging Tech

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DEPOSITPHOTOS

As a new decade approaches, we are in a state of technological flux across many spectrums. One area to take note of is quantum computing. We are starting to evolve beyond classical computing into a new data era called quantum computing. It is envisioned that quantum computing (still in a development stage) will accelerate us into the future by impacting the

Quantum computing leaps ahead in 2019 with new power and speed

It was a good year for these weird machines.



Stephen Shankland  December 12, 2019 5:00 AM PST

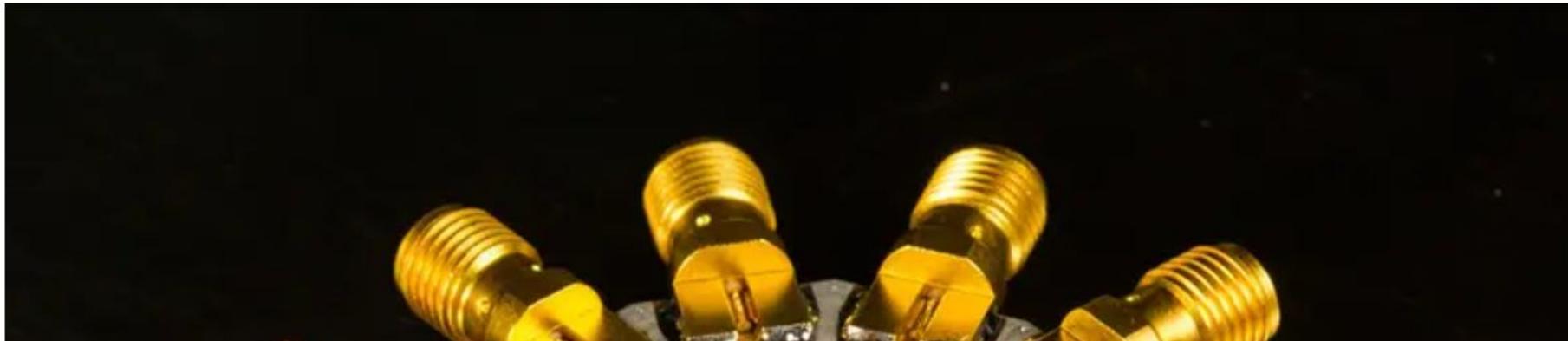


Google's quantum supremacy algorithm has found its first practical use



PHYSICS 13 December 2019

By [Leah Crane](#)



Quantum computer sets new record for finding prime number factors



PHYSICS 13 December 2019

By [Leah Crane](#)



Physicists Just Achieved The First-Ever Quantum Teleportation Between Computer Chips

DAVID NIELD 31 DEC 2019

As 2019 winds to a close, the journey towards fully realised [quantum computing](#) continues: physicists have been able to demonstrate quantum teleportation between two computer chips for the first time.



Put simply, this breakthrough means that information was passed between the chips not by physical electronic connections, but through [quantum entanglement](#) – by linking two particles across a gap using the principles of

EDITION: UK ▼



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MUST READ: [Ransomware: Cybercriminals are adding a new twist to their demands](#)

Prediction 2020: The future of robotics next year and beyond

Will the red hot robotics sector grow more or cool down in the months ahead? Expert insights from an insider.



By [Greg Nichols](#) for [Robotics](#) | December 11, 2019 -- 12:00 GMT (12:00 GMT) | Topic: [Robotics](#)



The NHS robots performing major surgery

By Lisa Summers
Scotland Health Correspondent

🕒 12 December 2019

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January 2020

3D printing of body parts is coming fast – but regulations are not ready

January 10, 2020 3.44pm SAST

The technology of producing biological parts is advancing, raising new legal and regulatory questions. Philip Ezze, CC BY-SA

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In the last few years, the use of 3D printing has exploded in medicine. Engineers and medical professionals now routinely 3D print prosthetic hands and surgical tools. But 3D printing has only just begun to transform the field.

Today, a quickly emerging set of technologies known as bioprinting is poised to push the boundaries further. Bioprinting uses 3D printers and techniques to fabricate the three-dimensional structures of biological materials, from cells to

Authors



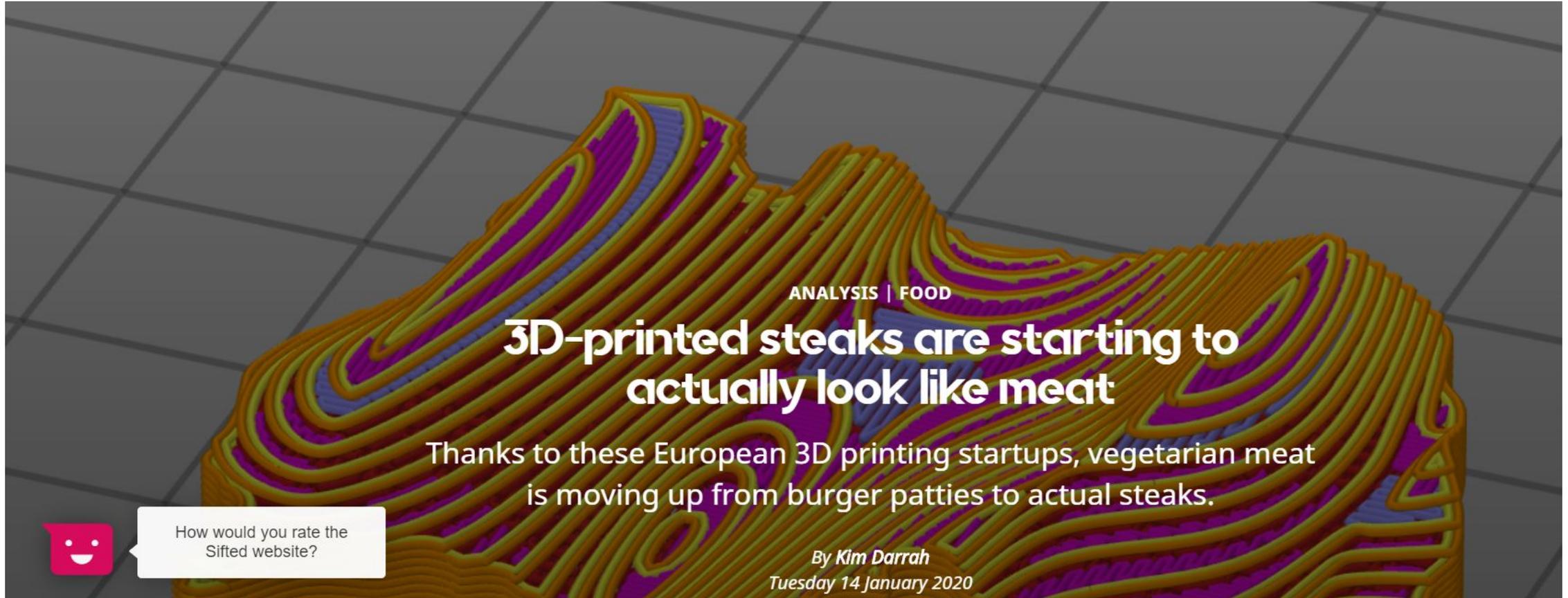
Dinusha Mendis

Professor of Intellectual Property and Innovation Law and Co-Director of the Jean Monet Centre of Excellence for European Intellectual Property and Information Rights, Bournemouth University



Ana Santos Rutschman

Assistant Professor of Law, Saint Louis University



This is the world's largest 3D-printed house

By Darren Allan 13 days ago

Largest 'permitted 3D-printed home' was built at an incredible pace



The Top 10 Artificial Intelligence Trends Everyone Should Be Watching In 2020



Bernard Marr Contributor 
[Enterprise Tech](#)

-  Artificial Intelligence (AI) has undoubtedly been the technology story of the 2010s, and it doesn't look like the excitement is going to wear off as a new decade dawns.
-  Artificial Intelligence (AI) has undoubtedly been the technology story of the 2010s, and it doesn't look like the excitement is going to wear off as a new decade dawns.
-  The past decade will be remembered as the time when machines that can truly be thought of as “intelligent” – as in capable of thinking, and learning, like we do – started to become a reality outside of science fiction.

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NBC NEWS China ramps up tech education in bid to become artificial intelligence leader

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WORLD

China ramps up tech education in bid to become artificial intelligence leader

Vita Zhou, 8, has become an online celebrity with his learn-to-code videos amid a nationwide push to train young people in technology.



Virtual reality is not suited to visual memory

 NEUROSCIENCE NEWS × JANUARY 9, 2020

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OPEN NEUROSCIENCE ARTICLES

VISUAL NEUROSCIENCE

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Summary: Study reports virtual reality may interfere with visual memory.

Source: Toyohashi University of Technology

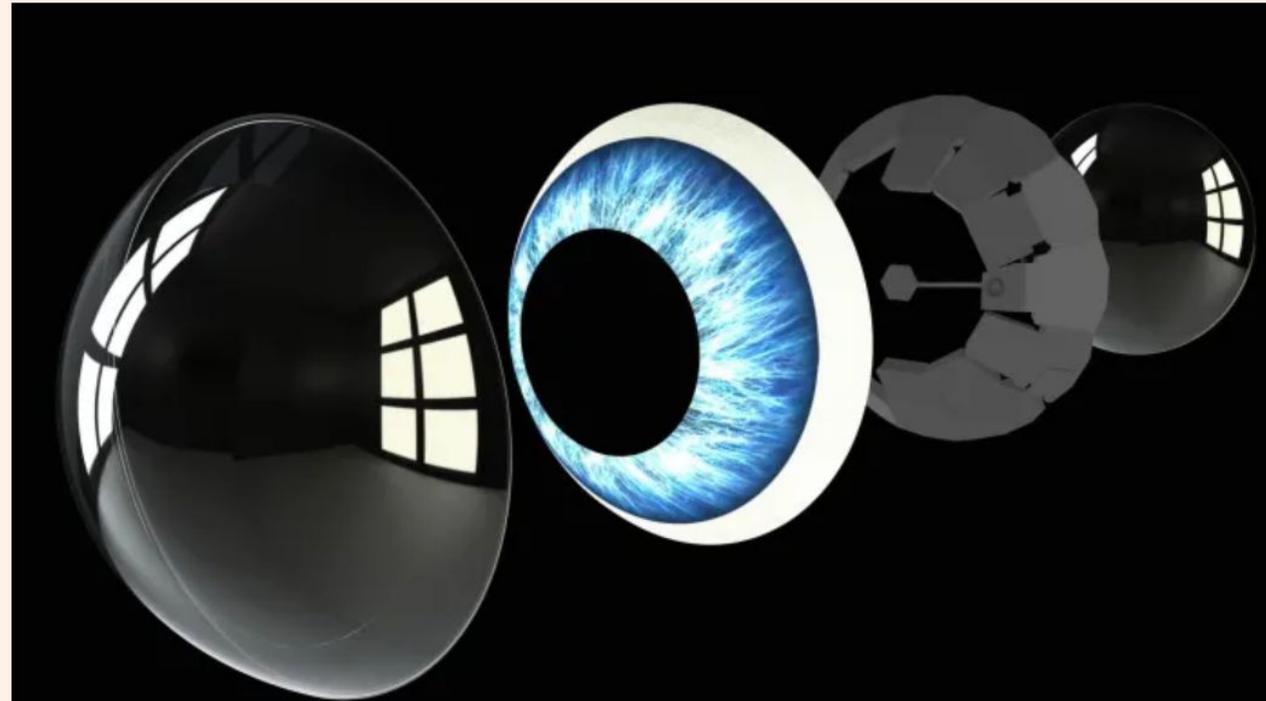
Kyoko Hine, Assistant Professor at the Department of Computer Science and Engineering, Toyohashi University of Technology

Wearable technology

+ Add to myFT

Tech start-up develops augmented reality contact lenses

Mojo Vision's product has a digital display that is navigated with eye movements



01-11-20 | WORLD CHANGING IDEAS

What self-driving cars will really do to cities

Without careful planning, the damage they do could be extreme.



GM Unveils New Self-Driving Car— But Will It Replace Uber?

By [Harmon Leon](#) • 01/27/20 3:14pm





Will 2020 be the year blockchain overcomes its hype?





Bitcoin 24h **\$8,070.84** -0.58%

Ethereum 24h **\$142.99** -0.38%

Story from **Policy & regulation** →

Illinois Legalizes Blockchain Contracts

Jan 9, 2020 at 19:31 UTC ▪ Updated Jan 9, 2020 at 19:32 UTC



Bitcoin 24h **\$8,656.87** -5.02%

Ethereum 24h **\$165.51** -5.82%

Story from **Business** →

LinkedIn Says Blockchain Is Top Skill for 2020

Jan 14, 2020 at 15:10 UTC ▪ Updated Jan 14, 2020 at 16:07 UTC

Biotechnology and Healthcare is the best performing IT fund sector

16 JAN 2020

Biotechnology and Healthcare was the top performing investment company sector over the last ten years while best performing companies came from a variety of sectors.

Artificial Intelligence Jan 16

...

This weird-looking pigeon is actually a drone that flies with real feathers



Mysterious drone swarms flying at night are baffling US authorities



TECHNOLOGY 16 January 2020

By [David Hambling](#)



EDITOR'S PICK | 601,894 views | Jan 15, 2020, 07:50am

China Discovers Underwater Spy Drones In Its Waters



H I Sutton Contributor

Aerospace & Defense

I cover the changing world of underwater warfare.



The secretive world of naval underwater surveys rarely breaks the surface. Now recent events are briefly shining a light into the darkness.



In the Adriatic, a Croatian fishing vessel [caught one of the U.S. Navy's undersea sensor systems](#) last week. That mysterious object [has largely been explained](#). Meanwhile, China has held an awards ceremony for fishermen who alerted authorities after discovering similar devices in their nets. The devices may have been operating in international waters, but still in China's backyard, as they see it. We can infer that some of these devices may belong to the U.S.



Switzerland's drone delivery program to resume after crashes

Flights will resume on January 27th

By [Chaim Gartenberg](#) | [@cgartenberg](#) | Jan 23, 2020, 1:36pm EST

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Hamas refit IDF drone, used it against Israeli forces last year – report

After small multi-rotor device operated by army fell inside Strip, terror group apparently recovered and fixed it, used it to drop explosive on tank, causing no damage

By **TOI STAFF**

27 January 2020, 6:06 pm | 0



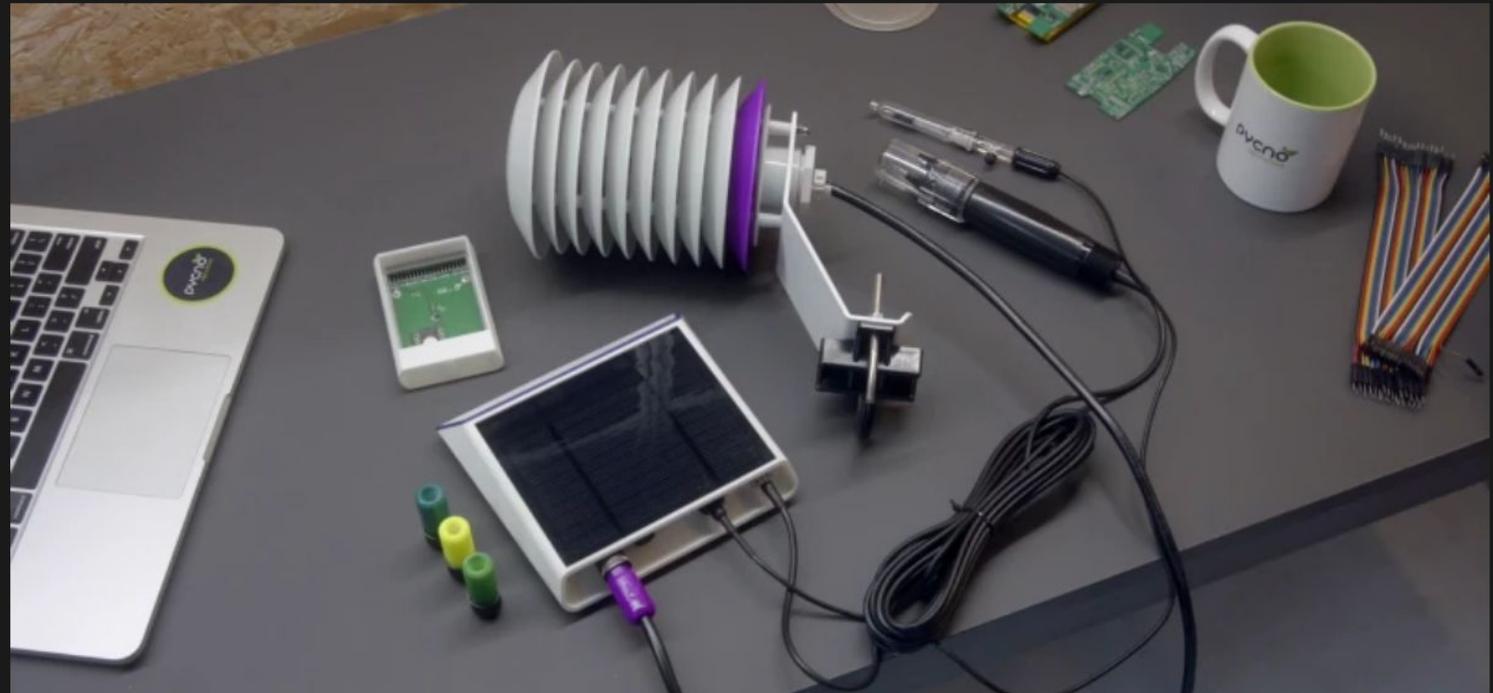
MODULAR SOLAR-POWERED IOT SENSORS

by: **Danie Conradie**

1 Comment



January 19, 2020



Disruption 2.0: How IoT And AI Are Breaking Up The Business World



Hod Fleishman Contributor 
Leadership Strategy

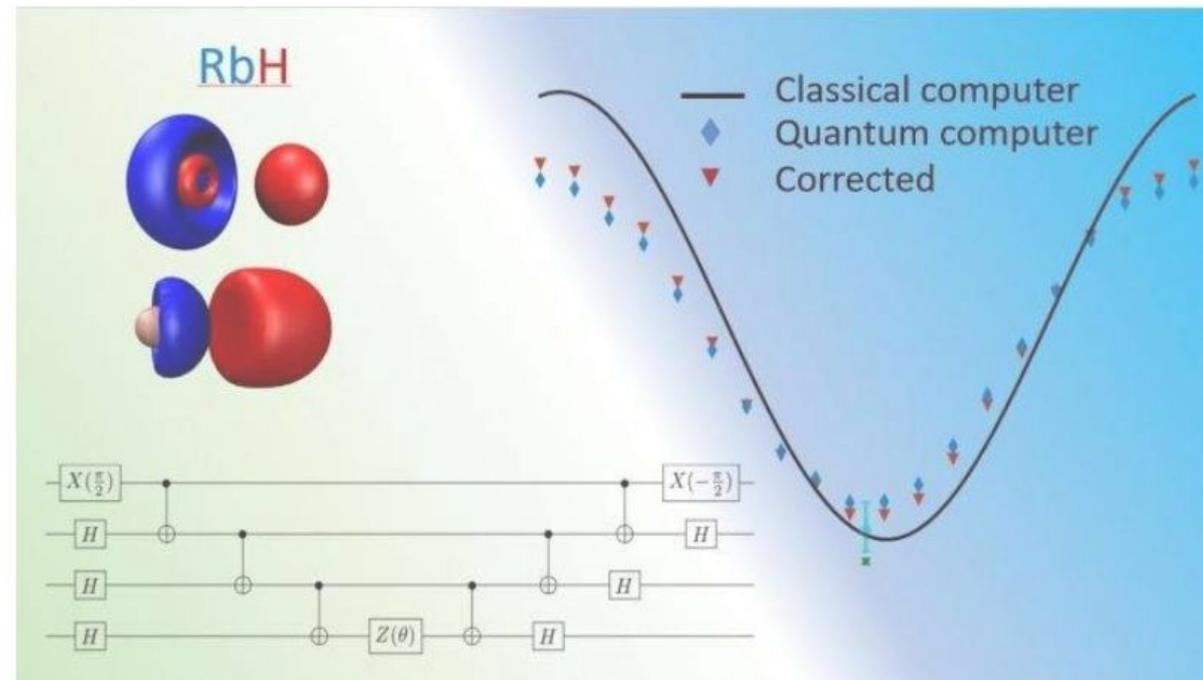
-
- f** Once again, businesses are under attack. We are in the midst of "Disruption 2.0," and this time, the attack comes from within. Previously, in the age of
 - t** Disruption 1.0, startups were spearheading the battle against established businesses. The old corporate world appeared to be defenseless in the face of
 - in** these fast, agile, tech-savvy, micro, and, at times, well-funded companies.

The fuel that powered Disruption 1.0 was the fact that the technology, the talent, and the funding driving startups all existed outside the corporate walls. Startups understood how to build and ship products fast, while the corporate

JANUARY 3, 2020

Researchers advance performance benchmark for quantum computers

by Oak Ridge National Laboratory



29,857 views | Jan 8, 2020, 02:13pm

IBM Doubles Its Quantum Computing Power Again



Moor Insights and Strategy Contributor

Cloud

Straight talk from Moor Insights & Strategy tech industry analysts



Paul Smith-Goodson Contributor

Analyst-in-residence, Quantum Computing



Quantum computing could be the next big thing for cloud providers



By [Clare Duffy](#), [CNN Business](#)

Updated 1646 GMT (0046 HKT) January 14, 2020



BUSINESS INSIDER | TRENDING

South African and Chinese scientists have just made an exciting breakthrough to allow internet users to transfer secure quantum data via normal optical fibre

Robotics Trends to Watch in 2020: Our 8 Big Predictions

Robotics Business Review chimes in with editors' predictions for some big themes to note during the year.



© JANUARY 02, 2020 👤 KEITH SHAW

latest **WEBCAST**



Science

Scientists use stem cells from frogs to build first living robots

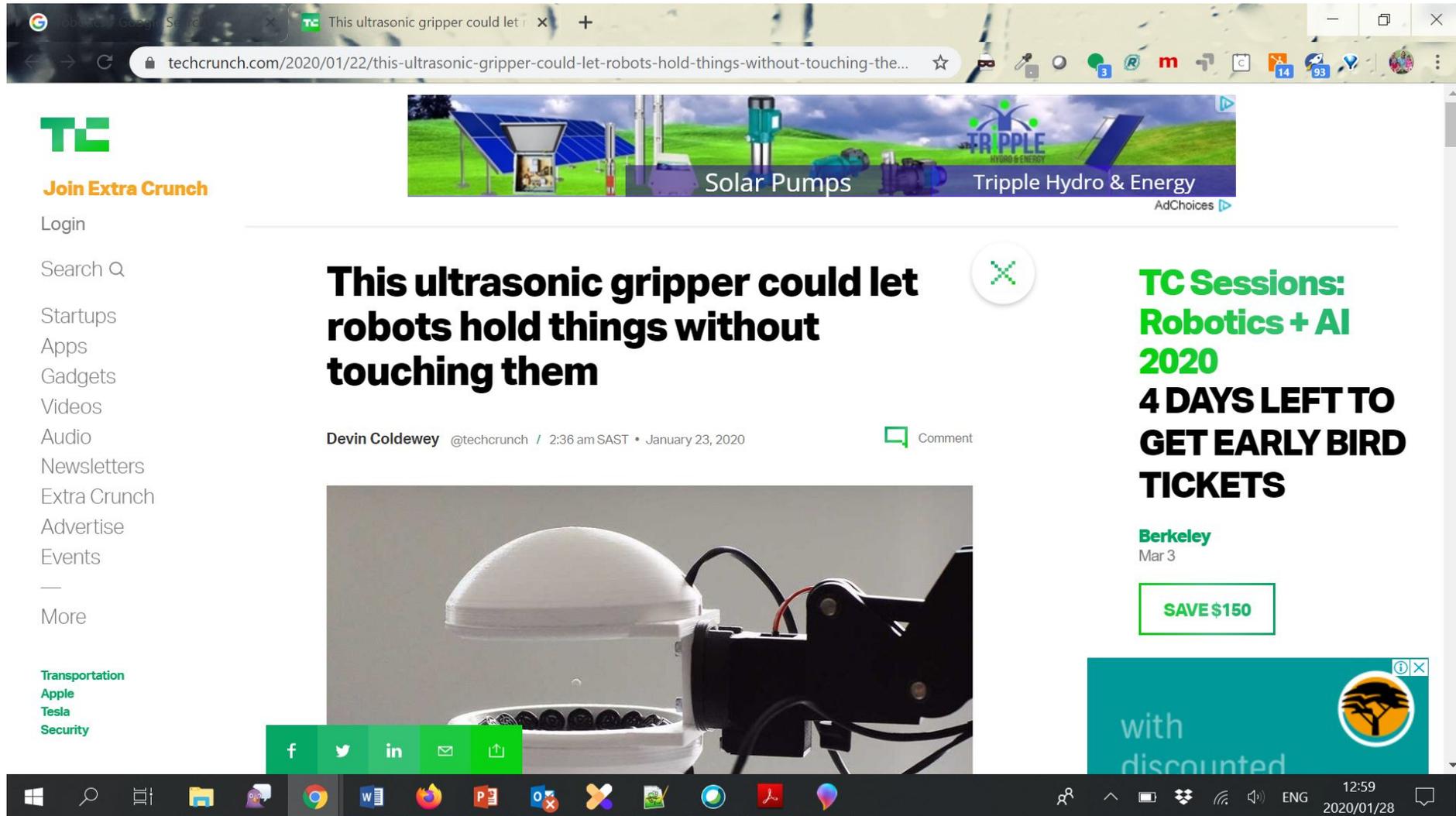
Researchers foresee myriad benefits for humanity, but also acknowledge ethical issues

Ian Sample
Science editor

@iansample

Mon 13 Jan 2020
20.00 GMT





The screenshot shows a web browser window displaying a TechCrunch article. The browser's address bar shows the URL: `techcrunch.com/2020/01/22/this-ultrasonic-gripper-could-let-robots-hold-things-without-touching-the...`. The TechCrunch logo is visible in the top left corner. Below the logo is a navigation menu with options like "Join Extra Crunch", "Login", "Search Q", "Startups", "Apps", "Gadgets", "Videos", "Audio", "Newsletters", "Extra Crunch", "Advertise", "Events", and "More". There are also category links for "Transportation", "Apple", "Tesla", and "Security".

The main article title is "This ultrasonic gripper could let robots hold things without touching them" by Devin Coldewey, published on January 23, 2020. The article features a large image of a white, dome-shaped ultrasonic gripper holding a small object. To the right of the article is a promotional banner for "TC Sessions: Robotics + AI 2020" with "4 DAYS LEFT TO GET EARLY BIRD TICKETS" and a "SAVE \$150" button. The banner also mentions "Berkeley Mar 3" and "with discounted".

The Windows taskbar at the bottom shows various application icons and the system tray with the time 12:59 and date 2020/01/28.

February 2020

EDITION: UK ▼



CXO HARDWARE MICROSOFT STORAGE INNOVATION APPLE SECURITY MORE ▼ N

 MUST READ: [Top cloud providers in 2020: AWS, Microsoft Azure, and Google Cloud, hybrid, SaaS players](#)

2020 predictions: 5 telling trends in 3D printing

Hype or new hope? Is 2020 the year 3D printing actually disrupts high-volume manufacturing?



[Home](#) / [Mobile](#)

OPINION

When it comes to augmented reality, it's glasses or bust

We have AR on our phones today and merely improving its quality won't be enough to thrill users and drive adoption.

Why Waymo's alliance with UPS is a big deal for autonomous vehicles

BY AARON PRESSMAN

January 31, 2020 3:30 PM EST



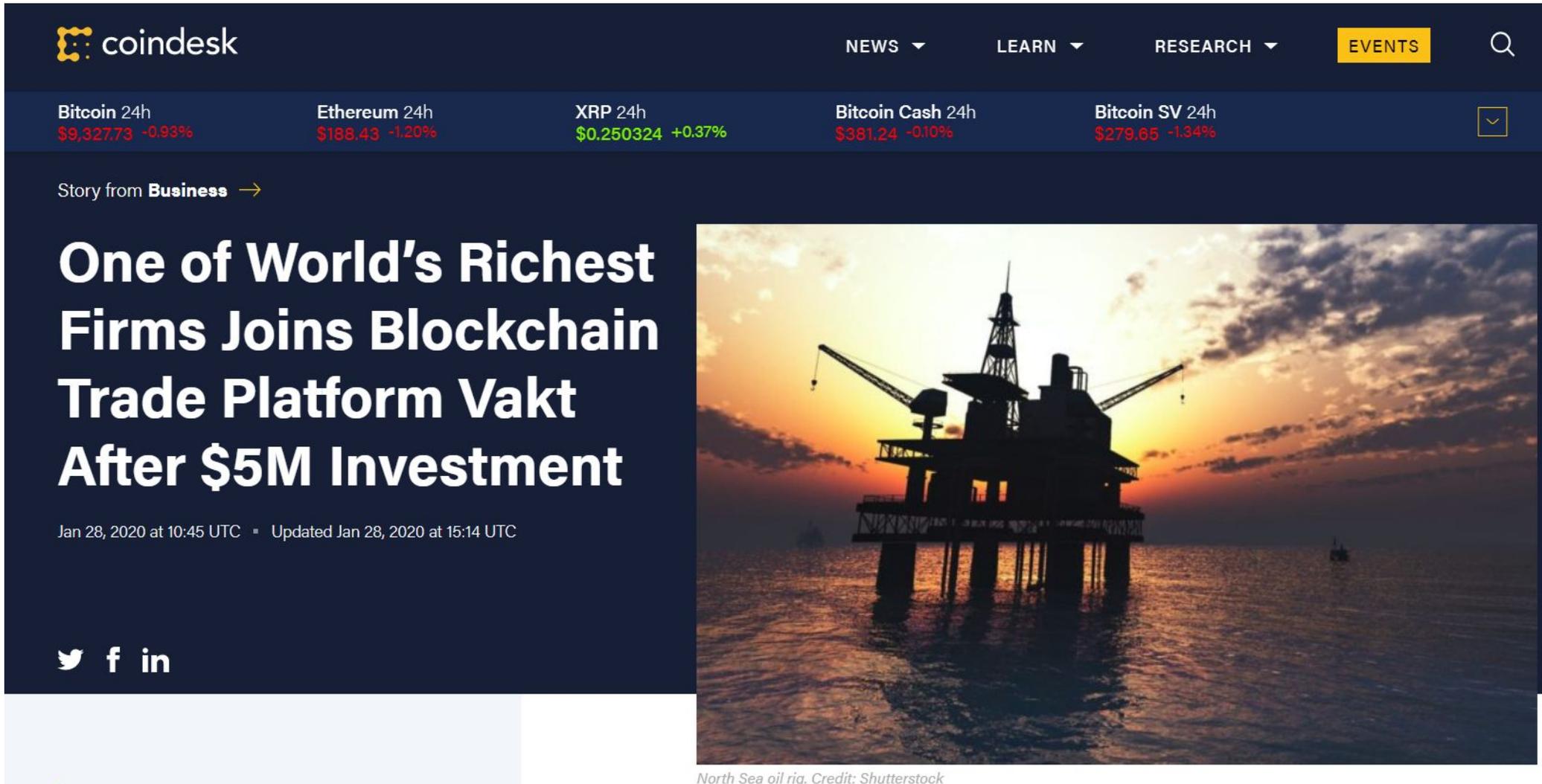
Aurora can now give the public rides in its self-driving cars



Kirsten Korosec @kirstenkorosec / 7:10 pm SAST • January 29, 2020

 Comment





The screenshot shows the Coindesk website interface. At the top, there is a navigation bar with 'NEWS', 'LEARN', 'RESEARCH', and 'EVENTS' (highlighted in yellow). Below the navigation bar, there is a row of cryptocurrency prices for Bitcoin, Ethereum, XRP, Bitcoin Cash, and Bitcoin SV, each with its 24-hour price and percentage change. The main content area features a large headline: 'One of World's Richest Firms Joins Blockchain Trade Platform Vakt After \$5M Investment'. Below the headline, it says 'Jan 28, 2020 at 10:45 UTC' and 'Updated Jan 28, 2020 at 15:14 UTC'. There are social media icons for Twitter, Facebook, and LinkedIn. To the right of the text is a large image of an oil rig at sunset. Below the image is the caption: 'North Sea oil rig. Credit: Shutterstock'.

Coin	24h Price	24h Change
Bitcoin	\$9,327.73	-0.93%
Ethereum	\$188.43	-1.20%
XRP	\$0.250324	+0.37%
Bitcoin Cash	\$381.24	-0.10%
Bitcoin SV	\$279.65	-1.34%

One of World's Richest Firms Joins Blockchain Trade Platform Vakt After \$5M Investment

Jan 28, 2020 at 10:45 UTC | Updated Jan 28, 2020 at 15:14 UTC

Twitter Facebook LinkedIn

North Sea oil rig. Credit: Shutterstock



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By Ting Peng

19 HOURS AGO

UAE Health Ministry Debuts Blockchain Platform for Medical Data

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How drones have come to dominate the battlefield

How drone technology became a multibillion-dollar industry. Plus, Putin's economic record and Xi's biggest test yet.

02 Feb 2020 07:07 GMT Business & Economy Drones Russia Vladimir Putin Coronavirus outbreak



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WHY CHINA IS THE FUTURE OF NANOSCIENCE

By Ben Halder

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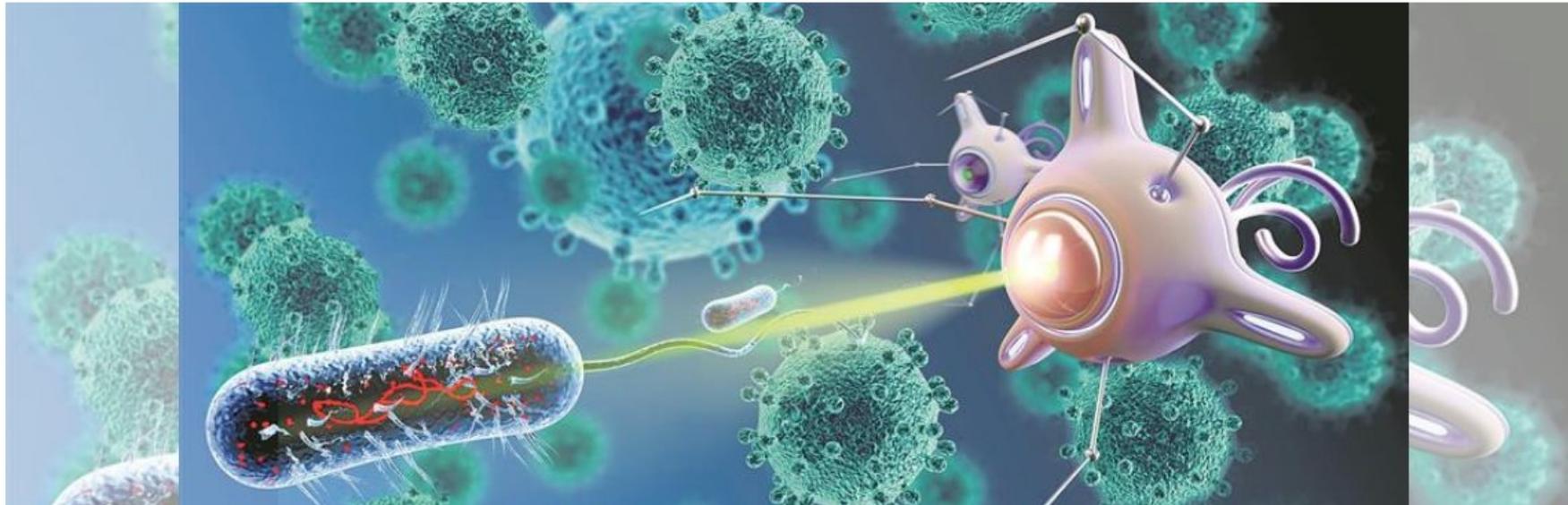
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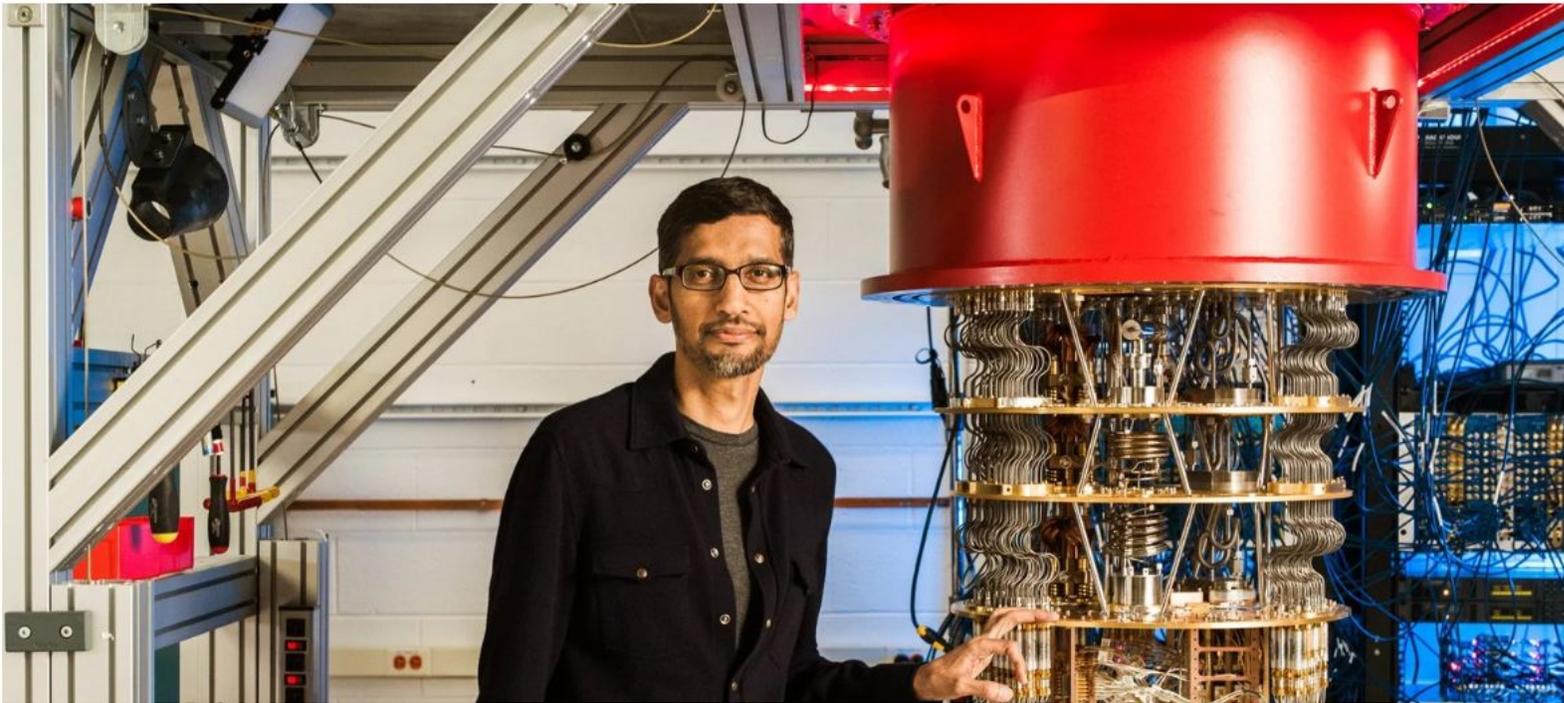
A -

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Alphabet Has a Second, Secretive Quantum Computing Team

Google's parent touted its quantum supremacy achievement last year. It doesn't talk about a group at X working on software.



REPORT | TECH | ARTIFICIAL INTELLIGENCE

AI-powered robot pickers will be the next big work revolution in warehouses

10 

Robot pickers are finally getting a grip on things

By [James Vincent](#) | Jan 29, 2020, 4:00am EST

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The Robots Are Coming. Prepare for Trouble.

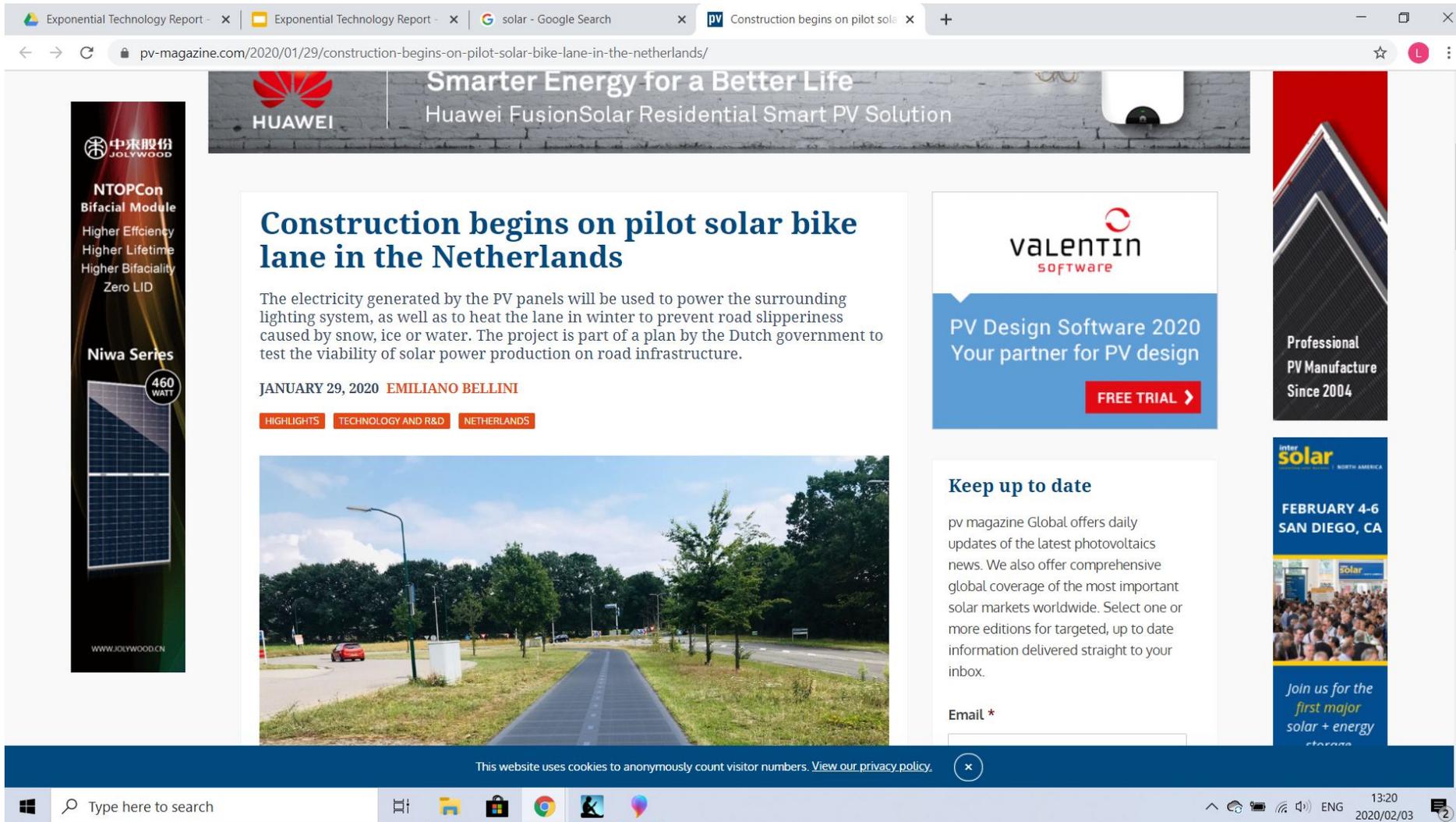
Artificial intelligence won't eliminate every retail job, an economist says, but the future could be grim unless we start planning now.



**SPECIAL SOLAR
PANELS COULD WORK
WHEN THE SUN GOES
DOWN**

JANUARY 30TH, 2020

POSTED BY **ANDY FELL-UC DAVIS**



The screenshot shows a web browser window with the following content:

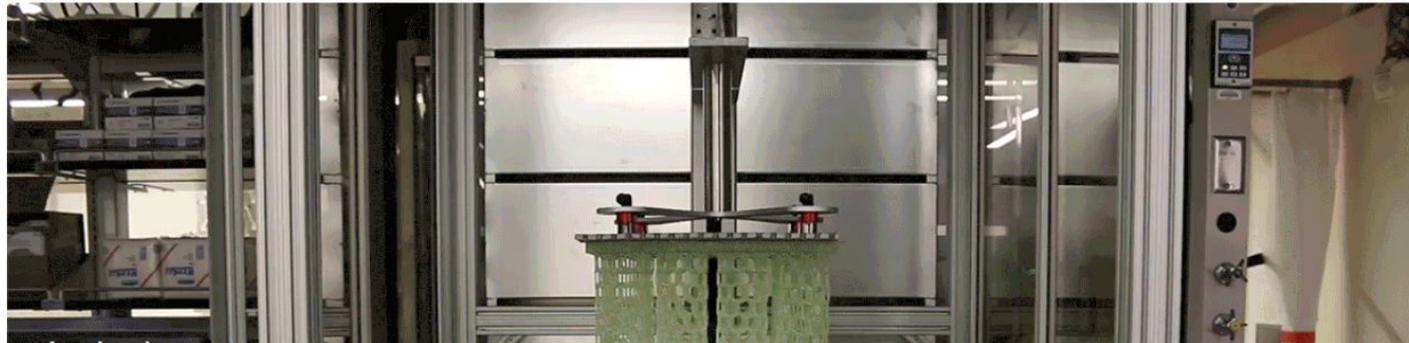
- Browser Tabs:** Exponential Technology Report - x, Exponential Technology Report - x, solar - Google Search x, pv Construction begins on pilot solar bike lane in the Netherlands x
- Address Bar:** pv-magazine.com/2020/01/29/construction-begins-on-pilot-solar-bike-lane-in-the-netherlands/
- Page Header:** HUAWEI logo and "Smarter Energy for a Better Life Huawei FusionSolar Residential Smart PV Solution"
- Left Sidebar:** Advertisement for JOLYWOOD solar panels, featuring "NTOPCon Bifacial Module" (Higher Efficiency, Higher Lifetime, Higher Bifaciality, Zero LID) and "Niwa Series" (460 WATT).
- Main Article:**
 - Headline:** Construction begins on pilot solar bike lane in the Netherlands
 - Text:** The electricity generated by the PV panels will be used to power the surrounding lighting system, as well as to heat the lane in winter to prevent road slipperiness caused by snow, ice or water. The project is part of a plan by the Dutch government to test the viability of solar power production on road infrastructure.
 - Date/Author:** JANUARY 29, 2020 EMILIANO BELLINI
 - Tags:** HIGHLIGHTS, TECHNOLOGY AND R&D, NETHERLANDS
 - Image:** A photograph of a paved bike lane with solar panels installed along its length, set against a backdrop of trees and a clear sky.
- Right Sidebar:**
 - Valentin Software:** Advertisement for "PV Design Software 2020" with a "FREE TRIAL" button.
 - Professional PV Manufacture:** Advertisement for a company established in 2004.
 - pv-magazine Global:** Advertisement for a conference in San Diego, CA, from February 4-6, with a sign-up form for an email newsletter.
- Footer:** A cookie consent banner: "This website uses cookies to anonymously count visitor numbers. View our privacy policy."
- Windows Taskbar:** Shows the search bar, taskbar icons for various applications, and system tray information including the date (2020/02/03) and time (13:20).

NEWS FEATURE · 05 FEBRUARY 2020 · CORRECTION 07 FEBRUARY 2020

3D printing gets bigger, faster and stronger

Research advances are changing the image of a once-niche technology.

Mark Zastrow

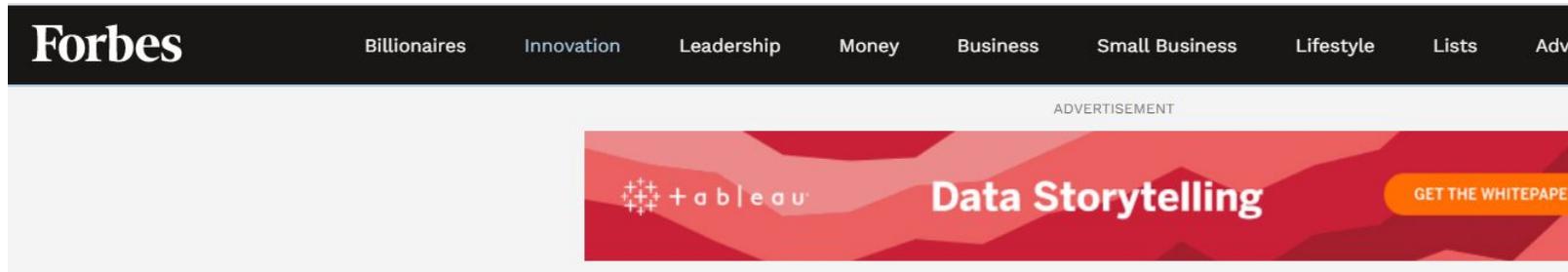


WILL KNIGHT BUSINESS 02.08.2020 07:00 AM

How AI Is Tracking the Coronavirus Outbreak

Machine-learning programs are analyzing websites, news reports, and social media posts for signs of symptoms, such as fever or breathing problems.





The screenshot shows the Forbes website header with navigation links: Billionaires, Innovation, Leadership, Money, Business, Small Business, Lifestyle, Lists, and Adv. Below the header is an advertisement for Tableau with the text 'Data Storytelling' and a button 'GET THE WHITEPAPER'.

621 views | Feb 10, 2020, 12:19am

8 Powerful Examples Of AI For Good



Bernard Marr Contributor 
Enterprise Tech

- f** Amid the cacophony of concern over artificial intelligence (AI) taking over jobs (and the world) and cheers for what it can do to increase
- t** productivity and profits, the potential for AI to do good can be overlooked. Technology leaders such as [Microsoft](#), [IBM](#), [Huawei](#) and
- in** [Google](#) have entire sections of their business focused on the topic and dedicate resources to build AI solutions for good and to support developers who do. In the fight to solve extraordinarily difficult challenges, humans can use all the help we can get. Here are 8 powerful examples of artificial intelligence for good as it is applied to some of the

White House reportedly aims to double AI research budget to \$2B



Devin Coldewey @techcrunch / 12:51 am SAST • February 8, 2020

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Autonomous Vehicles

BBC Sign in News Sport Reel Worklife Travel Future Mo

NEWS

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Technology

Uber self-driving cars allowed back on California roads

🕒 5 February 2020

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#DigitalChef

Israeli burger chain plans vegan 3D-printed burgers

Burgus Burger Bar partners with SavorEat on a system that 'prints' plant-based burgers on demand, to be piloted at some of the chain's branches.

By [Abigail Klein Leichman](#) | FEBRUARY 9, 2020, 8:14 AM



MARKETPLACE AFRICA



Mapping the future with Africa's first drone academy

By Charles Pensulo, for CNN

🕒 Updated 1156 GMT (1956 HKT) February 7, 2020



News & buzz

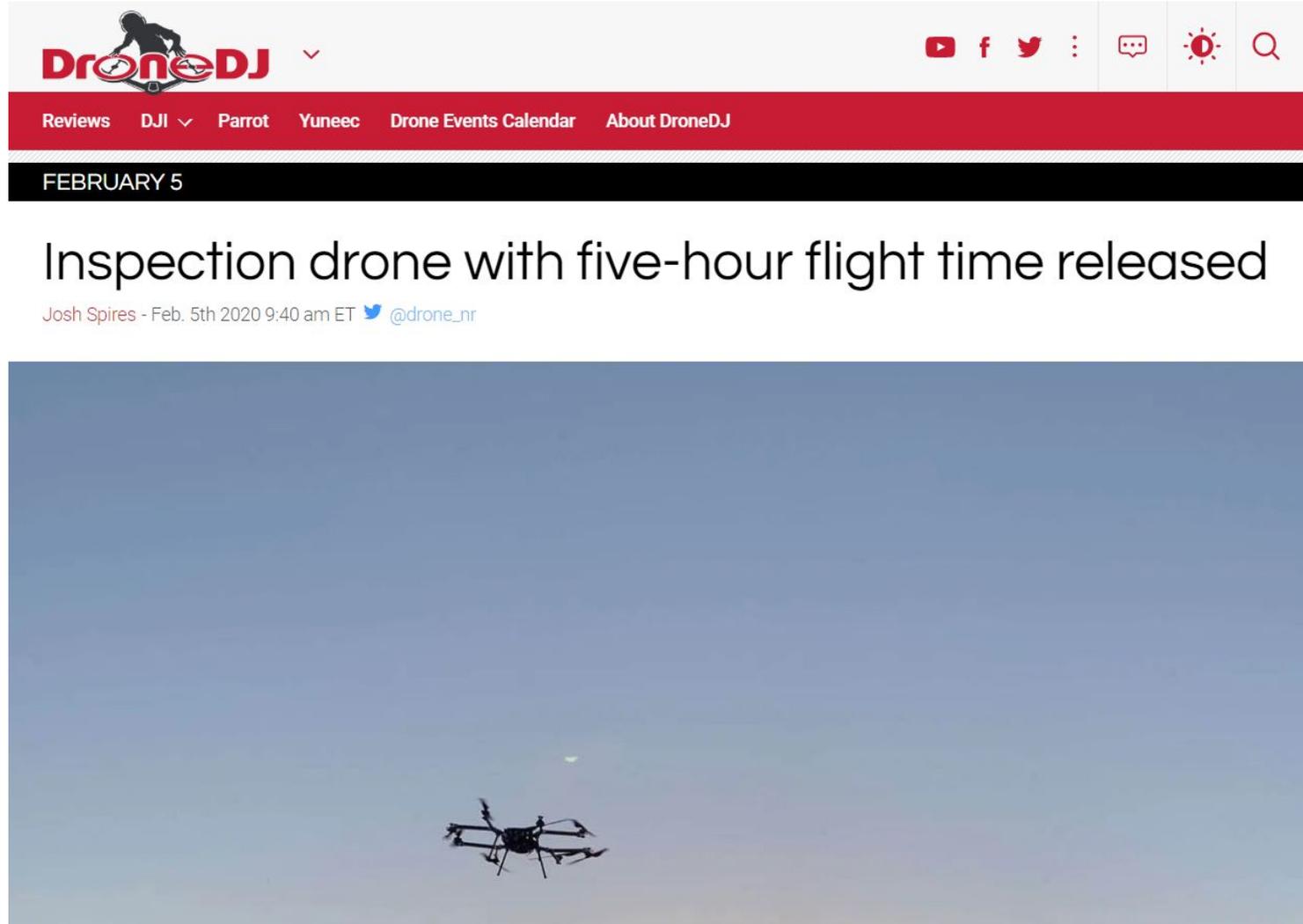


Five ways coronavirus could hurt Trump's economy -- and one way...



'More than the Senate gave John Bolton' jokes Brad Pitt





The screenshot shows the DroneDJ website interface. At the top left is the DroneDJ logo with a dropdown arrow. To the right are social media icons for YouTube, Facebook, and Twitter, followed by a menu icon, a sun icon, and a search icon. Below this is a red navigation bar with links for 'Reviews', 'DJI' (with a dropdown arrow), 'Parrot', 'Yuneec', 'Drone Events Calendar', and 'About DroneDJ'. A black bar below the navigation bar displays 'FEBRUARY 5'. The main content area features a large heading: 'Inspection drone with five-hour flight time released'. Below the heading is a byline: 'Josh Spires - Feb. 5th 2020 9:40 am ET' followed by a Twitter icon and the handle '@drone_nr'. The main image is a large, square video player showing a drone flying in a clear blue sky.

Israeli startup says its nanotech masks and robes may block coronavirus

Sonovia's textiles are resistant to bacteria and fungus; firm hopes its tech will also work against viruses; has sent samples for testing to China

By SHOSHANNA SOLOMON

6 February 2020, 4:25 pm | 1

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3D printing and digital fabrication

3D-printing technique produces tiny, highly detailed objects in under 30 seconds

By Georgina Torbet
February 16, 2020 10:00AM PST



The new fast 3D printing technique developed by researchers at EPFL.

AI a new and 'frightening' battlefield in cyber war, experts warn

From fuzzing to spear-phishing, hackers have smarter tools at their disposal; Israel's cyber directorate setting out protection guidelines

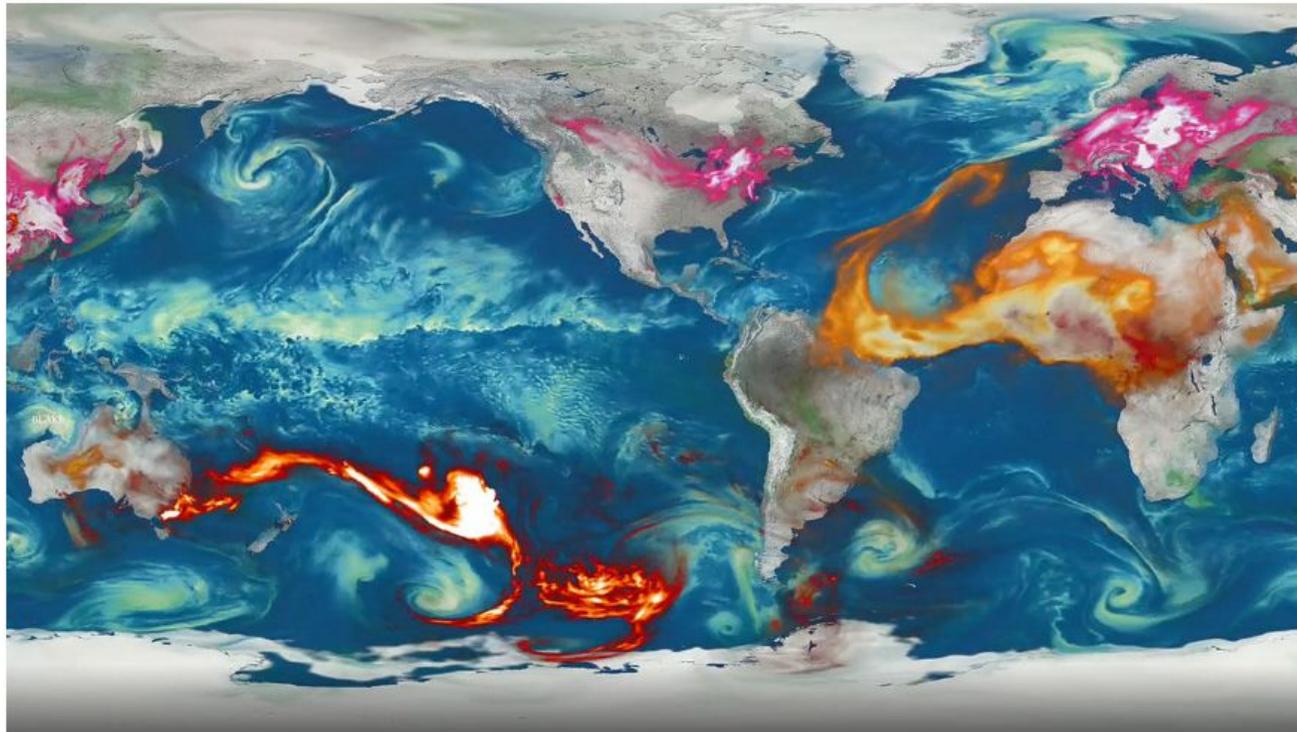
By SHOSHANNA SOLOMON

16 February 2020, 3:06 pm | 0

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Artificial intelligence (AI)



Emulators speed up simulations, such as this NASA aerosol model that shows soot from fires in Australia. NASA

From models of galaxies to atoms, simple AI shortcuts speed up simulations by billions of times

By **Matthew Hutson** | Feb. 12, 2020, 2:35 PM

Aptiv's self-driving cars have given 100,000 paid rides on the Lyft app



Kirsten Korosec @kirstenkorosec / 1:00 pm SAST • February 11, 2020

 Comment



OPINION

Self-Driving-Car Research Has Cost \$16 Billion. What Do We Have to Show for It?

Imagine how many actual cars you could buy with \$16 billion that you could actually drive. We did.



By *Roberto Baldwin* FEB 10, 2020





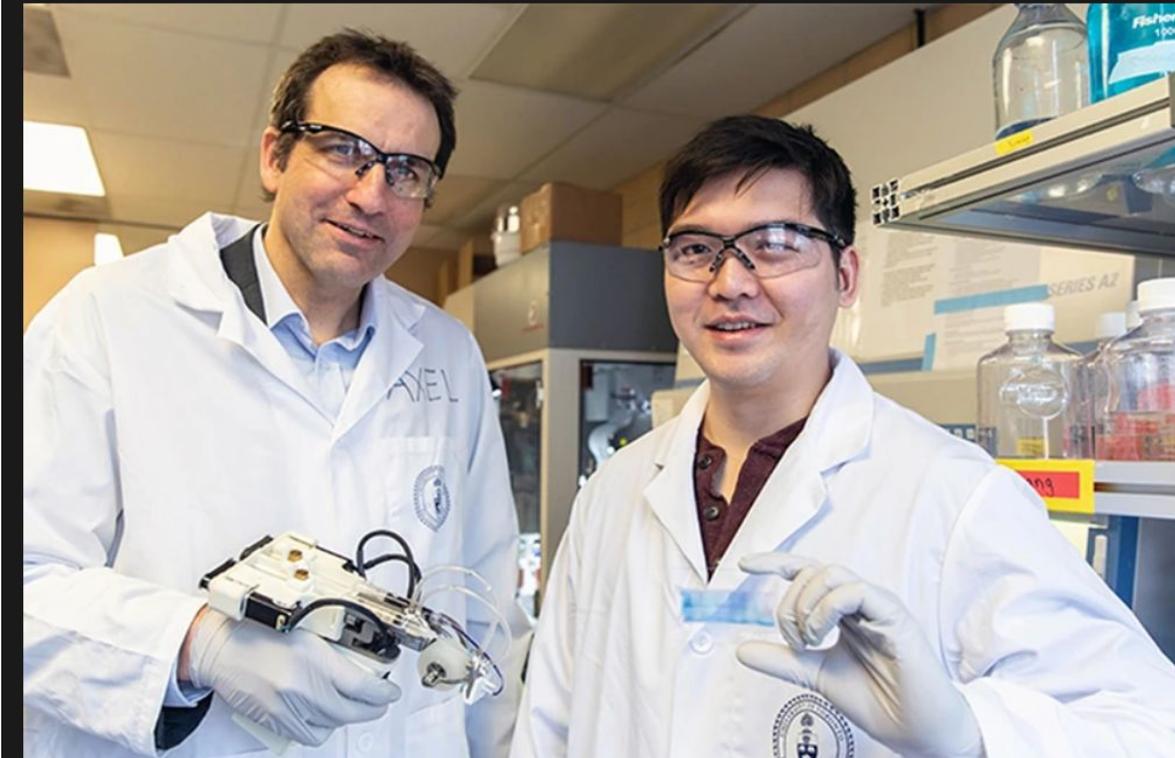
3D PRINTING SKIN OR MAYBE A DERMAL REGENERATOR

by: [Al Williams](#)

8 Comments



February 15, 2020



This Is How a Laser Weapon Torches Drones Out of the Sky

This simple laser demonstration is actually a great crash course on how these anti-drone weapons work.



By [Kyle Mizokami](#) Feb 11, 2020



INNOVATION

Integrated Machines: An Extension of One Central Mind

Will the internet of things mean fewer humans involved in manufacturing?



By Trevor English

February 15, 2020



The Quantum Computer Is About to Change the World. Three Israelis Are Leading the Revolution

The Israeli startup QM is the first company in the world to be building both the hardware and the software that will make it possible to use quantum computers – once they actually are a practical reality

By **Oded Carmeli** | Feb 16, 2020

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Greece to install 3 GW of solar in mining regions

Greece has announced plans to install two PV projects at mining sites. The facilities are part of the national utility's new strategy and in line with the country's efforts to phase out coal.

FEBRUARY 14, 2020 **ILIAS TSAGAS**

MARKETS

MARKETS & POLICY

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SOLAR

New Solar Panels Power 66% of Government Operations in Fayetteville, Arkansas



By Yale Climate Connections | Feb. 10, 2020 10:58AM EST

RENEWABLE ENERGY



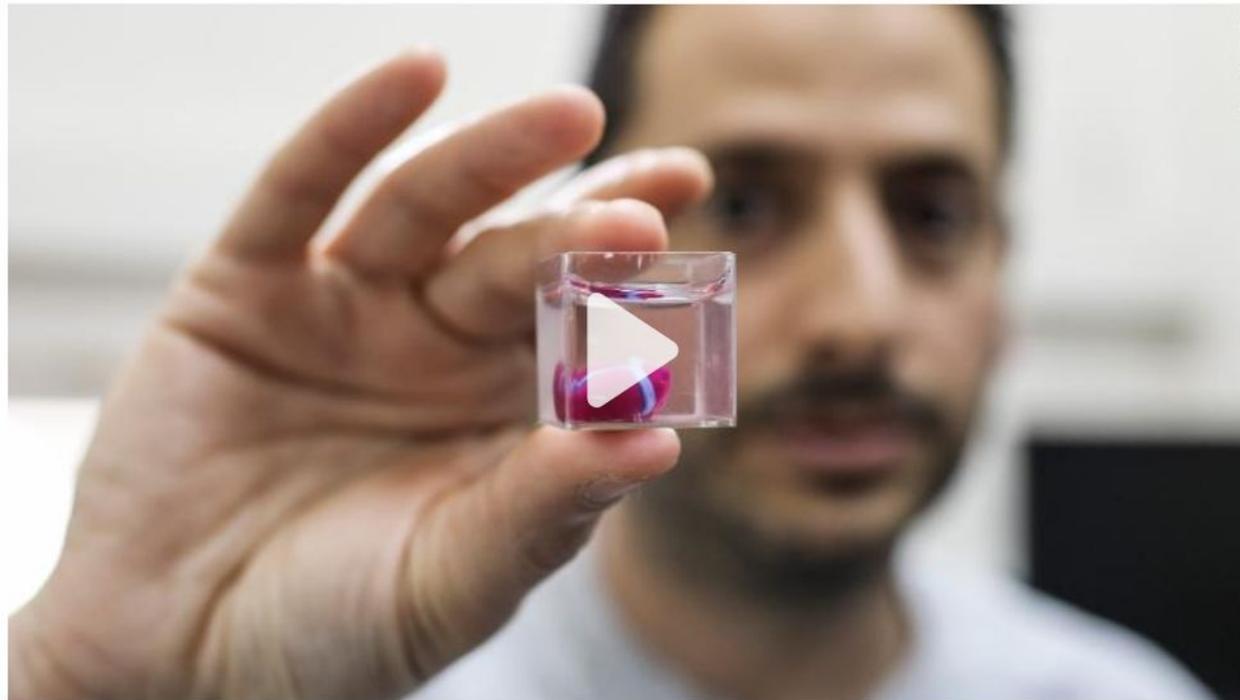


A new use for McDonald's used cooking oil: 3D printing



By [Parija Kavilanz](#), CNN Business

Updated 1522 GMT (2322 HKT) February 20, 2020



3D printing and digital fabrication

TECHSPOT LOGIN f t r Q

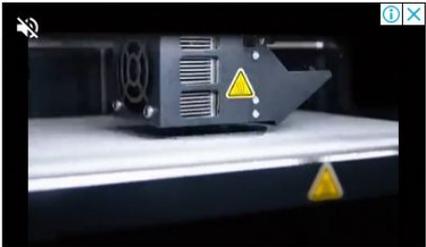
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CAR TECH 3D PRINTING HYPERCAR

The Czinger 21C is a 3D-printed, \$1.7 million hypercar that can do 268mph

1,233bhp!

By Rob Thubron on February 21, 2020, 10:14 AM | 20 comments



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Manufacturing reinvented. Digital manufacturing with metal 3D printing



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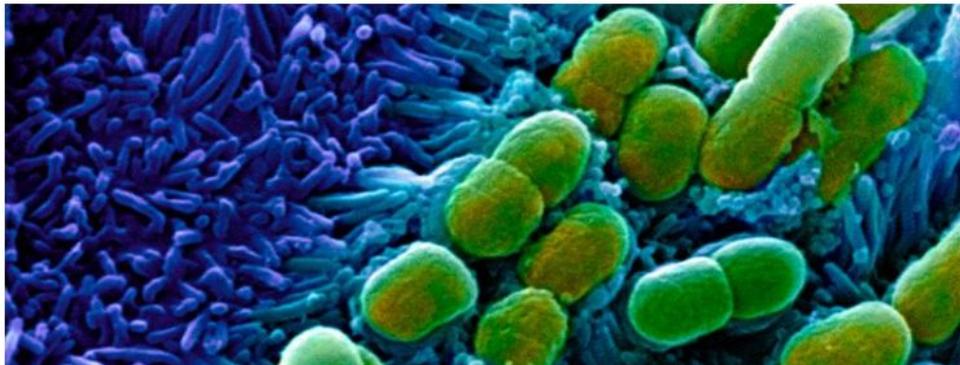


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Machine learning spots molecules that work even against 'untreatable' strains of bacteria.

Jo Marchant



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Spatial and Nreal partner to make AR meetings a reality

The two companies plan to team up with telcos to sell 5G-enabled augmented reality technology for remote collaboration.



By Matthew Finnegan

Senior Reporter, Computerworld | FEB 21, 2020 6:22 AM PST



“Patrick McGovern (the founder of IDG) was a gift to us all, a trailblazing visionary who showed an entire generation of entrepreneurs what it means to be a principles-based leader and how to lead with higher values.”

—Marc Benioff,
Founder, Chairman, and CEO of Salesforce

HTC is prototyping an AR headset that looks like sunglasses

It's still a work in progress

By [Adi Robertson](#) | [@thedextriarchy](#) | Feb 20, 2020, 10:32am EST

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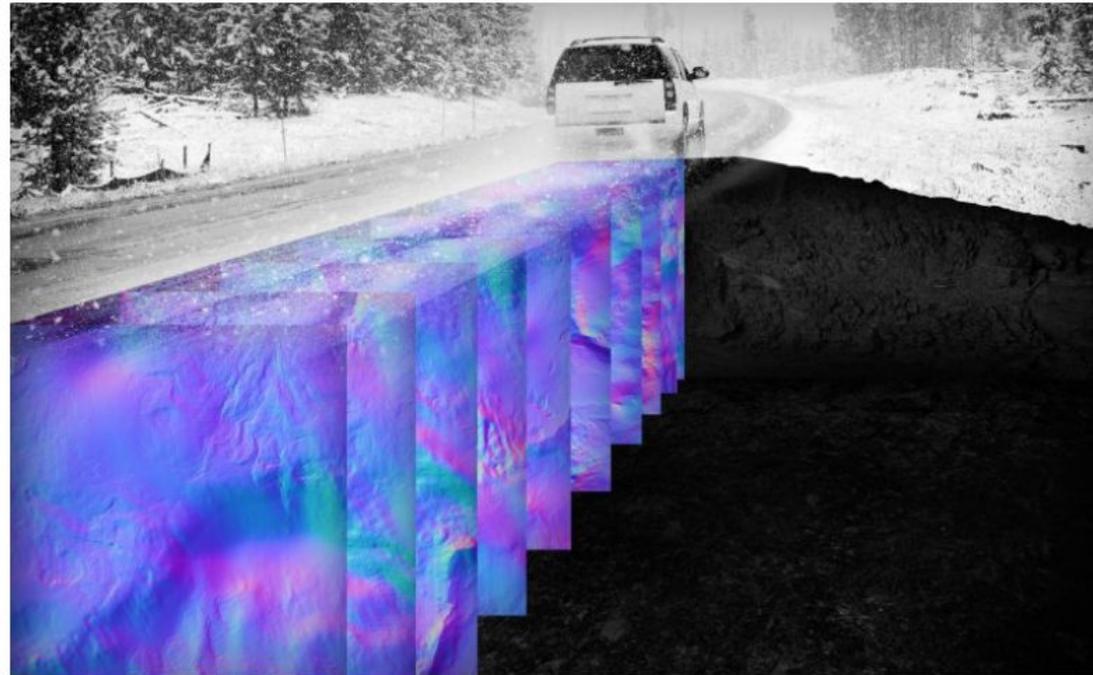


HOME > EXTREME > MIT'S GROUND-PENETRATING RADAR LOOKS DOWN FOR PERFECT SELF-DRIVING

MIT's Ground-Penetrating Radar Looks Down for Perfect Self-Driving

By Bill Howard on February 18, 2020 at 11:05 am | [34 Comments](#)

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INDUSTRY / VEHICLES

Novel EV Battery Doubles Driving Range and Charges up to 80% in Five Minutes

The new battery is made out of silicon anode materials.



By Loukia Papadopoulos

February 22, 2020



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AIRCRAFT

World's first manned aerobatic drone shown pulling loops and rolls

By Loz Blain
February 17, 2020



VIEW 8 IMAGES 



Intel outlines chip that will make quantum computers smaller and faster

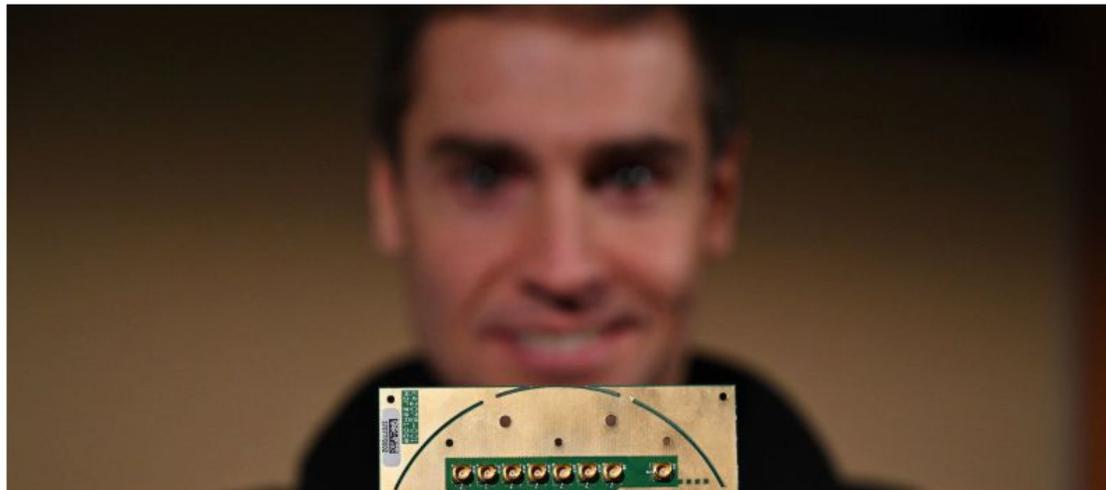
Horse Ridge will allow for more (and more capable) qubits.



Jon Fingas, @jonfingas
02.19.20

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Self-driving robots can disinfect hospitals with UV lights

Drones and self-driving robots used to fight coronavirus in China



India Block | 20 February 2020 | 1 comment

Future Planet

What is BBC Future? Best of... Future Planet Made on Earth

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The world's most unlikely solar farms

FUTURE PLANET CLIMATE CHANGE



By Jody Ellis
20th February 2020

Solar energy has become so accessible that new farms are being switched on in the most unexpected places – including in the depths of the Alaskan winter.

UNIVERSITY OF OXFORD Business School Join a global network 

This \$3.3 million yacht is powered by solar panels that allow it to cruise around forever without refueling — see inside

Mary Meisenzahl 18 hours ago



Solar might be Tesla's secret weapon



By [Chris Isidore](#), [CNN Business](#)

Updated 1720 GMT (0120 HKT) February 19, 2020



GREGORY GERRITSMA/ISTOCK

March 2020

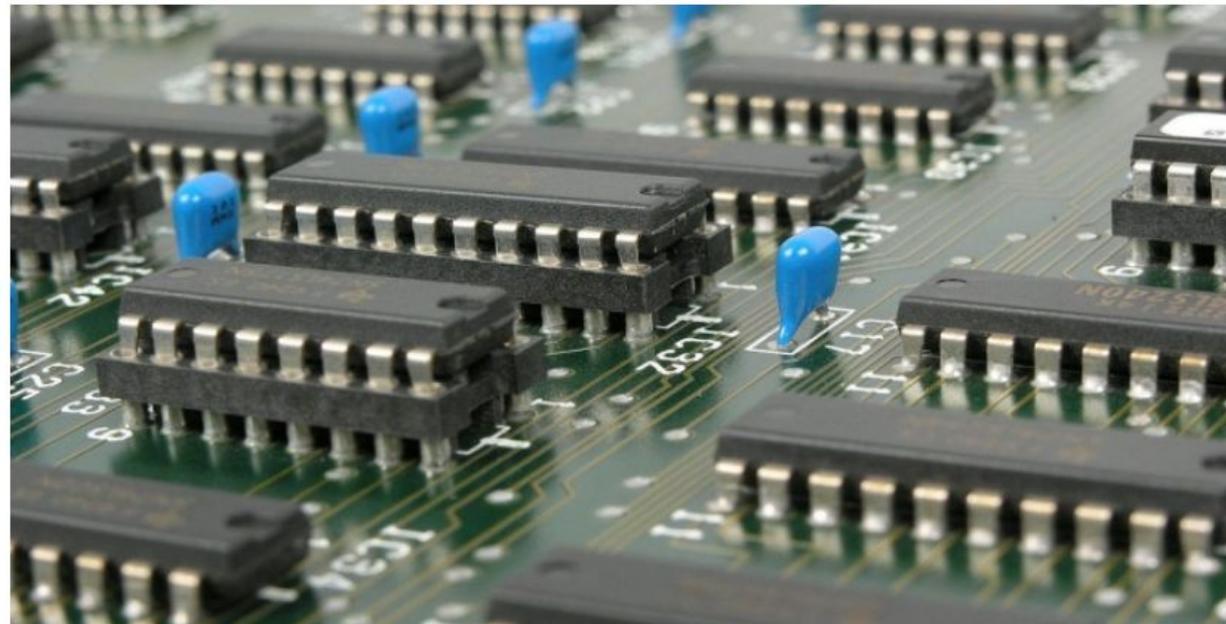
3D Printed Circuit Boards are the Next Big Thing in Additive Manufacturing

3D printed circuits are here.



By Trevor English

February 29, 2020



3D printing and digital fabrication

Relativity Space will 3D-print rockets at new autonomous factory in Long Beach, California

By Mike Wall 2 days ago

The company aims to revolutionize rocketry via 3D printing and intelligent automation.

      [Comments \(0\)](#)



How China is using AI and big data to combat coronavirus outbreak

Authorities in China step up surveillance and roll out new artificial intelligence tools to fight deadly epidemic.

by **Shawn Yuan**  

20 hours ago



The Feds Ban a Self-Driving Shuttle Fleet From Carrying People

Regulators have been hands-off on autonomous vehicles, even after deaths and injuries. But they acted quickly after a woman was hurt in Columbus this week.

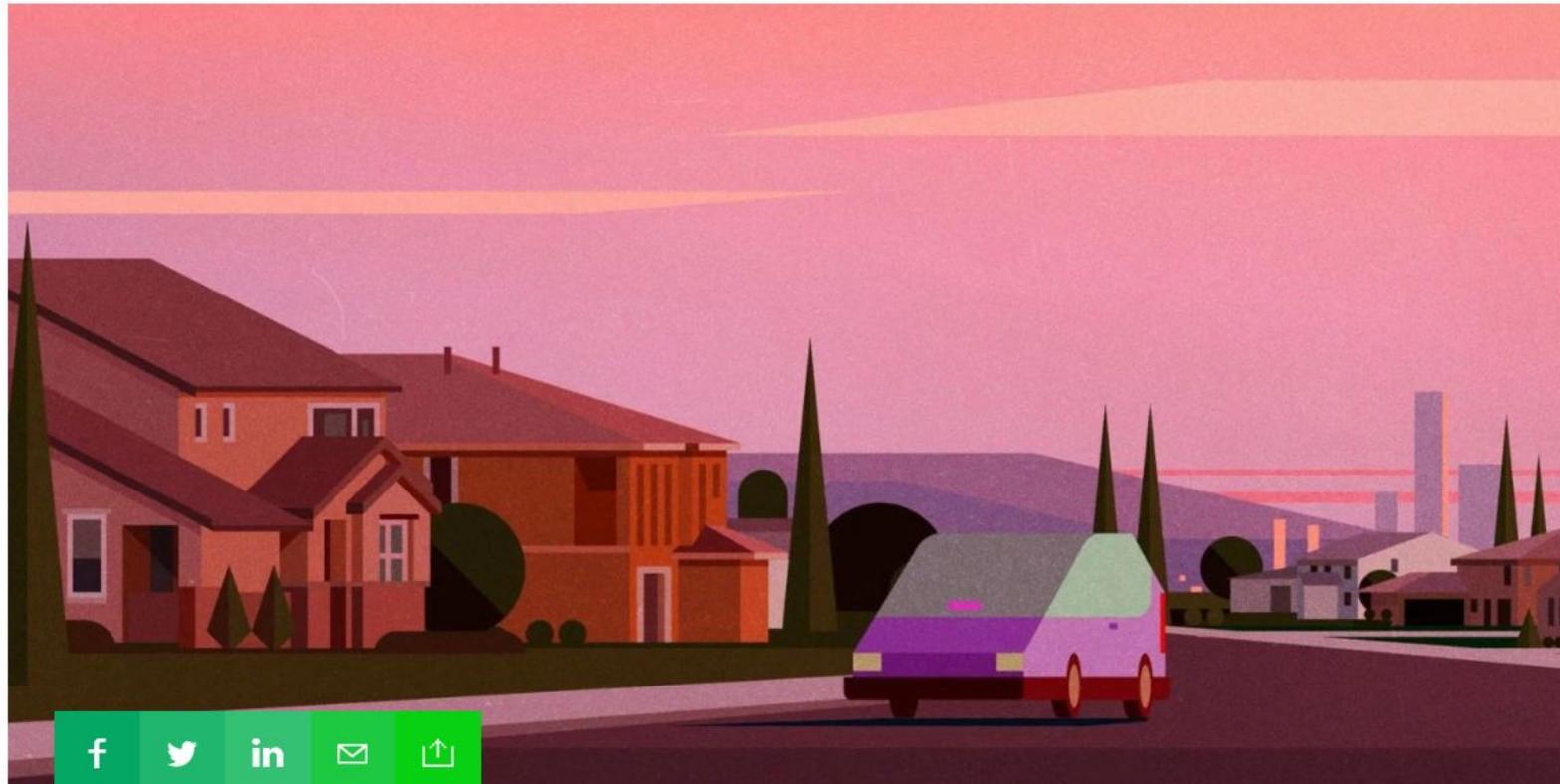


Lyft ramps up self-driving program

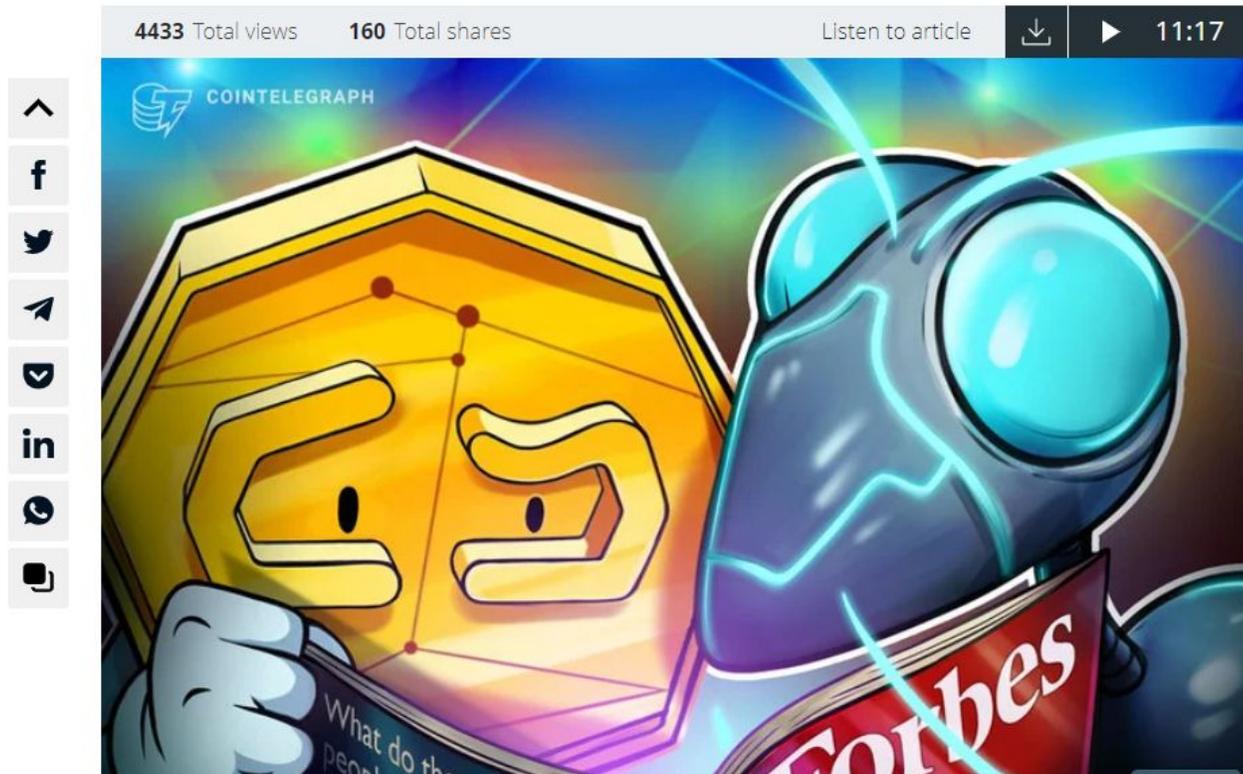


Kirsten Korosec @kirstenkorosec / 2:12 am SAST • February 29, 2020

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What Do the Richest Men in the World Think of Crypto and Blockchain?



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Blockchain For Good: How The United Nations Is Looking To Leverage Technology



Darryn Pollock Contributor 
Crypto & Blockchain

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How Biotechnology Is Changing the Way We Make Clothes



CLARA RODRÍGUEZ FERNÁNDEZ - 25/02/2020 - 7 MINS - FEATURES , INDUSTRIAL



MENU ▾

**nature
communications**

Article | [Open Access](#) | Published: 24 February 2020

Neural cell integration into 3D bioprinted skeletal muscle constructs accelerates restoration of muscle function

Ji Hyun Kim, Ickhee Kim, Young-Joon Seol, In Kap Ko, James J. Yoo, Anthony Atala & Sang Jin Lee 

Nature Communications **11**, Article number: 1025 (2020) | [Cite this article](#)

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Abstract

A bioengineered skeletal muscle construct that mimics structural and functional characteristics of native skeletal muscle is a promising therapeutic option to treat extensive muscle defect injuries. We

Drone





<http://ahval.co/en-76186>

Turkey's killer drones posing Syria air challenge to Russia - Bloomberg

Mar 01 2020 10:16 Gmt+3
Last Updated On: Mar 01 2020 10:25 Gmt+3

🕒 FEBRUARY 27, 2020

Particle accelerator technology could solve one of the most vexing problems in building quantum computers

by Jerald Pinson, Fermi National Accelerator Laboratory



Superconducting radio-frequency cavities, such as the one seen here, are use...

SOFT ROBOTICS VS HARD ROBOTICS: HOW ARE THEY DIFFERENT?

LATEST NEWS ROBOTICS

by Smriti Srivastava / March 2, 2020 / 0 comments

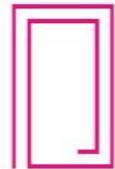


HOW HARD WILL THE ROBOTS MAKE US WORK?

In warehouses, call centers, and other sectors, intelligent machines are managing humans, and they're making work more stressful, grueling, and dangerous

By [Josh Dzieza](#) | [@joshdzieza](#) | Feb 27, 2020, 8:00am EST

Illustrations by [Joel Plosz](#)



In conference stages and at campaign rallies, tech executives and politicians warn of a looming automation crisis — one where workers are gradually, then all at once, replaced by intelligent machines. But their warnings mask the fact that an automation crisis has already arrived. The robots are here, they're working in management, and they're grinding workers into the ground.

03-06-20 | WORLD CHANGING IDEAS

This village for the homeless just got a new addition: 3D-printed houses

Icon is printing full houses to give Austin's homeless a real home to live in.



Artificial intelligence is making artificial intelligence easier to build

AI and machine learning is poised to assist with moving into the next frontier of technology: data itself.



By Joe McKendrick for Service Oriented | March 7, 2020 --
13:53 GMT (13:53 GMT) | Topic: Artificial Intelligence

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Nreal is adding hand tracking to its mixed reality glasses

The glasses are supposed to launch this year

By [Adi Robertson](#) | [@thedextriarchy](#) | Mar 6, 2020, 12:00pm EST

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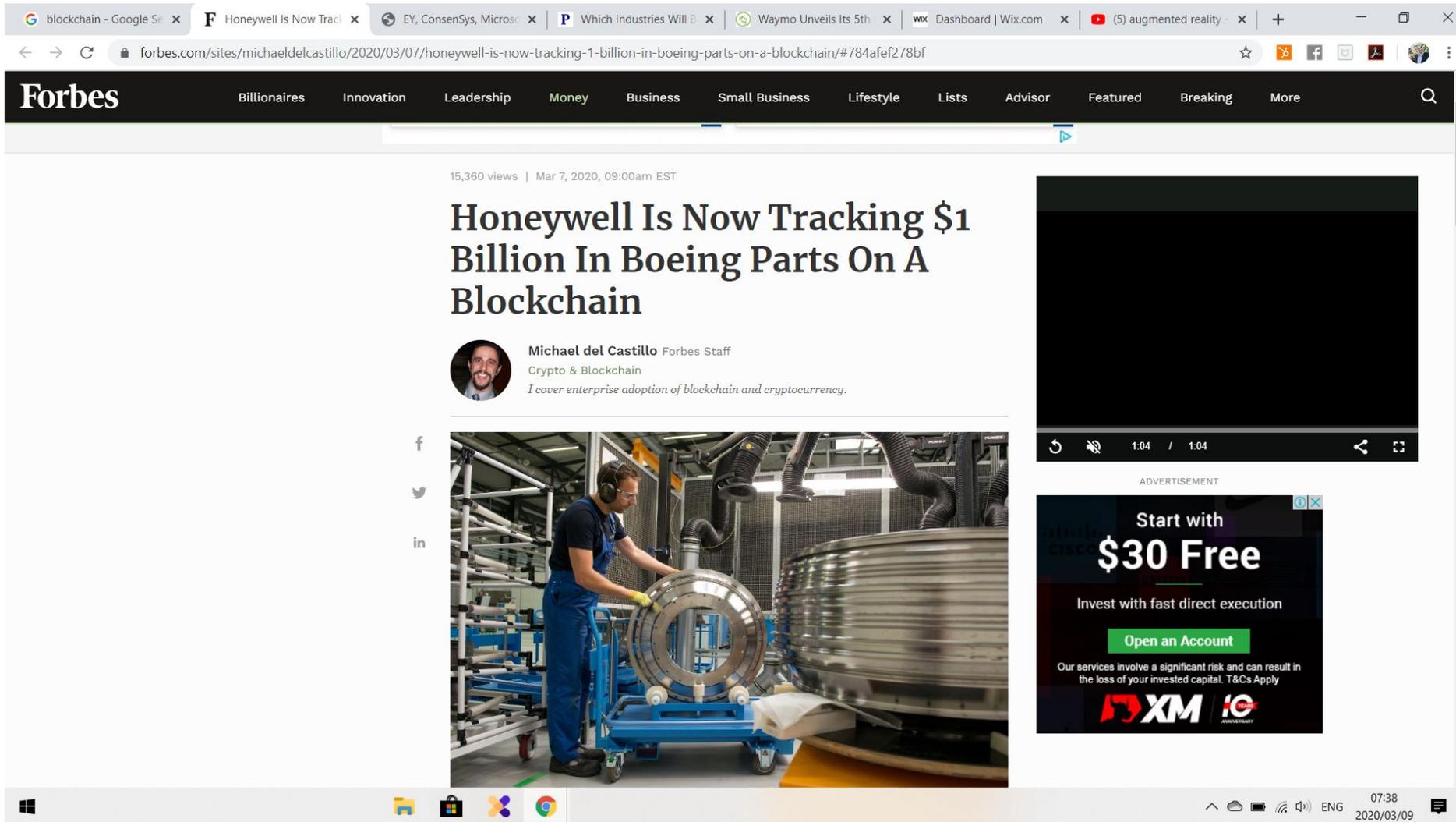
Waymo Unveils Its 5th Generation Autonomous Driving Technology



March 7th, 2020 by [Steve Hanley](#)

India's Supreme Court Ruling Is a Win for the Whole Blockchain Industry

Mar 4, 2020 at 20:29 UTC Updated Mar 4, 2020 at 20:40 UTC



The screenshot shows a web browser window displaying a Forbes article. The browser's address bar shows the URL: forbes.com/sites/michaeldelcastillo/2020/03/07/honeywell-is-now-tracking-1-billion-in-boeing-parts-on-a-blockchain/#784afef278bf. The article title is "Honeywell Is Now Tracking \$1 Billion In Boeing Parts On A Blockchain". The author is Michael del Castillo, Forbes Staff, with a bio: "Crypto & Blockchain. I cover enterprise adoption of blockchain and cryptocurrency." Below the article is a video player showing a factory worker in blue overalls and a headset working with a large, circular metal component on a blue cart. To the right of the video is an advertisement for XM and IC, featuring the text "Start with \$30 Free" and "Invest with fast direct execution". The Windows taskbar at the bottom shows the time as 07:38 on 2020/03/09.

Feature · News · Technology

EY, ConsenSys, Microsoft unveil Baseline, a path for enterprises to public blockchain

4 days ago · by Nicky Morris



Which Industries Will Be Transformed By Blockchain (and the Ensuing Data Glut That Follows)?

By Priceonomics Data Studio

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2,086 views | Mar 5, 2020, 11:23am EST

This New Coronavirus Spy Drone Will Make Sure You Stay Home



Zak Doffman Contributor ©

Cybersecurity

I write about security and surveillance.

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Business

China adapts surveying, mapping, delivery drones to enforce world's biggest quarantine and contain coronavirus outbreak

- Shenzhen Smart Drone UAV's drones used in surveying, mapping can lift a maximum payload of 15kg
- Adaptation shows how outbreak has opened the door for innovative applications to emerge from existing tech



Yujing Liu

Published: 8:00am, 5 Mar, 2020 ▾

March 7, 2020 | *Topic:* Security | *Region:* Middle East | *Blog Brand:* The Buzz | *Tags:* Turkey, Syria, Drones, Military, War

Is Turkey's Military a Drone Superpower?

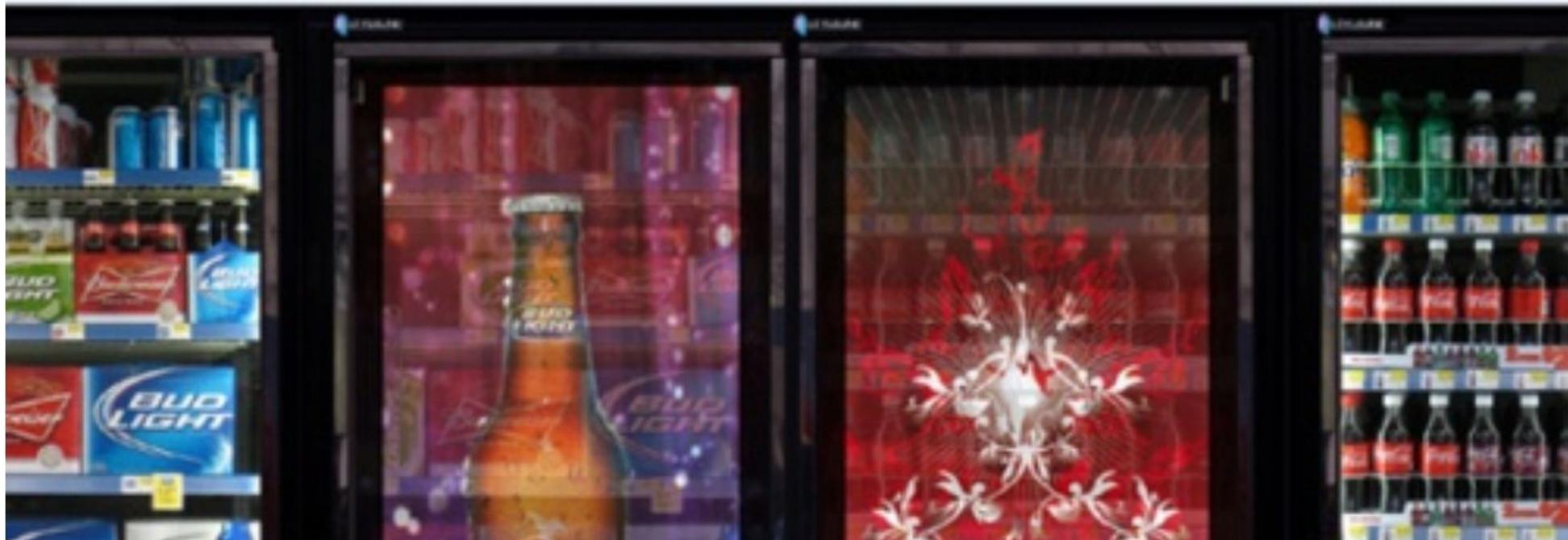
We know at least one thing: the weapons they carry can cause some serious damage.

by **Charlie Gao**

EasyReach launched IoT sensors to monitor retail assets

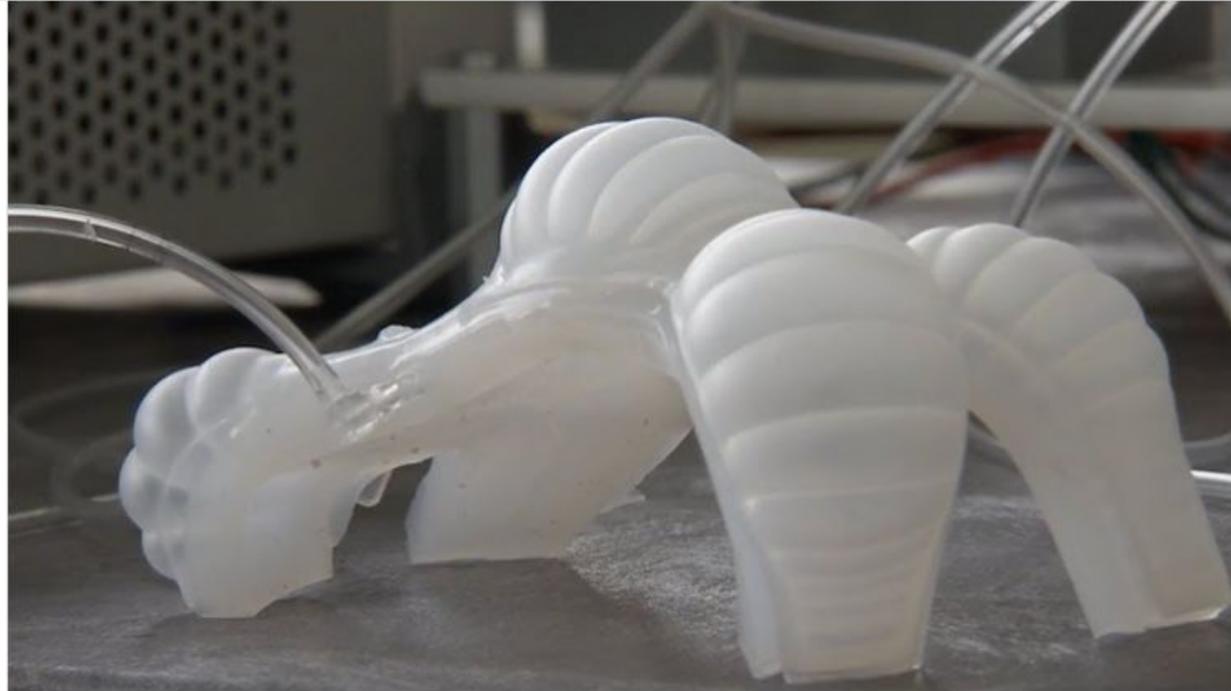


by Gigi Onag — March 6, 2020



Honeywell Launching A Powerful Quantum Computer And Signs JPMorgan As First Customer

By Amit Chowdhry • March 6, 2020



Opinion: The incredible potential of soft robotics

MARCH 9, 2020 BY [DAVID EDWARDS](#) — [LEAVE A COMMENT](#)

robotics - Google Search x Boston Dynamics and OTTO Mot x Dashboard | Wix.com x (5) augmented reality - YouTube x +

newatlas.com/robotics/boston-dynamics-otto-motors-robotic-warehouse/

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Boston Dynamics and OTTO Motors demo robotic warehouse of the future

By David Szondy
March 04, 2020

Handle / OTTO Integration VIEW 1 IMAGES



The demonstration showed the degree to which warehouse automation can go Boston Dynamics

Boston Dynamics and OTTO Motors have teamed up for a demonstration of the warehouse of the future. In a new video, the duo shows Boston Dynamics' Handle robot working with OTTO Motors' autonomous mobile robots (AMRs) in a simulated warehouse environment. The Handle robot is shown picking up a box from a pallet and placing it on an OTTO AMR. The AMR is then shown moving the pallet through the warehouse aisles.

IBM IT Infrastructure

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Breakthrough Self-Assembly Innovation Enables Cheaper Solar Energy Production

TOPICS: Energy Green Energy Materials Science Perovskite Solar Cell Solar Cells

By KAUNAS UNIVERSITY OF TECHNOLOGY MARCH 7, 2020

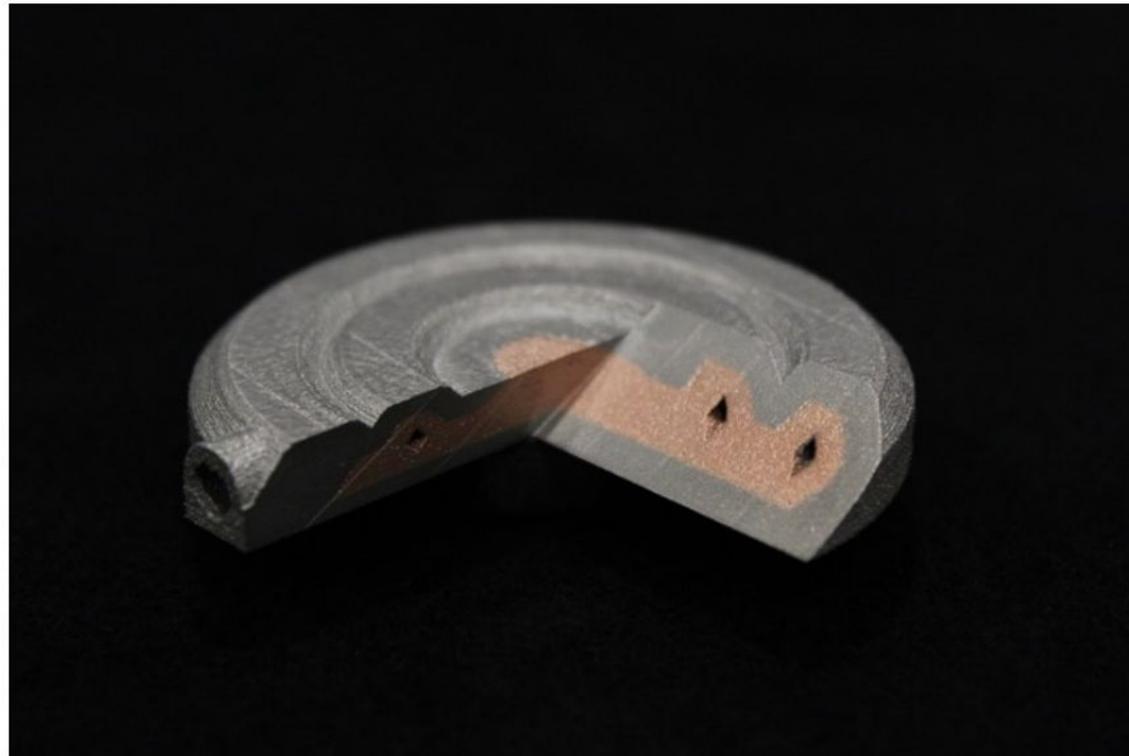


3D Printing Progress

Posted on March 12, 2020

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Multi Material Metal 3D Printer



It's finally done. the first-ever dual-metal part is printed via Laser- Powder Bed Fusion (L-



Industrial Apps ▾ Medical Apps ▾ AM Professionals ▾ 3D Printing

AM in the time of COVID-19 AM Industry Medical

Italian hospital saves Covid-19 patients lives by 3D printing valves for reanimation devices

The supply chain was broken, people and 3D printing rose to the occasion

 Davide Sher · March 14, 2020

 21  27,725  2 minutes read



Announcing TensorFlow Quantum: An Open Source Library for Quantum Machine Learning

Monday, March 9, 2020

Posted by Alan Ho, Product Lead and Masoud Mohseni, Technical Lead, Google Research

"Nature isn't classical, dammit, so if you want to make a simulation of nature, you'd better make it quantum mechanical." – Physicist [Richard Feynman](#)

Machine learning (ML), while it doesn't exactly simulate systems in nature, has the ability to learn a model of a system and predict the system's behavior. Over the past few years, classical ML models have shown promise in tackling challenging scientific issues, leading to advancements in [image processing for cancer detection](#), [forecasting earthquake aftershocks](#), [predicting extreme weather patterns](#), and [detecting new exoplanets](#). With the recent [progress in the development of quantum computing](#), the development of new *quantum* ML models could have a [profound impact on the world's biggest problems](#), leading to breakthroughs in the areas of medicine, materials, sensing, and communications. However, to date there has been a lack of research tools to discover useful quantum ML models that can process quantum data and execute on quantum computers available today.

Today, in collaboration with the [University of Waterloo, X](#), and [Volkswagen](#), we announce the release of [TensorFlow Quantum \(TFQ\)](#), an open-source library for the rapid prototyping of quantum ML models. TFQ provides the tools necessary for bringing the quantum computing and machine learning research communities together to control and model natural or artificial quantum systems; e.g. [Noisy Intermediate Scale Quantum \(NISQ\)](#) processors with ~50 - 100 qubits.



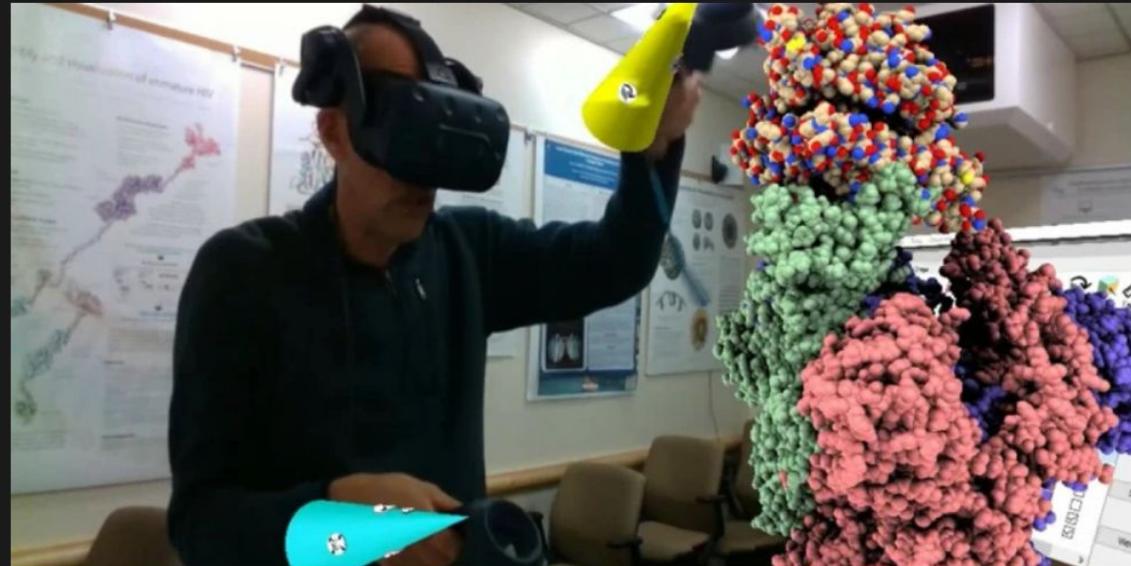
AUGMENTED REALITY AIDS IN THE FIGHT AGAINST COVID-19

by: [Dan Maloney](#)

3 Comments



March 12, 2020



“Know your enemy” is the essence of one of the most famous quotes from [Sun Tzu]’s *Art of War*, and it’s as true now as it was 2,500 years ago. It also applies far beyond the martial arts, and as the world squares off for battle against COVID-19, it’s especially important to know the enemy: the novel coronavirus now dubbed SARS-CoV-2. And now, [augmented reality technology](#) is giving a boost to search for fatal flaws in the virus that can be exploited to defeat it.

Toyota's self-driving car mapping system could be a game changer

With commercial satellite technology, Toyota showed it can create HD maps more quickly and do it in a cost-effective manner.



Sean Szymkowski March 11, 2020 9:24 AM PDT



Coronavirus highlights strengths of self-driving delivery vehicles

With quarantines across China, one company flexed its tech muscles to show the usefulness of autonomous vehicles.



Sean Szymkowski March 9, 2020 11:48 AM PDT





By Ting Peng

9 HOURS AGO

Air Cargo Industry Could Save \$400M Per Year With Innovative Blockchain Tech

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Mar 15, 2020, 09:00am EST

Bitcoin's Coronavirus Crash; Blockchain In A Pandemic



Newsletters

f Get Forbes' top crypto and blockchain stories delivered to your inbox every week for the latest news on bitcoin, other major cryptocurrencies and enterprise blockchain adoption.

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Poison-laden drones to patrol New Zealand wilderness on the hunt for invasive pests

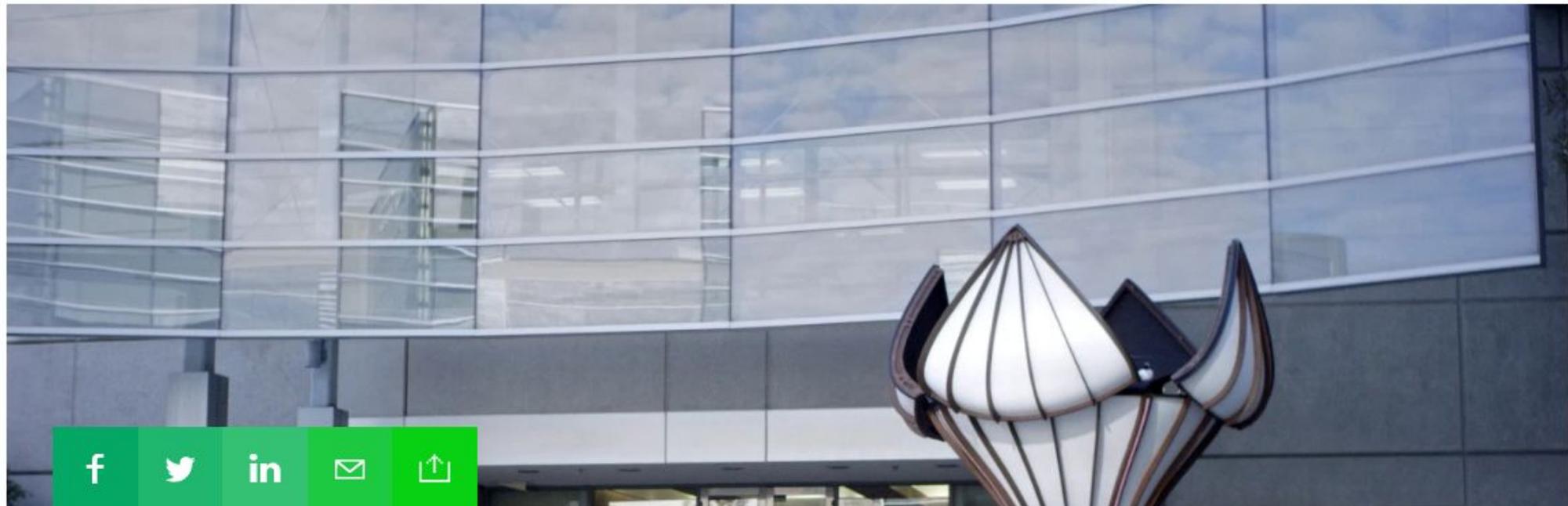


Matternet's new drone landing station looks like a sci-fi movie prop



Devin Coldewey @techcrunch / 12:19 am SAST • March 11, 2020

 Comment



Applications of Internet of Things technology in the education sector

Andrew Meola Mar 12, 2020, 8:05 PM

- This is a preview of *The Internet of Things* research report from Business Insider Intelligence.
- Purchase this report.
- Business Insider Intelligence offers even more technology coverage with Connectivity & Tech Pro. Subscribe today to receive industry-changing connectivity news and analysis to your inbox.

The Internet of Things (IoT), the connection of devices – other than standard products such as computers and smartphones – to the Internet, is in the process of transforming numerous areas of our everyday lives. And while it might not seem like an obvious



Czech Republic tests nanotechnology for disinfecting public transport

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Czech Republic tests nanotechnology for disinfecting public transport

The Czech Republic is testing nanotechnology in Prague in an effort to combat the spread of the new coronavirus.

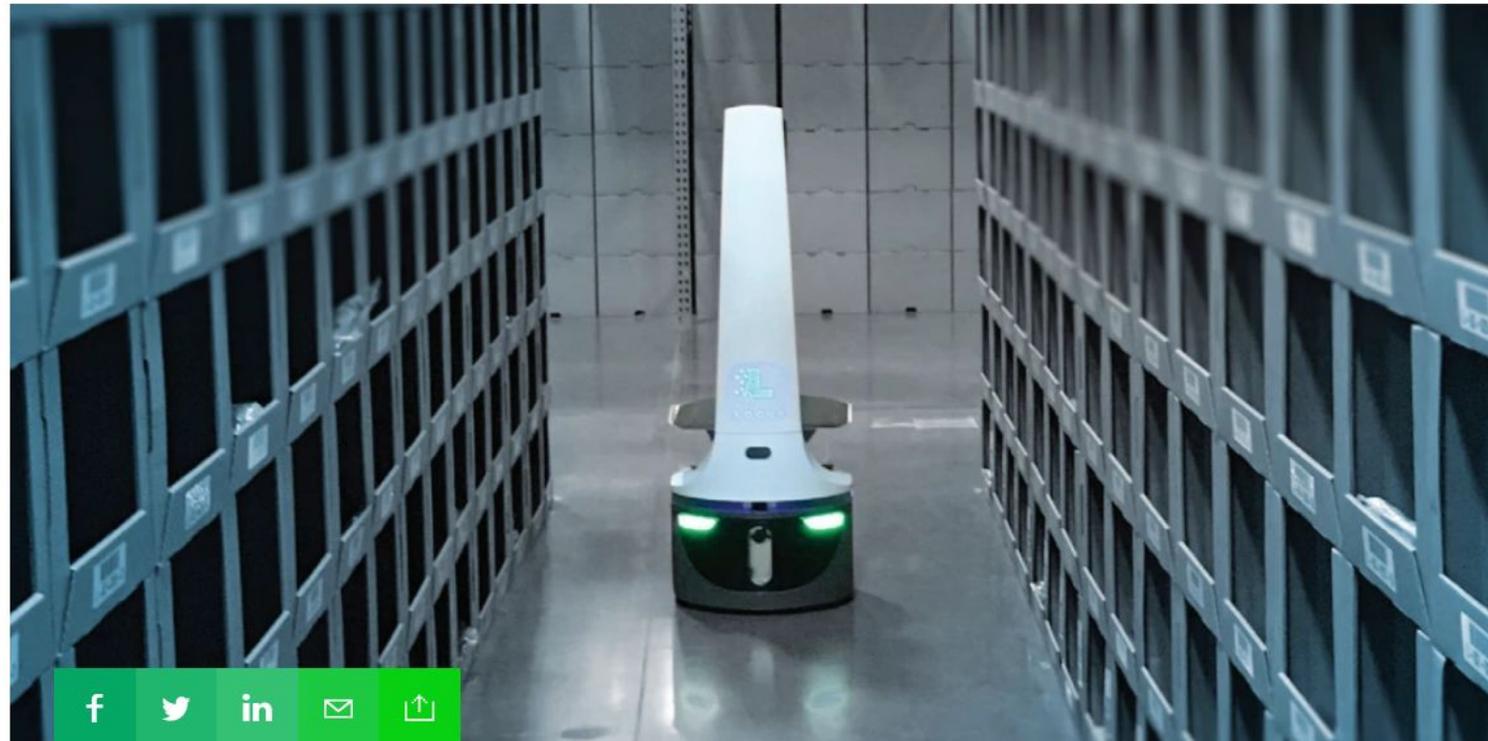
Workers have been spraying the inside of three trams and two buses with different types of disinfectant nano-polymers.

DHL will deploy 1,000 robots from Locus Robotics for delivery fulfillment



Brian Heater @bheater / 5:41 pm SAST • March 11, 2020

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Breakthrough Solar System Uses Recycled Aluminum to Store Energy—Without Batteries

By **Andy Corbley** - Mar 15, 2020

Home / AM Industry / AM in the time of COVID-19 / Leitatz presents first medically validated, industrialized 3D printed ventilator

AM in the time of COVID-19 AM Industry Medical

Leitatz presents first medically validated, industrialized 3D printed ventilator

 Davide Sher · March 22, 2020

0 447 1 minute read



From Design to Mass 3D printing of Medical Shields in Three Days



Josef Průša

March 18, 2020

— — — — —

TECH | CORONAVIRUS | WORLD HEALTH ORGANIZATION | ARTIFICIAL INTELLIGENCE

Why AI might be the most effective weapon we have to fight COVID-19

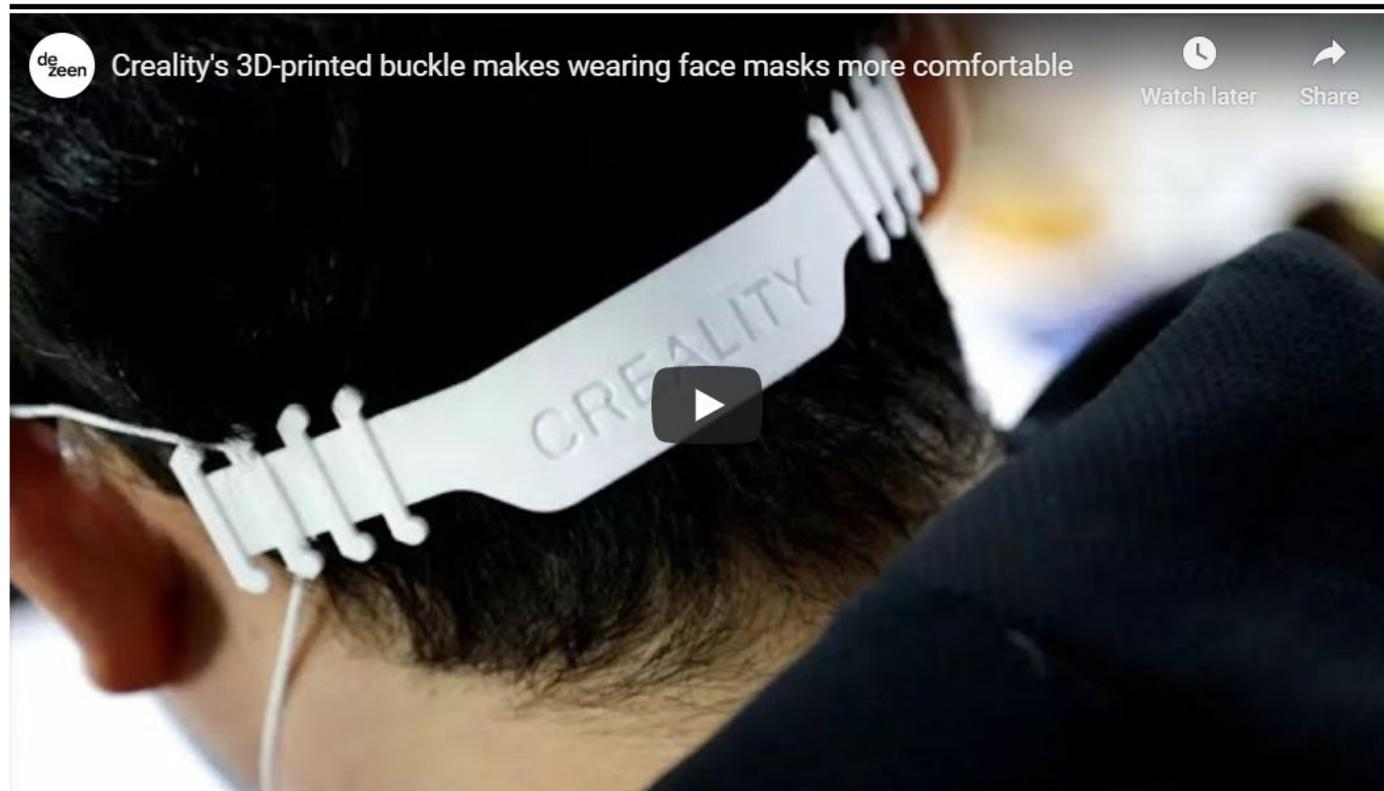


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Why AI might be the most effective weapon we have to fight COVID-19

3D printing and digital fabrication



Creality's 3D-printed buckle makes wearing face masks more comfortable



India Block | 22 hours ago | 2 comments

3D printing and digital fabrication

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7 Exciting Ways 3D Printing Is Changing the World Around Us in 2020

3D printing technology has far-reaching implications across multiple industries.

 By [Donovan Alexander](#)
March 24, 2020



891 views | Mar 30, 2020, 12:34am EDT

10 Business Functions That Are Ready To Use Artificial Intelligence

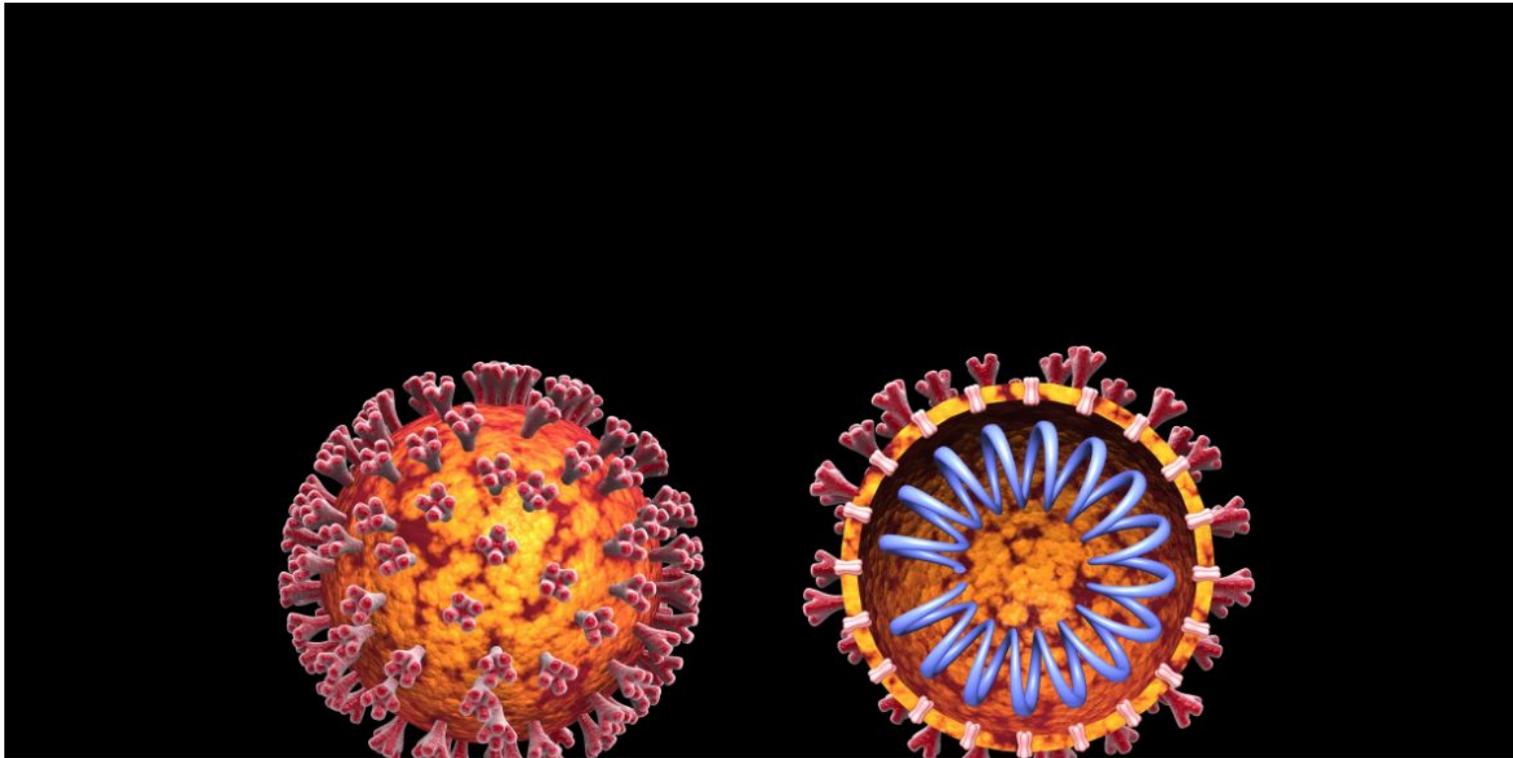


Bernard Marr Contributor ⓘ

Enterprise Tech

AI Can Help Scientists Find a Covid-19 Vaccine

Artificial intelligence has already played a vital role in the outbreak since day 1—a reminder for the first time in a while that it can be a tool for good.



Artificial Intelligence Mar 27

Google is using AI to design chips that will accelerate AI



Google AR brings 3D animals into users' homes

TECHNOLOGY 

Monday, 30 Mar 2020

1:35 PM MYT

By Qishin Tariq



Ever wondered if you could fit a hedgehog in your living room, or maybe even a giant panda? Now you can try, using Google AR. — Google



By Samuel Haig

5 HOURS AGO

Dutch Govt to Embrace Blockchain in Fight Against Pandemic



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World Health Organization Teams With IBM, Oracle on Blockchain-Based Coronavirus Data Hub

Mar 27, 2020 at 20:50 UTC ▪ Updated Mar 27, 2020 at 21:02 UTC

DRONES

"Pandemic drone" could help detect infections in crowds

By David Szondy
March 26, 2020



VIEW 1 IMAGES 



Indian start-up QNu Labs debuts on global quantum computing stage

Quantum computing relies on vastly enhanced computing capacity to quickly crack problems that would take conventional computers years to solve

Ajai Shukla | New Delhi

Last Updated at March 28, 2020 23:39 IST

SCIENCE & TECH

Crisis brings robots to medical frontline: Researchers

AGENCE FRANCE-PRESSE

Washington, United States / Fri, March 27, 2020 / 09:04 pm



The Covid-19 Pandemic Is a Crisis That Robots Were Built For

Robots can help doctors distance from patients, and help those in isolation cope. But getting the machines into hospitals is fraught with difficulties.



GCL to build world's biggest solar-panel plant

TECHNOLOGY

Monday, 30 Mar 2020



April 2020

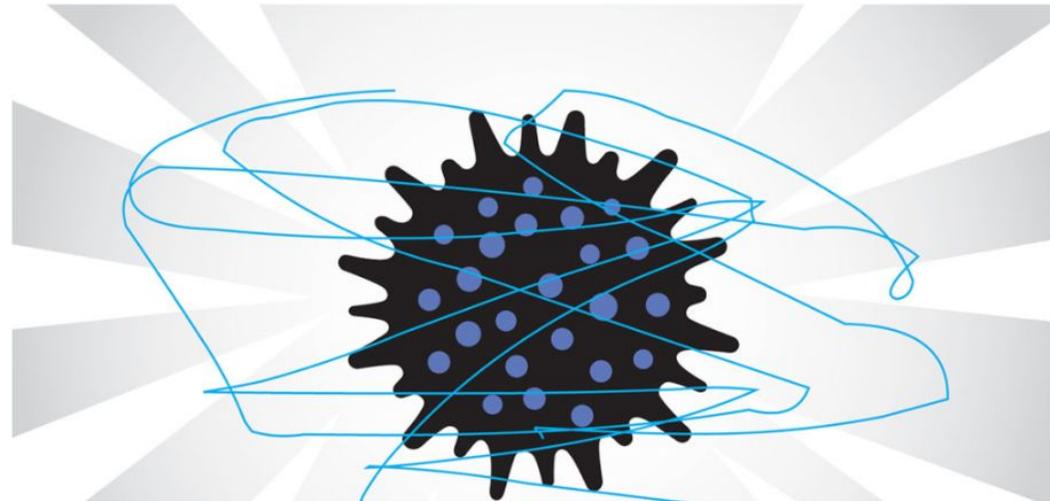
INNOVATION

How Hospitals Are Using AI to Battle Covid-19

by Kelley A. Wittbold , Colleen Carroll , Marco Iansiti , Haipeng Mark Zhang and Adam B. Landman

April 03, 2020

Summary Save Share Comment ² Print



Neuroscience

Scientists develop AI that can turn brain activity into text

Researchers in US tracked the neural data from people while they were speaking

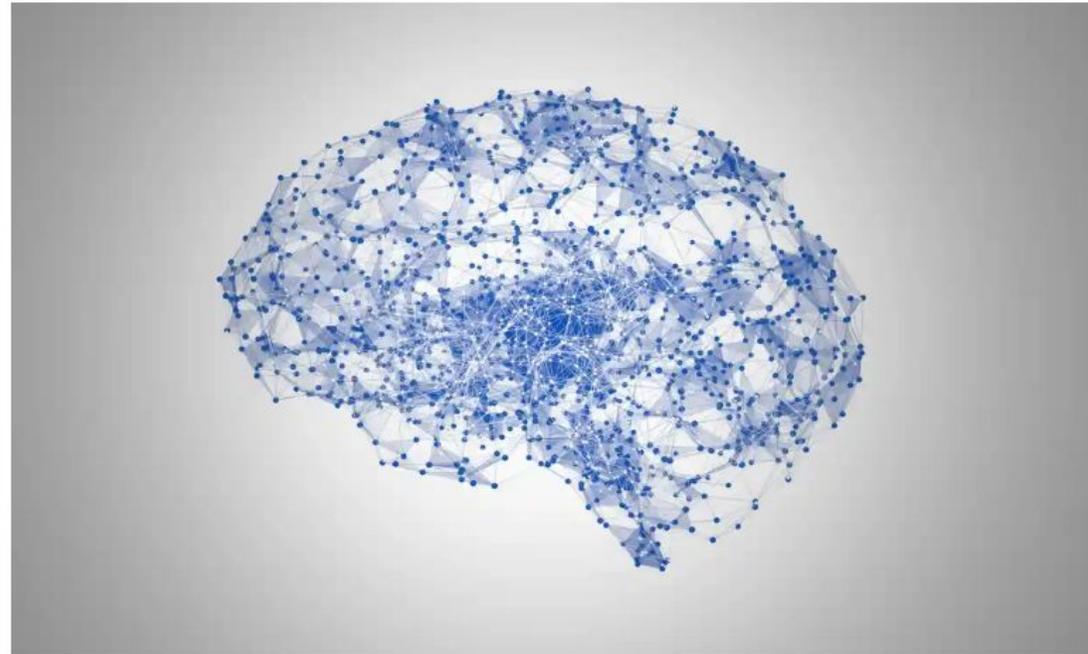
Nicola Davis

@NicolaKSDavis

Mon 30 Mar 2020 16.00 BST



3,109



▲ Computer-generated image of a brain. The team found the accuracy of the latest system was far higher than previous approaches. Photograph: Jezper/Alamy

Augmented Reality (AR) Market to Exhibit an Incredible CAGR of 48.6%; Integration of Artificial Intelligence in AR to Augur Well for the Market, States Fortune Business Insights™

 PR Newswire April 3, 2020

INNOVATION / 3D TECHNOLOGIES

Out of This World Tech: The Exciting Role of 3D Printing in the Aerospace Industry

Since 1989, the aerospace industry has benefited from 3D printing. Here is how things are changing today.



By Donovan Alexander

April 12, 2020



CRISIS MANAGEMENT

4 Ways AI Is Making the World a Safer Place

We've never stood to benefit more from artificial intelligence than we do now.



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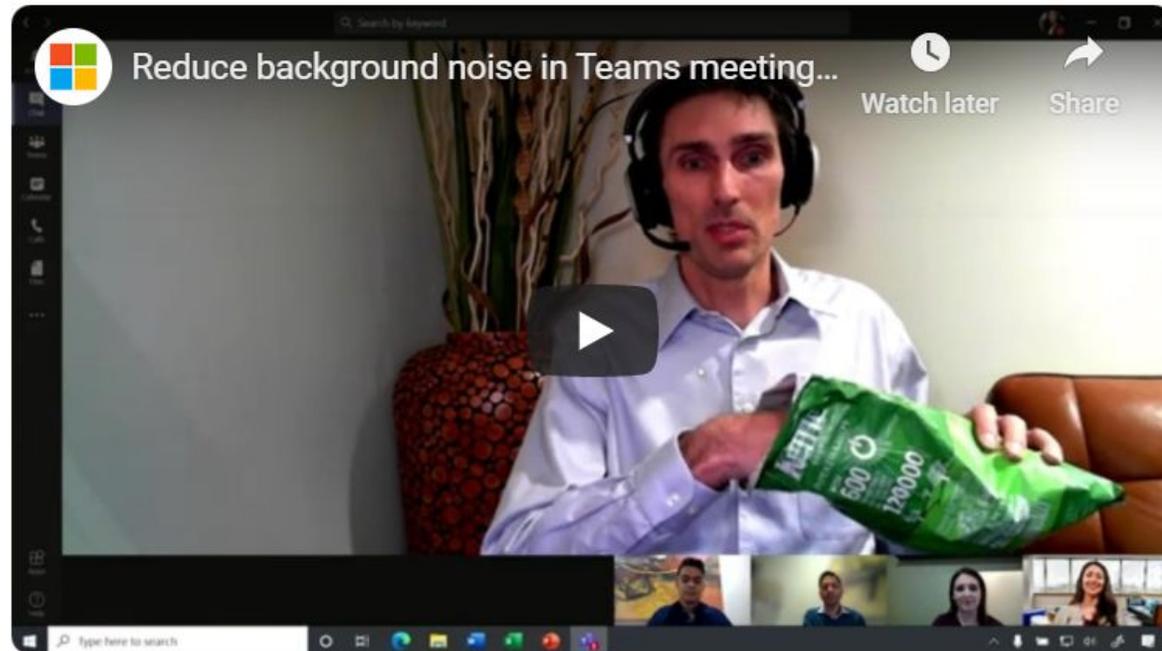
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How Microsoft Teams will use AI to filter out typing, barking, and other noise from video calls

EMIL PROTALINSKI @EPRO APRIL 9, 2020 9:09 AM



Last month, Microsoft announced that Teams, its competitor to Slack

VB TRANSFORM

The AI event for
business leaders

San Francisco
July 15 - 16

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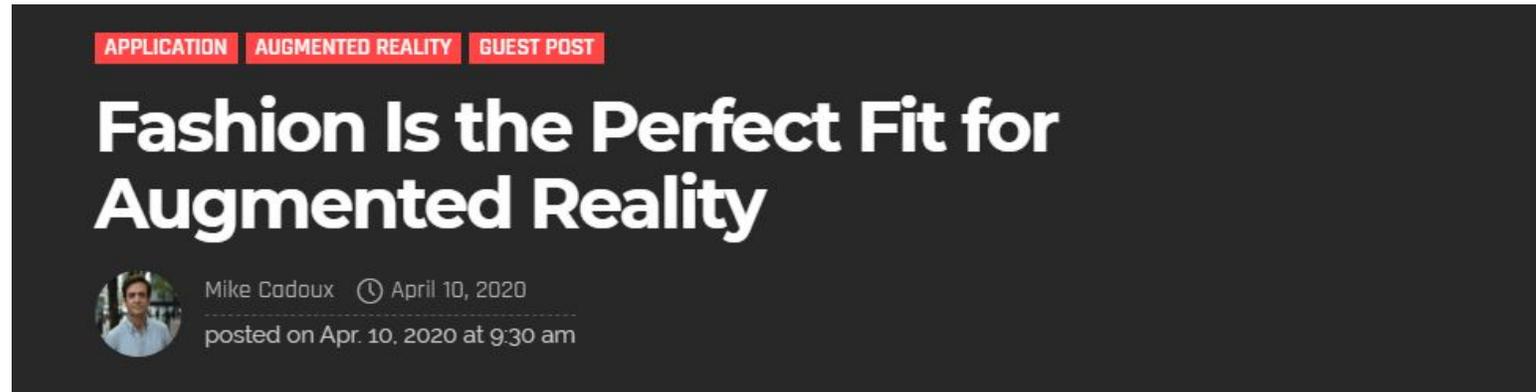
09 Apr 2020 | 15:05 GMT

Mirror Arrays Make Augmented Reality More Realistic

Relying on a collection of fast-moving mirrors, this AR system can control how much of the real and virtual world users perceive

By **Michelle Hampson**





| The fashion industry is tailor-made for an AR explosion.



The [fashion industry](#) is tailor-made for an augmented reality explosion. Just picture yourself trying on different shirts digitally; it's too good. From virtual try-ons, to detailed product inspection, to camera activated logos, to what my mom calls "bright and shiny" camera filters – what we wear will come to life in the virtual world.

[Snapchat](#) was the first to discover the power of augmenting the selfie. It's easy to dismiss this as a Gen Z fad, but put a toddler in front of Snap lenses and you will see – there is something inherently human about the joy of doing stuff to your face. People love it – you probably will too if you give it a try.

Comprehensive Guide to IoT Statistics You Need to Know in 2020

Oil Companies Are Collapsing, but Wind and Solar Energy Keep Growing

The renewable-energy business is expected to keep growing, though more slowly, in contrast to fossil fuel companies, which have been hammered by low oil and gas prices.

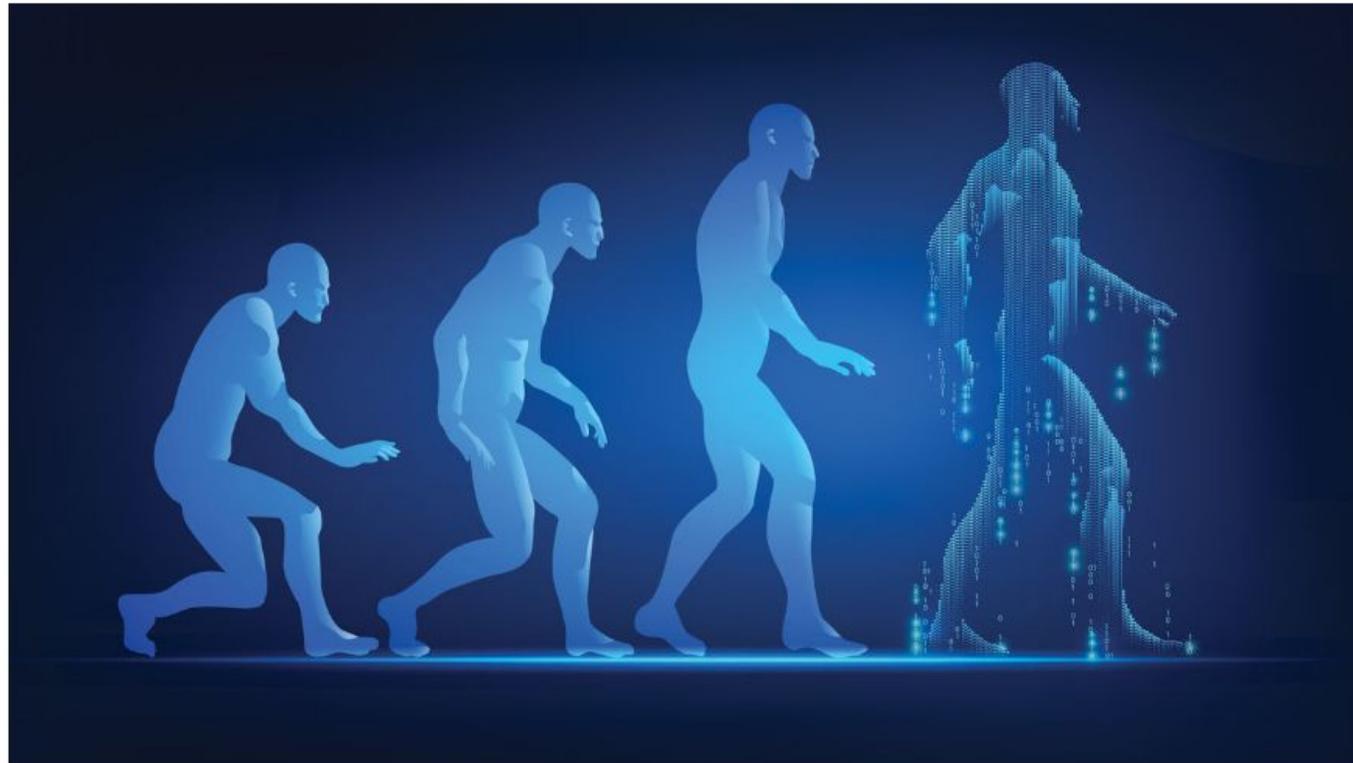
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JAKARIN2521/ISTOCK.COM

Artificial intelligence is evolving all by itself

By Edd Gent | Apr. 13, 2020 , 11:20 AM

2,960 views | Apr 18, 2020, 12:57am EDT

How AI Is Expanding The Applications Of Robo Advisory



Ilker Koksal Contributor 
Enterprise Tech

f For the last couple of years, Artificial Intelligence (AI) has been changing many fields and increasing efficiency by using improved datasets. One of those areas where AI has accelerated evolution is the robo-advisory, which is a field having extensive financial big data to analyze.

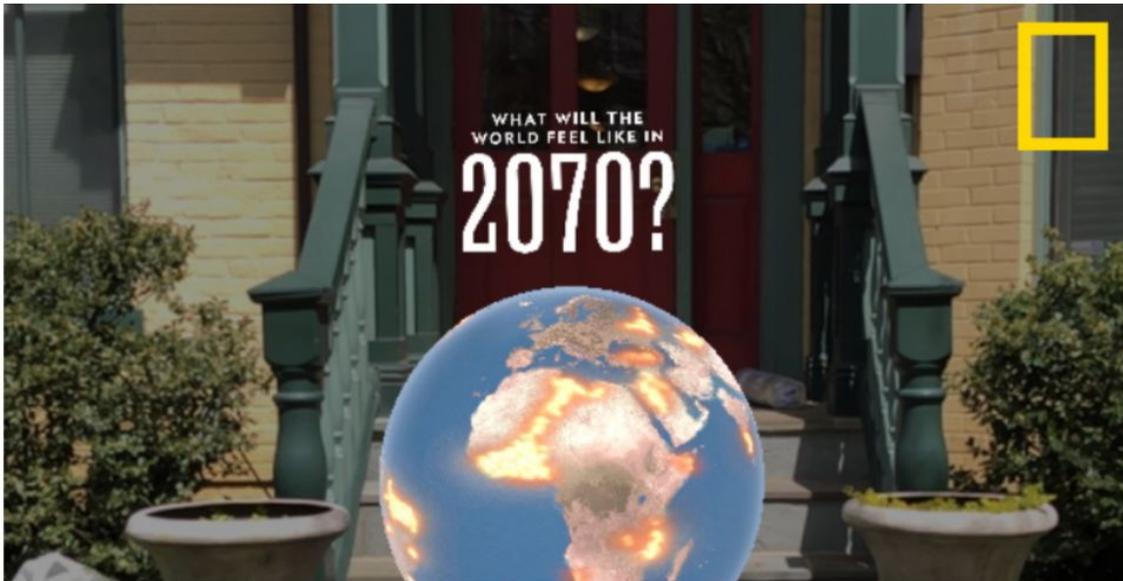
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National Geographic Debuts Instagram AR Experience for April Earth Day Issue

People can see the projected climate conditions for 12 global cities
in 2070

By David Cohen | April 13, 2020



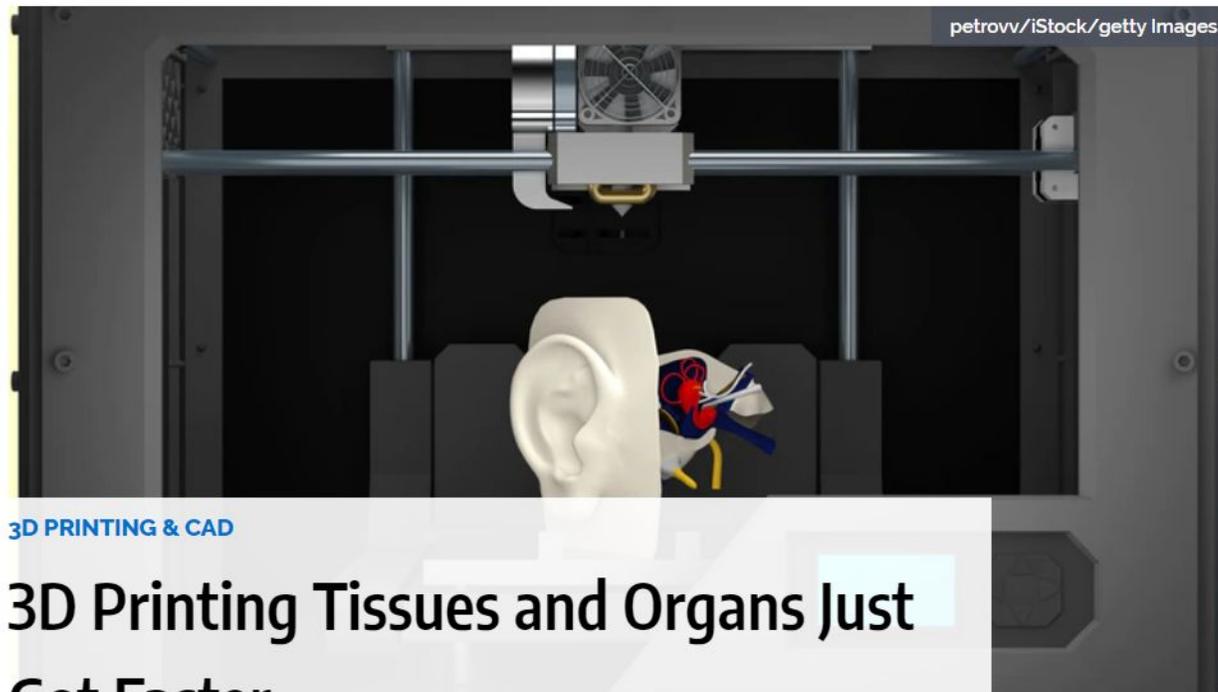
Explore Notre-Dame in this 360 video from Ubisoft's VR experience



by RACHEL KASER — 2 days ago in VIRTUAL REALITY



Credit: Ubisoft



3D PRINTING & CAD

3D Printing Tissues and Organs Just Got Faster

Several 3D printers simultaneously create a two-dimensional slice of a tissue or organ, then the pieces are assembled in a process called bioprinting.

Stephen Mraz 1

APR 23, 2019

Iranian army acquires combat-capable drones with 1,500km range

Defence minister says the domestically produced drones are equipped with missiles and bombs



The Army Is Building Drones That Can Be Fired From Grenade Launchers

The drones would give troops on the ground their own mini spy plane.



// BY [KYLE MIZOKAMI](#) APR 13, 2020



TECH

Physicists Successfully Use 'Hot' Qubits to Overcome a Huge Quantum Computing Problem

MIKE MCRAE 17 APRIL 2020

As [quantum computers](#) continue to grow in size and complexity, engineers are hitting a major obstacle. All of that added machinery means higher temperatures - and if anything can ruin a perfectly good quantum bit, it's heat.

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Technology

Coronavirus: Will Covid-19 speed up the use of robots to replace human workers?

By Zoe Thomas
Technology reporter

19 April 2020

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Coronavirus pandemic





(David Trood/DigitalVision/Getty Images)

TECH

While We've Been in Lockdown, Solar Cell Technology Has Smashed Three Big Records

CARLY CASSELLA 18 APRIL 2020

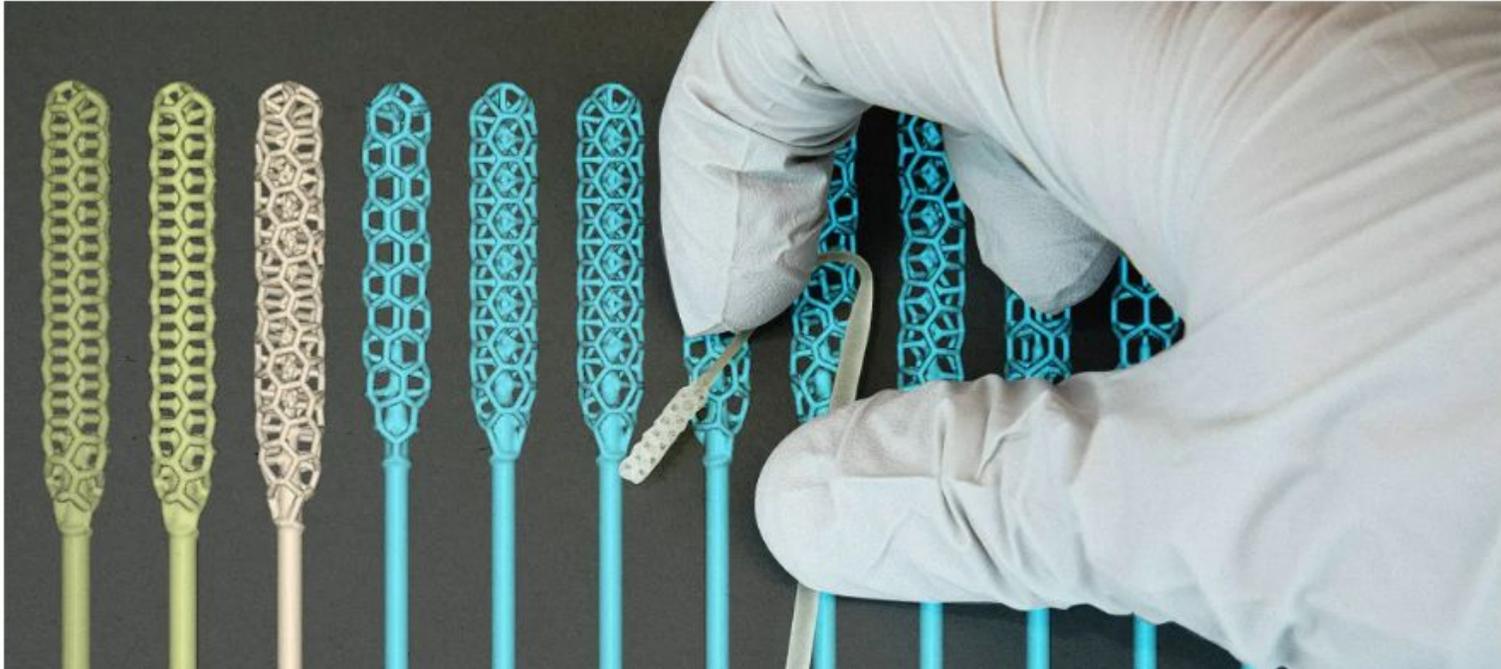
Today, the world is grappling with more than just the climate crisis, and yet even now, in the face of a global pandemic, scientists are marching on with renewable solutions.

Just this month, no less than three records have been broken in solar panel efficiency. The first and the second were achieved by scientists in the United States at the National Renewable Energy Laboratory (NREL).

04-24-20 | THE REBUILDERS

The race to 3D-print 4 million COVID-19 test swabs a week

3D printing companies hope to help produce tens of millions of swabs for the American public. It's a race against time.



China's military developing 6G internet to power AI army of the future

BEIJING is pumping billions in a project that could make its fierce millions-strong People's Liberation Army a cybernetic, artificially intelligent force of the future.

By **BRIAN MCGLEENON**

PUBLISHED: 14:47, Sun, Apr 26, 2020 | UPDATED: 16:20, Sun, Apr 26, 2020



Ex-CEO of Google stunned by China's AI 'domination' promise



TECH VIRTUAL REALITY YOUTUBE

Japanese hot spring resorts let you soak in their baths in VR

For a more relaxing isolation

By Sam Byford | @345triangle | Apr 23, 2020, 1:20am EDT

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Surprise! 2020 Is Not the Year for Self-Driving Cars

The AV industry has had to reset expectations as it shifts its focus to Level 4 autonomy

By **Mark Anderson**

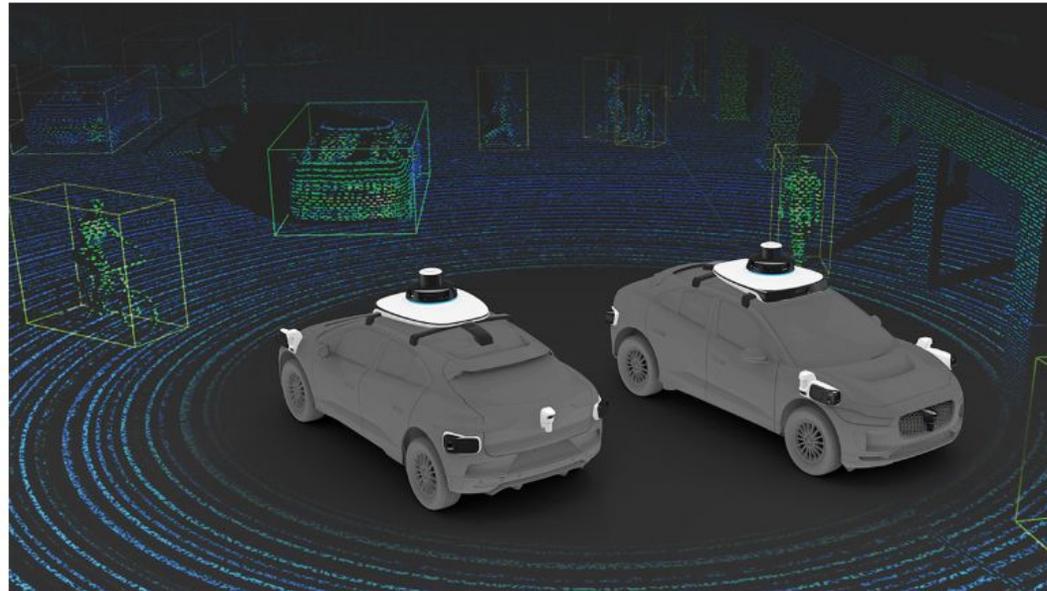
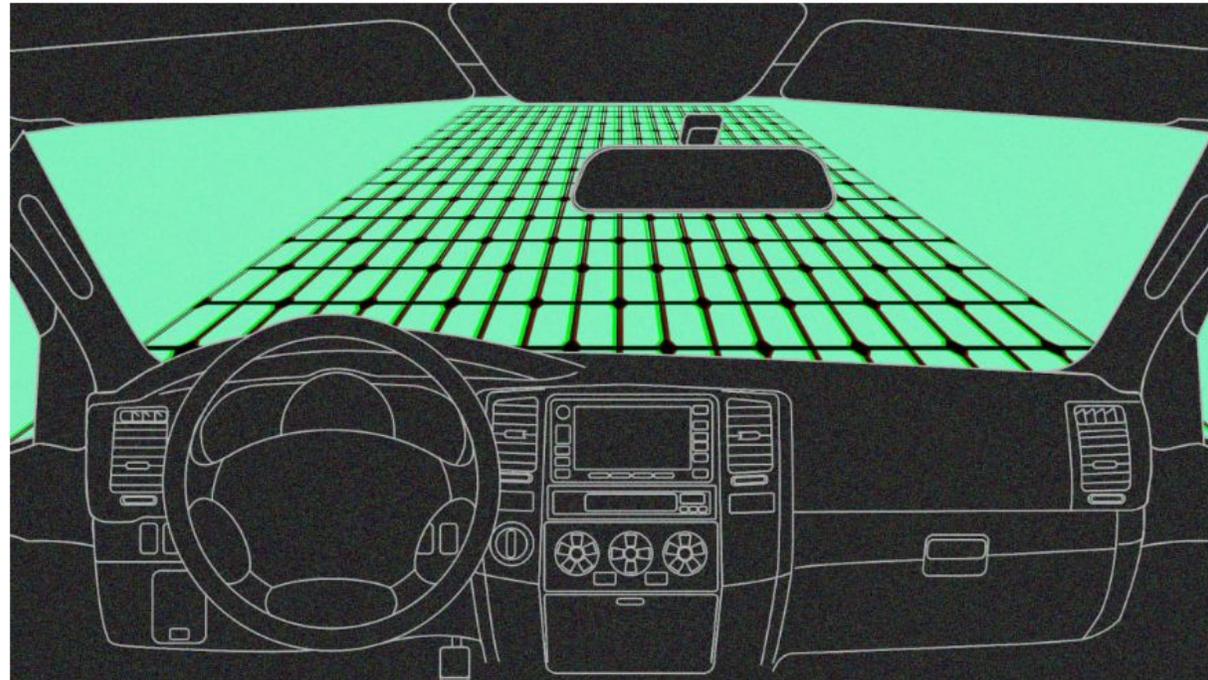


Image: Waymo

04-21-20 | POV

The biggest myth about the development of self-driving cars

The hype about autonomous vehicles misses one key point: Humans will still be vitally necessary for a very long time.



[Source images: aarrows/iStock; DavidZydd/Unsplash]

Story from **Policy & regulation** →

China's National Blockchain Will Change the World

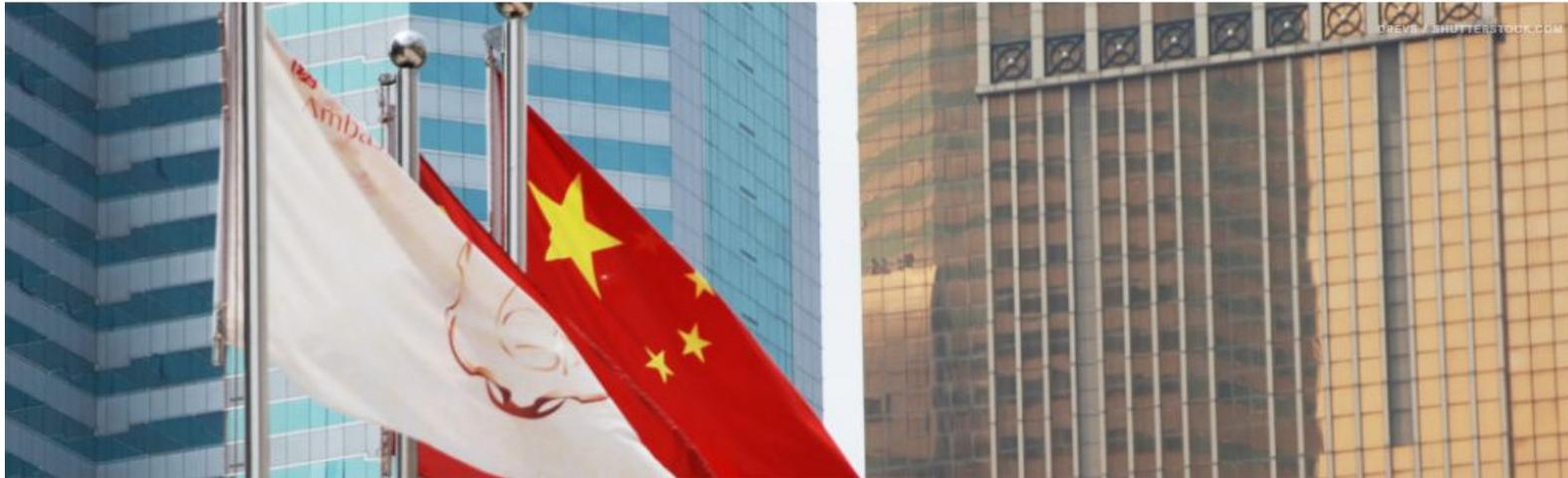
Apr 24, 2020 at 18:26 UTC ▪ Updated Apr 25, 2020 at 19:13 UTC

JUST IN ASIA

Most of China's biggest banks are already using blockchains

 by Celia Wan

April 22, 2020, 12:32PM EDT · 1 min read





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Changes in 3d Bioprinting Market Revenue and growth rate during COVID-19 crisis

Monday, April 20th 2020, 7:03 PM CDT

The demand for 3D bioprinting has increased significantly, as it is employed for developing organ and tissue constructs that are used scaffolds, research and development of drugs, and development of medical implants.

Technology

Coronavirus: Drones to deliver NHS supplies to Isle of Wight

🕒 24 April 2020

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Coronavirus pandemic



SAFETY TECHNOLOGY

Three Ways Nanotechnology Improves Manufacturing

How has the manipulation of matter benefitted workplace safety?

Mark Howard

JAN 17, 2020



Nanotechnology involves the manipulation of matter on the atomic and molecular-scale — structures between one and 100 nanometers in size. To put that



That Very Good Robotic Dog Is Now Helping Hospitals Fight the Coronavirus

Spot deserves all the belly rubs.



// BY [COURTNEY LINDER](#) APR 23, 2020





A perovskite solar cell with different levels of light transparency. (Dr Jae Choul Yu)

ENVIRONMENT

This Genius New Type of Solar Energy Cell Can Be Used in Windows

DAVID NIELD 22 APRIL 2020

Engineers have developed a semi-transparent solar cell that offers a viable level of efficiency, and it might get us closer to a future where windows that double up as solar panels could transform both architecture and energy production.

May 2020

Adidas is using AI and 3D printing to cope with a plunge in sales during the coronavirus pandemic

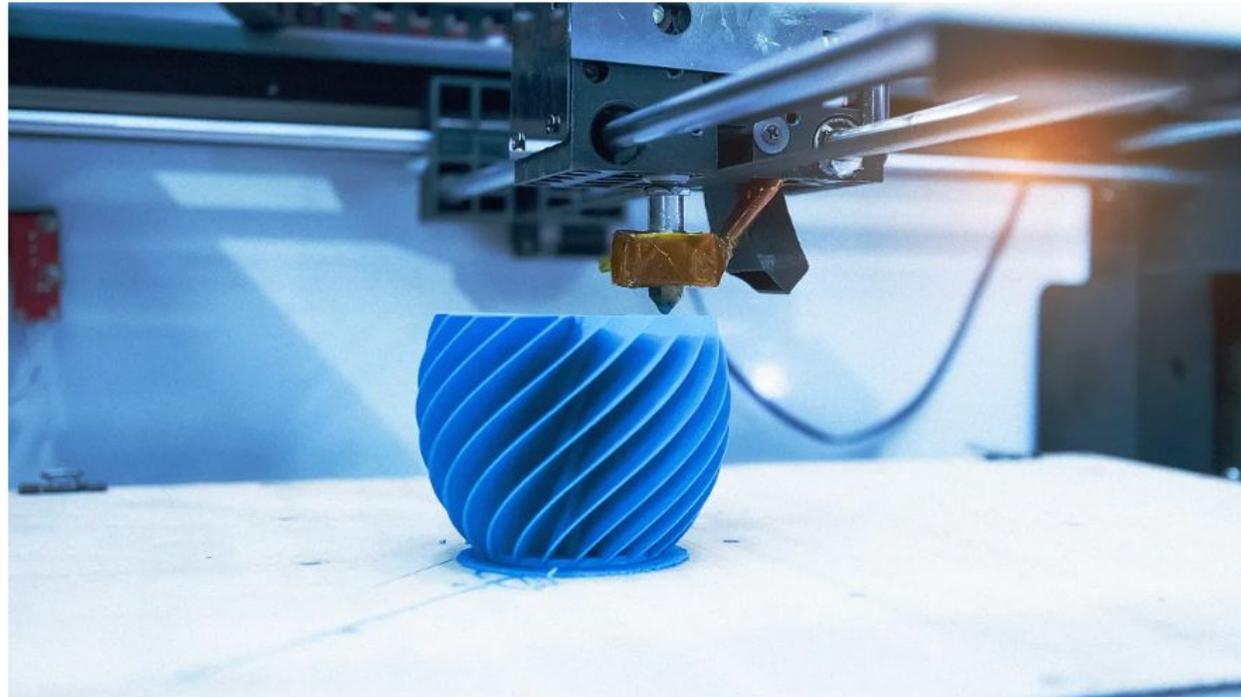
Shalini Nagarajan May 3, 2020, 1:27 PM



04-27-20 | CORONAVIRUS

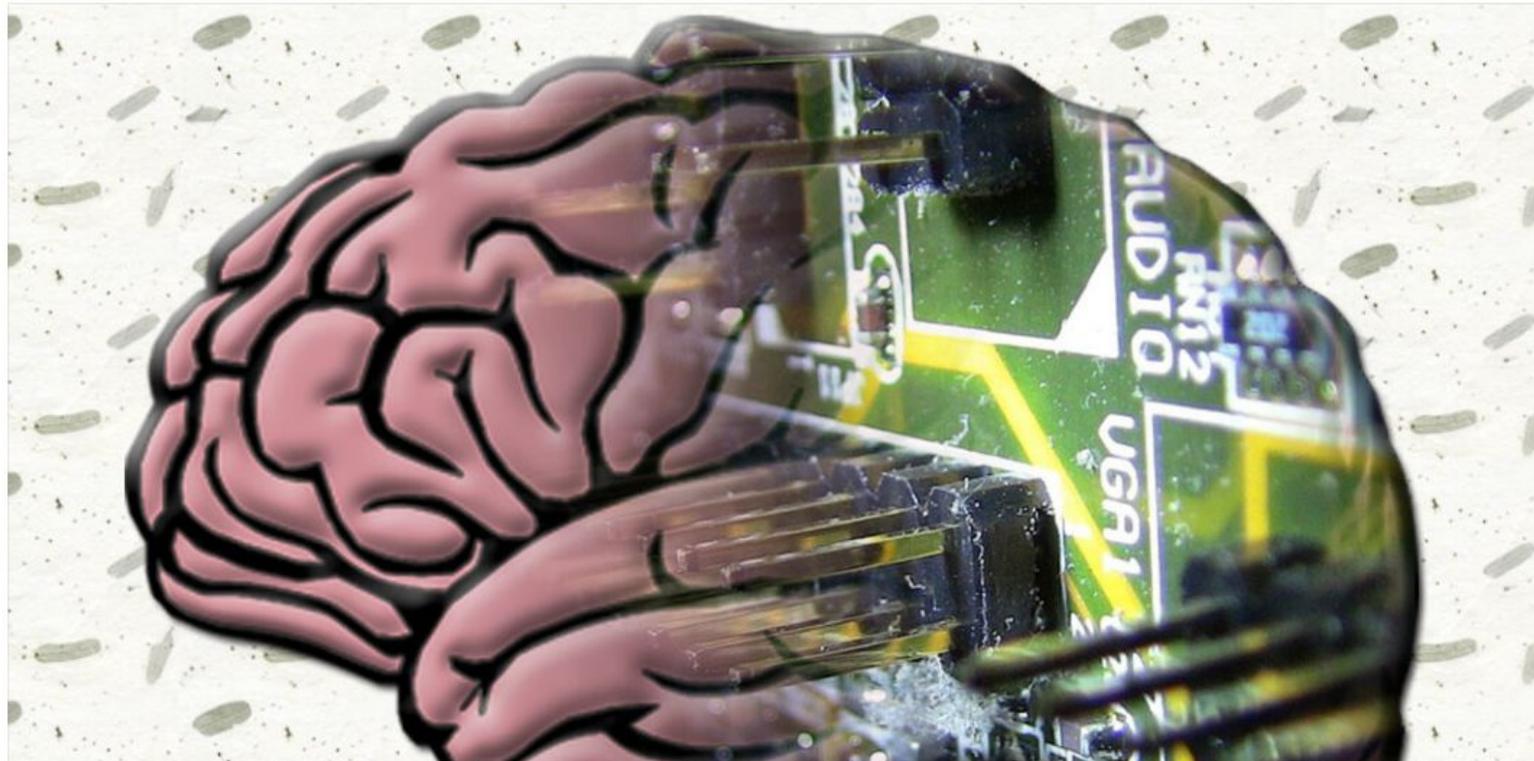
The 3D printing revolution is finally here

The move toward distributed manufacturing was expected to be a slow process. Then the coronavirus changed everything.



© 2020 Idea Storm

Is AI already conscious?



Artificial intelligence / Machine learning

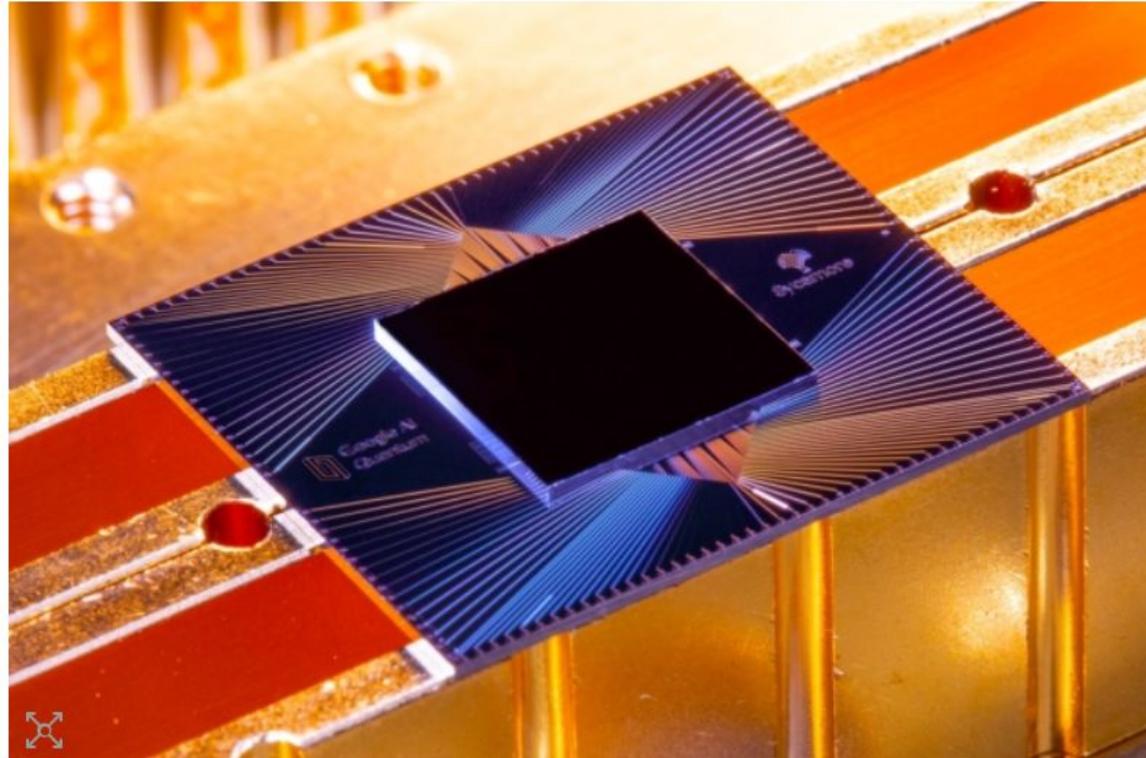
Google's medical AI was super accurate in a lab. Real life was a different story.

If AI is really going to make a difference to patients we need to know how it works when real humans get their hands on it, in real situations.

QUANTUM COMPUTING | RESEARCH UPDATE

Quantum computers vastly outperform supercomputers when it comes to energy efficiency

01 May 2020



Energy efficient: Google's Sycamore quantum processor. (Courtesy: Erik Lucero/Google)

TECH TRENDS

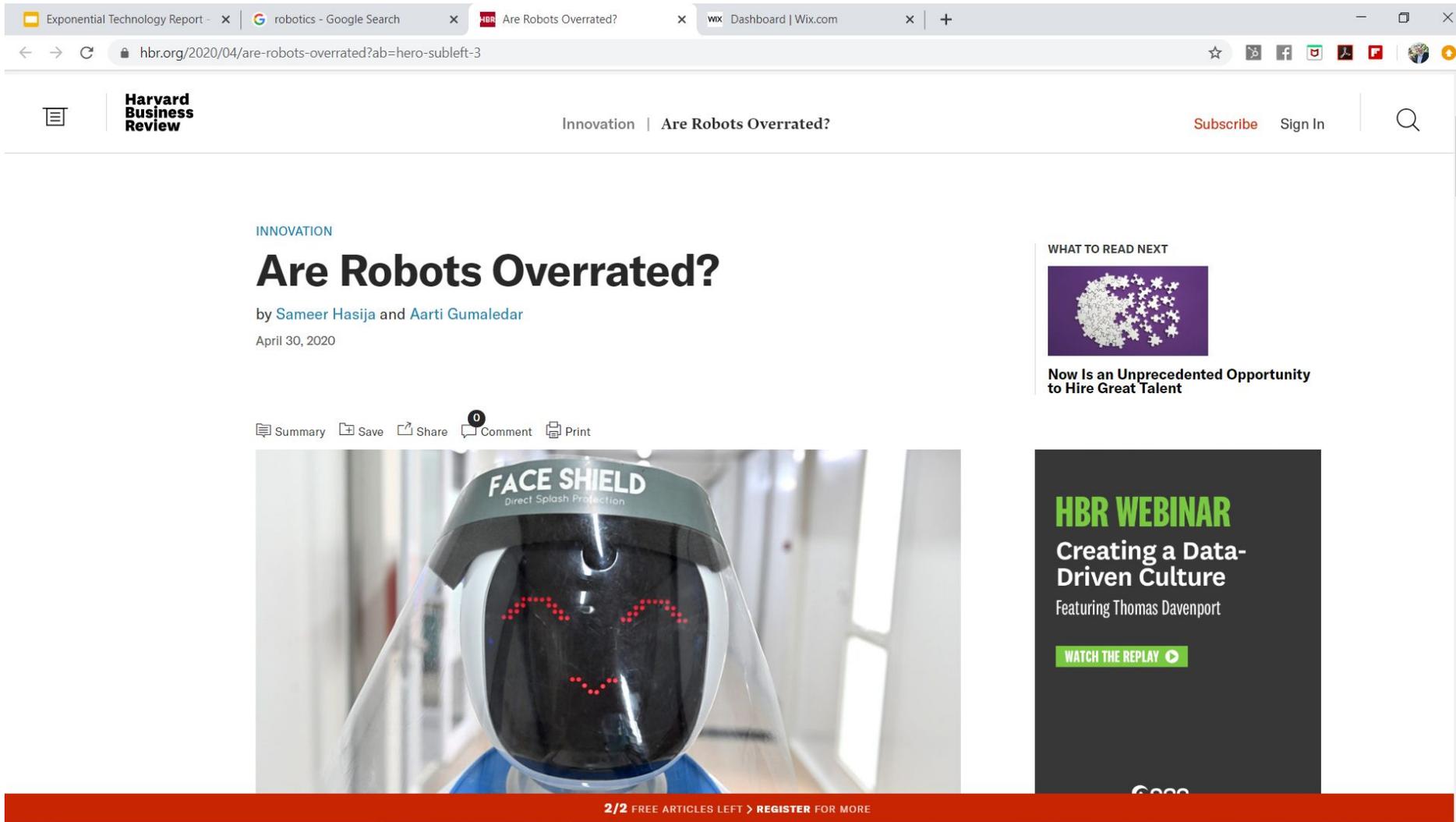
Scientists make artificial skin for robots, taking us one step closer to a world of androids

PUBLISHED SAT, MAY 2 2020 • 11:21 AM EDT



Todd Wasserman
@TODDWASSERMAN

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The screenshot shows a web browser with several tabs open: 'Exponential Technology Report', 'robotics - Google Search', 'Are Robots Overrated?', and 'Dashboard | Wix.com'. The address bar shows the URL 'hbr.org/2020/04/are-robots-overrated?ab=hero-subleft-3'. The page header includes the Harvard Business Review logo, the word 'Innovation', the article title 'Are Robots Overrated?', and links for 'Subscribe' and 'Sign In'. The main content area features the article title 'Are Robots Overrated?' by Sameer Hasija and Aarti Gumaledar, dated April 30, 2020. Below the title are icons for 'Summary', 'Save', 'Share', 'Comment', and 'Print'. The main image shows a robot head with a clear face shield labeled 'FACE SHIELD Direct Splash Protection'. To the right, there is a 'WHAT TO READ NEXT' section with a purple graphic and the text 'Now Is an Unprecedented Opportunity to Hire Great Talent'. Below that is a 'HBR WEBINAR' section titled 'Creating a Data-Driven Culture' featuring Thomas Davenport, with a 'WATCH THE REPLAY' button. At the bottom of the page, a red banner reads '2/2 FREE ARTICLES LEFT > REGISTER FOR MORE'.

A breakthrough approaches for solar power

By Padraig Belton
Technology of Business reporter

🕒 1 May 2020

[f](#) [📧](#) [🐦](#) [✉️](#) [Share](#)



This Nation Is Building the World's Cheapest Solar Farm

It will add power for 160,000 homes—and it could be just the beginning.



// BY [CAROLINE DELBERT](#) MAY 1, 2020



31,452 views | May 9, 2020, 11:00am EDT

3D Printing Has Entered The Nuclear Realm



James Conca Contributor

Energy

I write about nuclear, energy and the environment

f 3D printing has been making parts for nuclear plants for a few years now.



ORNL's BAAM machine reduced this submersible hull production cost by 90% and shortened production ... [+]

DOF

In 2017, Siemens achieved the industry breakthrough with the first successful commercial installation and continuing safe operation of a 3D printed part in a nuclear power plant. Because of the stringent safety and reliability requirements in the nuclear sector. This

Artificial intelligence / Machine learning

An AI can simulate an economy millions of times to create fairer tax policy

Deep reinforcement learning has trained AIs to beat humans at complex games like Go and StarCraft. Could it also do a better job at running the economy?

by **Will Douglas Heaven**

May 5, 2020

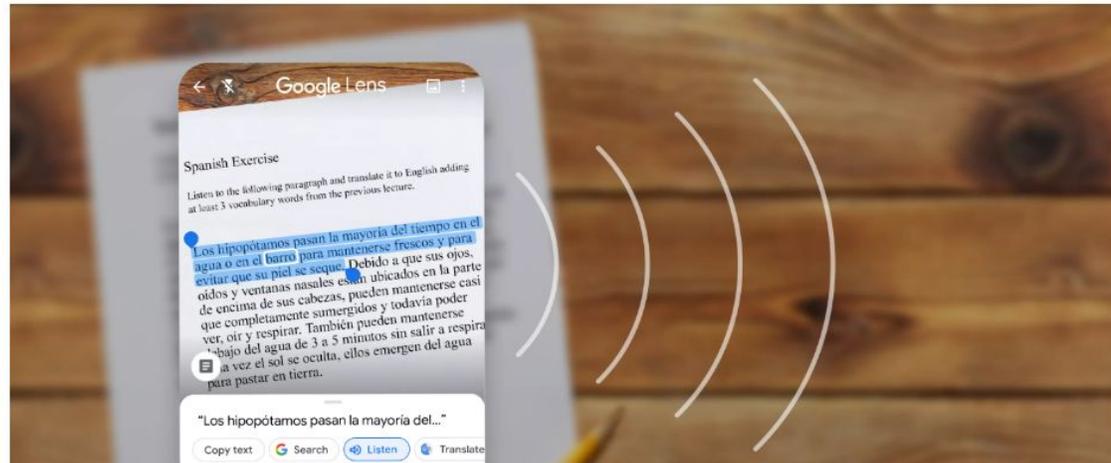
Google Lens can now read other languages out loud, and scan text to your computer

An update adds scanning, translation and search perks to your phone camera on iOS and Android.



Scott Stein  May 7, 2020 6:00 a.m. PT

ES



Google reads Spanish out loud through Lens, now.

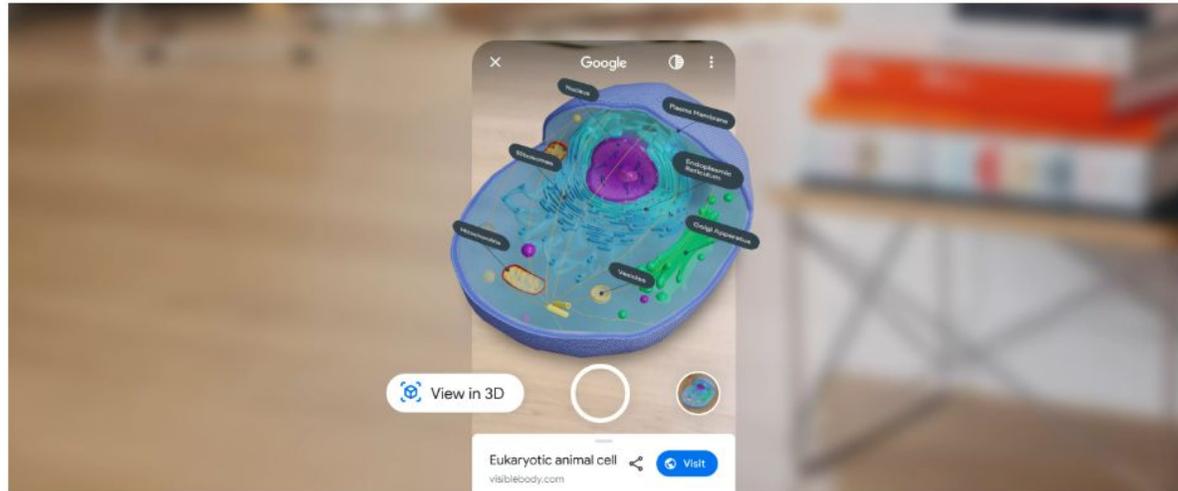
Google

Google AR now has a lot more than animals

Anatomy, microscopic worlds and a way to record your augmented reality experience on Android have arrived.



Scott Stein  May 8, 2020 6:00 a.m. PT



Augmented reality, meet your innards.

Google



CoinLinked Debuts as First-Ever Blockchain-Based Social Network and Crypto-Commerce Platform



An Airbus A350-1000 (Photo: AirlineGeeks | Fabian Behr)

[NEWS] May 9, 2020 4:57 pm ET

By Jordan Green

Airbus Announces Progress on Biotechnology Solution for Aviation Security Issues

Australian military gets first drone that can fly with artificial intelligence



By **Brad Lendon**, CNN

🕒 Updated 0541 GMT (1341 HKT) May 5, 2020



News & buzz



All administration w
will testify remotely



Coronavirus shapes
relationship ... and
wedding



Soft robots can now run like cheetahs and swim like marlins

It's all thanks to a more flexible spine



Andrew Tarantola, @terrortola
May 8, 2020

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Middle East & Africa

May 7th 2020 edition >

Rays of hope

Arab states are embracing solar power

Research: Intelligent battery management for wind and solar power

May 5, 2020 . 0



WEBINAR RECORDING

OPPORTUNITIES FOR SOLAR-HYBRID PLANTS IN SUB-SAHARAN AFRICA

LISTEN HERE *Solar* **Jinko**

MOST READ



Hydropower at risk as water levels at Lake Victoria rise

May 4, 2020

Coming Soon: A Nuclear Reactor—With a 3D-Printed Core

A nuclear reactor core is one of the most extreme human-made environments on the planet. These scientists just figured out how to print one.



APPLE APPS BUSINESS

Apple confirms it bought virtual reality event startup NextVR

After a month of silence from both firms about the rumored deal

By Nick Statt | @nickstatt | May 14, 2020, 3:01pm EDT

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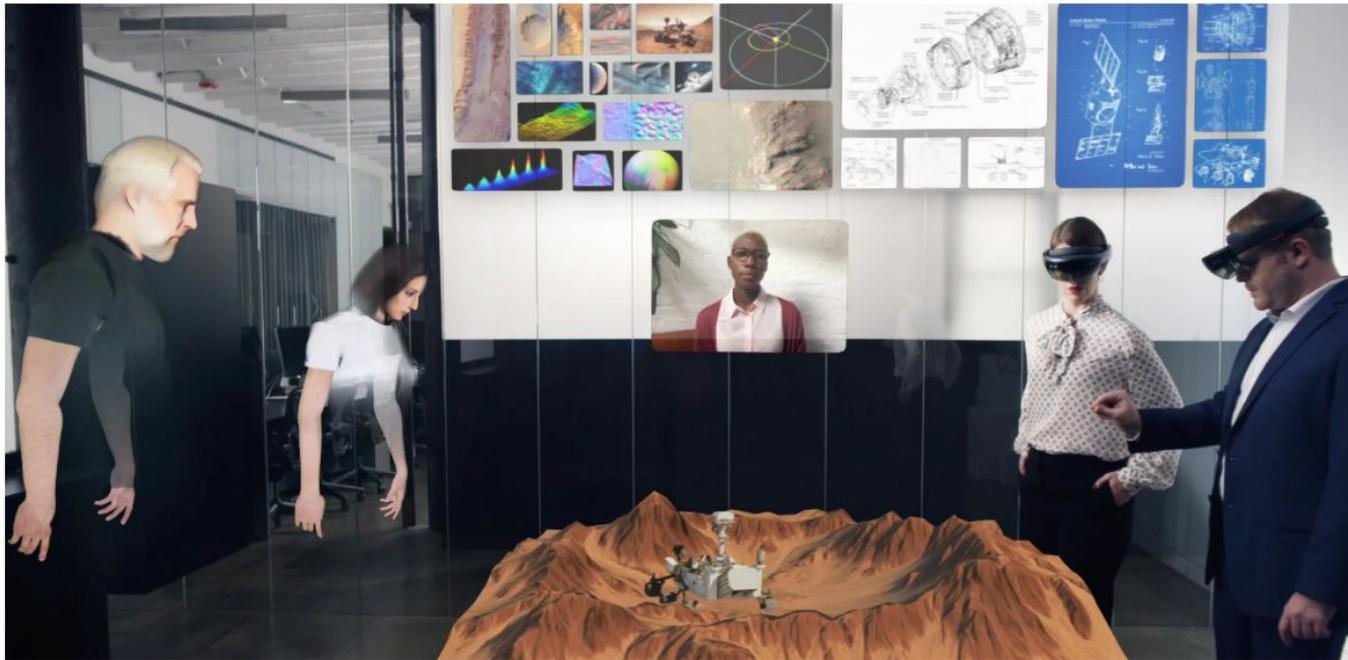


JULIAN CHOKKATTU

GEAR 05.13.2020 06:00 AM

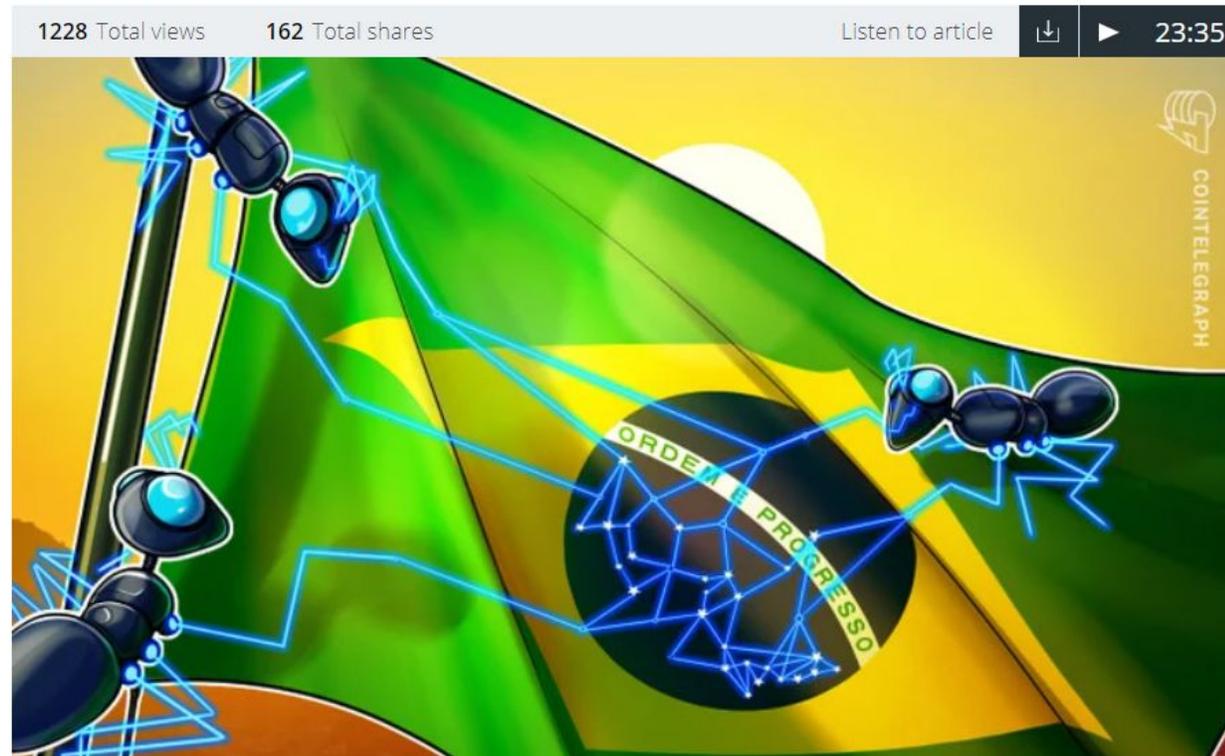
You Can Now Attend VR Meetings—No Headset Required

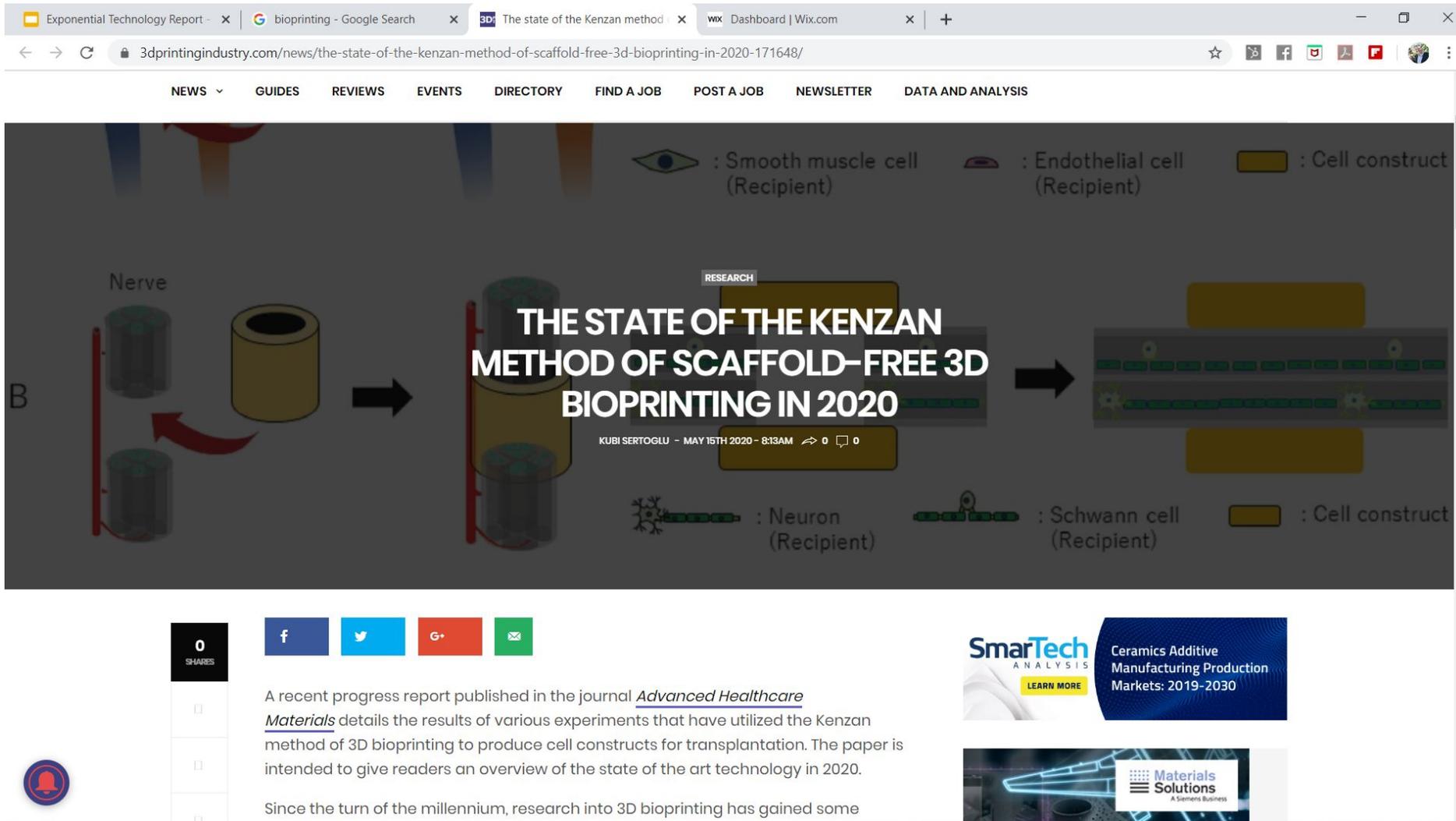
Virtual-reality workspace startup Spatial is offering a free version for users. All you need is a web browser.



Blockchain as One of the Goals of Digital Government Strategy in Brazil

Advantages and challenges in the usage of blockchain in digital services provided by governments: Overview with a close look at Brazil.





The screenshot shows a web browser with several tabs open: 'Exponential Technology Report', 'bioprinting - Google Search', '3D The state of the Kenzan method', and 'Dashboard | Wix.com'. The address bar shows the URL: 3dprintingindustry.com/news/the-state-of-the-kenzan-method-of-scaffold-free-3d-bioprinting-in-2020-171648/. The page features a navigation menu with options like NEWS, GUIDES, REVIEWS, EVENTS, DIRECTORY, FIND A JOB, POST A JOB, NEWSLETTER, and DATA AND ANALYSIS. The main content area displays a large graphic with the title 'THE STATE OF THE KENZAN METHOD OF SCAFFOLD-FREE 3D BIOPRINTING IN 2020' and a sub-headline 'RESEARCH'. The graphic includes a diagram of a 'Nerve' and various cell constructs. A legend identifies the components: Smooth muscle cell (Recipient), Endothelial cell (Recipient), Neuron (Recipient), Schwann cell (Recipient), and Cell construct. The author is identified as KUBI SERTOGLU, dated MAY 15TH 2020 - 8:13AM. Below the article, there are social media sharing icons for Facebook, Twitter, Google+, and Email. To the right, there are two advertisements: 'SmarTech ANALYSIS Ceramics Additive Manufacturing Production Markets: 2019-2030' and 'Materials Solutions A Siemens Business'.

Surveillance drones operating autonomously take to the sky in police trial



New ISR Payload Epsilon 180

4-sensor payload with MWIR, Full HD EO, Laser Pointer and LRF. Nose or belly mounted.

 Octopus ISR

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SCIENCE & TECH

US successfully launches unmanned reusable drone for space experiments

AGENCE FRANCE-PRESSE

Washington, United States / Mon, May 18, 2020 / 11:04 am



REVOLUTIONARY NEW ROBOTS RUN SO FAST THEY COULD OVERTAKE CHEETAHS



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A Secret Space Plane is Carrying a Solar Experiment to Orbit

The idea of beaming solar energy to Earth with radio waves is decades old. But this weekend, the technology gets its first test in orbit.



Home > News > Engineers Create the First Double-Sided 10-Layer PCB Using 3D Printing

NEWS

Engineers Create the First Double-Sided 10-Layer PCB Using 3D Printing

2 days ago by **Gary Elinoff**

A new project indicates the value of 3D printing in PCB design: fast prototyping.

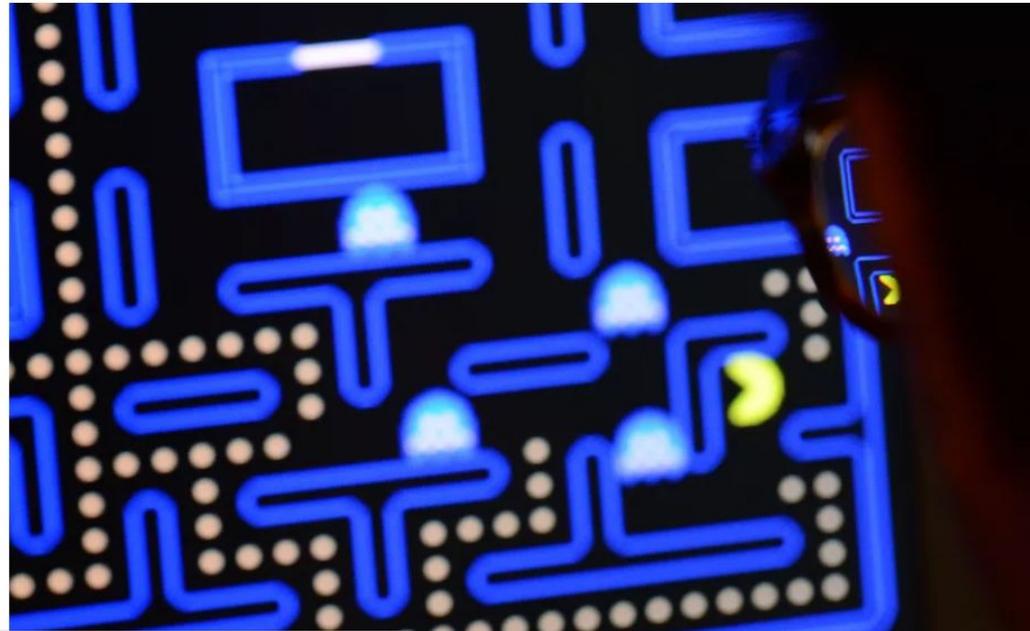
GAMING ENTERTAINMENT TECH

Nvidia's AI recreates Pac-Man from scratch just by watching it being played

No coding required

By James Vincent | May 22, 2020, 9:00am EDT

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Home / Machine learning & AI



🕒 MAY 22, 2020

Artificial intelligence can make personality judgments based on photographs

by National Research University Higher School of Economics

 1.1K

 86

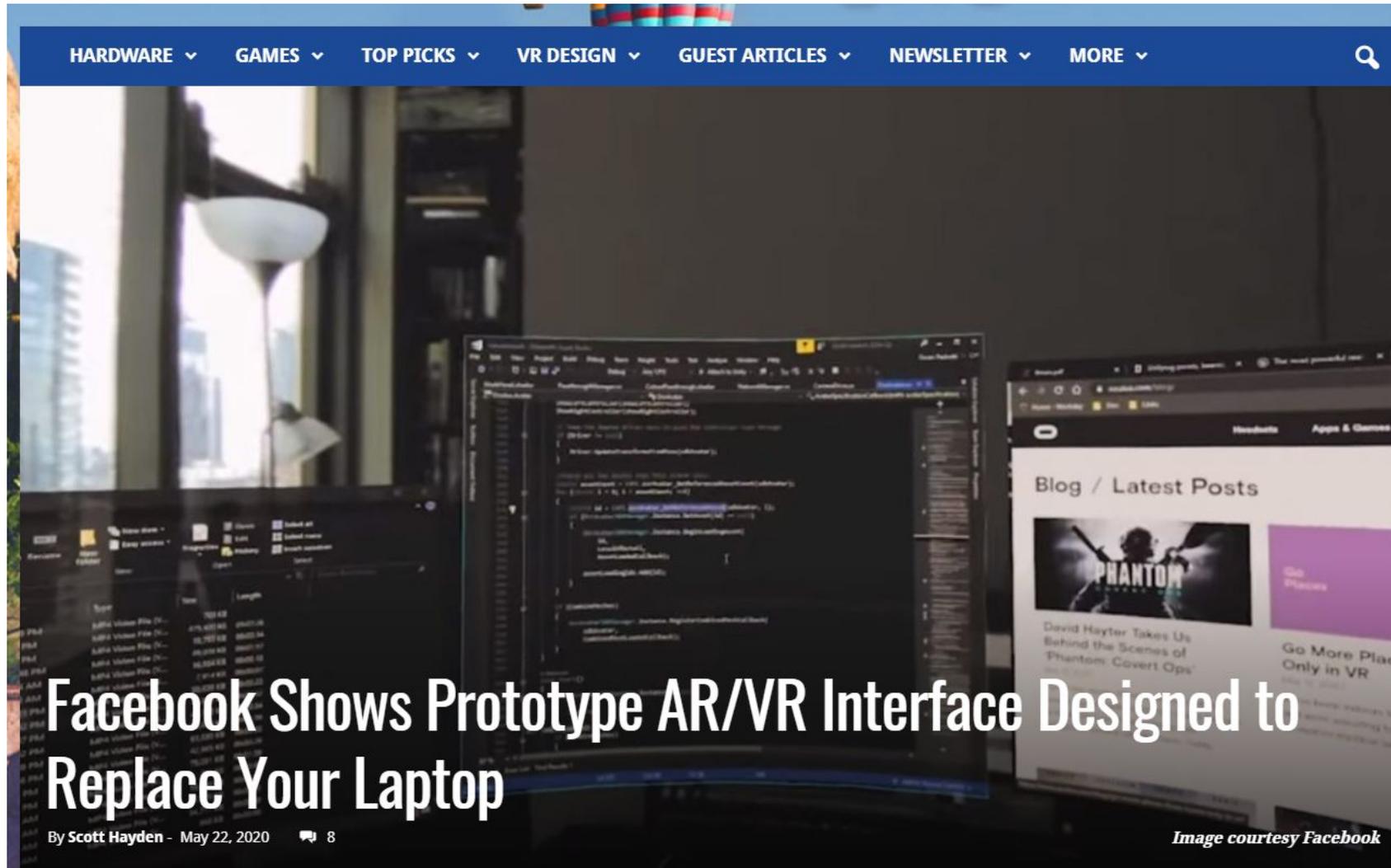
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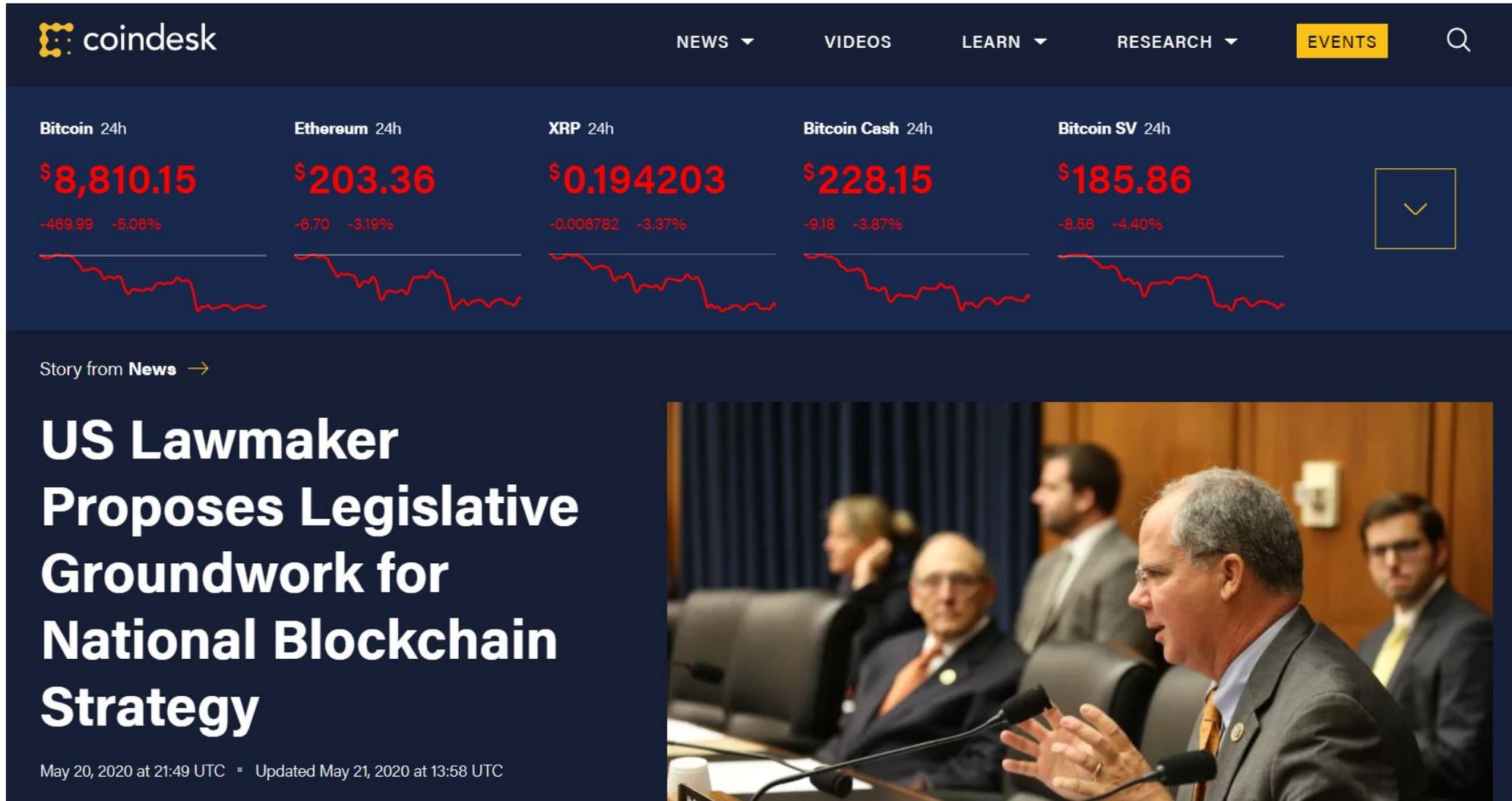
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Credit: CC0 Public Domain

Augmented and Virtual Reality





The screenshot shows the Coindesk website interface. At the top, there is a navigation bar with links for NEWS, VIDEOS, LEARN, RESEARCH, and EVENTS. Below the navigation bar, there are five columns, each representing a different cryptocurrency: Bitcoin, Ethereum, XRP, Bitcoin Cash, and Bitcoin SV. Each column displays the current price in red, a 24-hour change in green or red, and a small line chart showing price movement. Below the price charts, there is a section titled 'Story from News' with a right-pointing arrow. The main article headline reads 'US Lawmaker Proposes Legislative Groundwork for National Blockchain Strategy'. Below the headline, there is a date and time stamp: 'May 20, 2020 at 21:49 UTC' and 'Updated May 21, 2020 at 13:58 UTC'. To the right of the text is a photograph of a man in a suit speaking at a podium during a hearing.

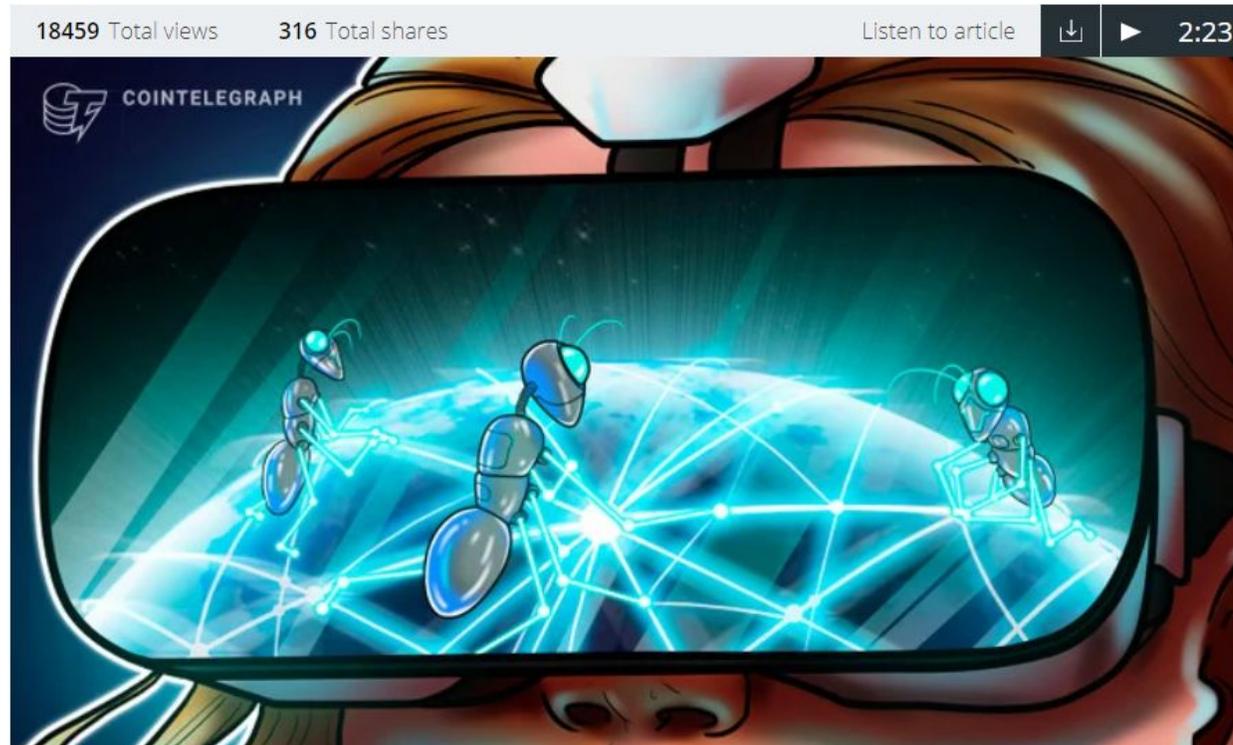
Cryptocurrency	Price	24h Change
Bitcoin	\$8,810.15	-469.99 (-5.06%)
Ethereum	\$203.36	-6.70 (-3.19%)
XRP	\$0.194203	-0.006782 (-3.37%)
Bitcoin Cash	\$228.15	-9.18 (-3.87%)
Bitcoin SV	\$185.86	-8.56 (-4.40%)

US Lawmaker Proposes Legislative Groundwork for National Blockchain Strategy

May 20, 2020 at 21:49 UTC • Updated May 21, 2020 at 13:58 UTC

Blockchain to Play Crucial Role in VR-Powered Social Media

Blockchain and VR-powered social media platform Sensorium has joined the Global Blockchain Business Council.



The Drones Were Ready for This Moment

While humans hunker below, aerial robots are taking over as cops, street cleaners, medical assistants, delivery workers and soon — friends?

Videos by Dexter Kennedy; The New York Times



By **Alex Williams**

Published May 23, 2020 Updated May 24, 2020



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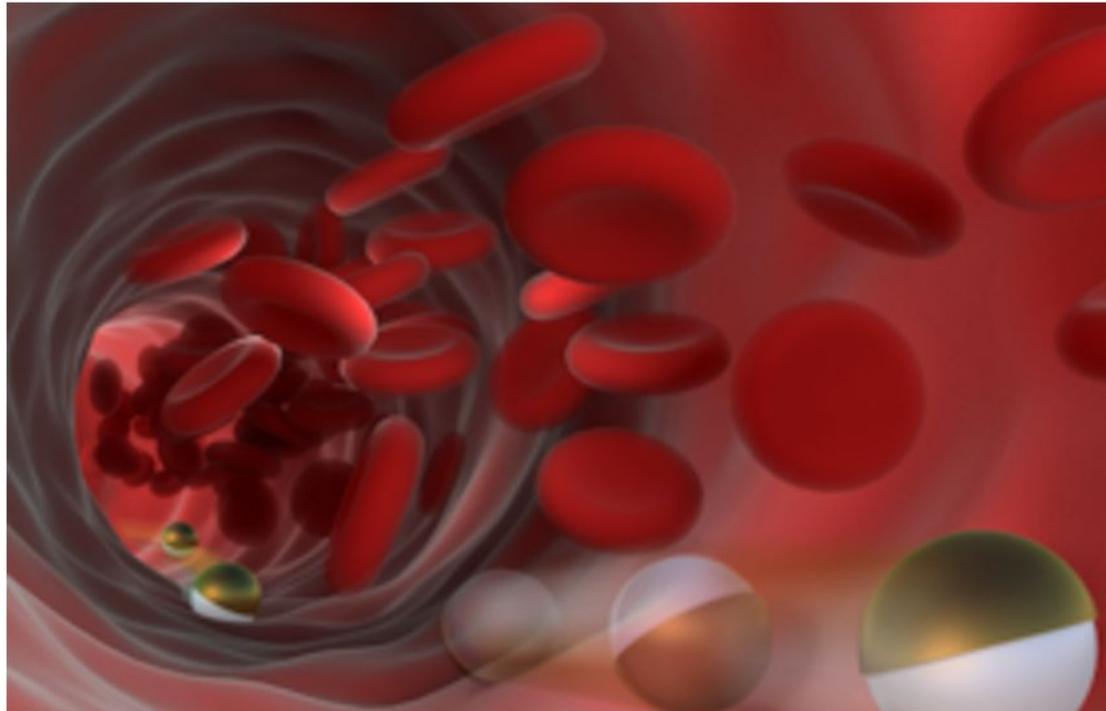
CAREER

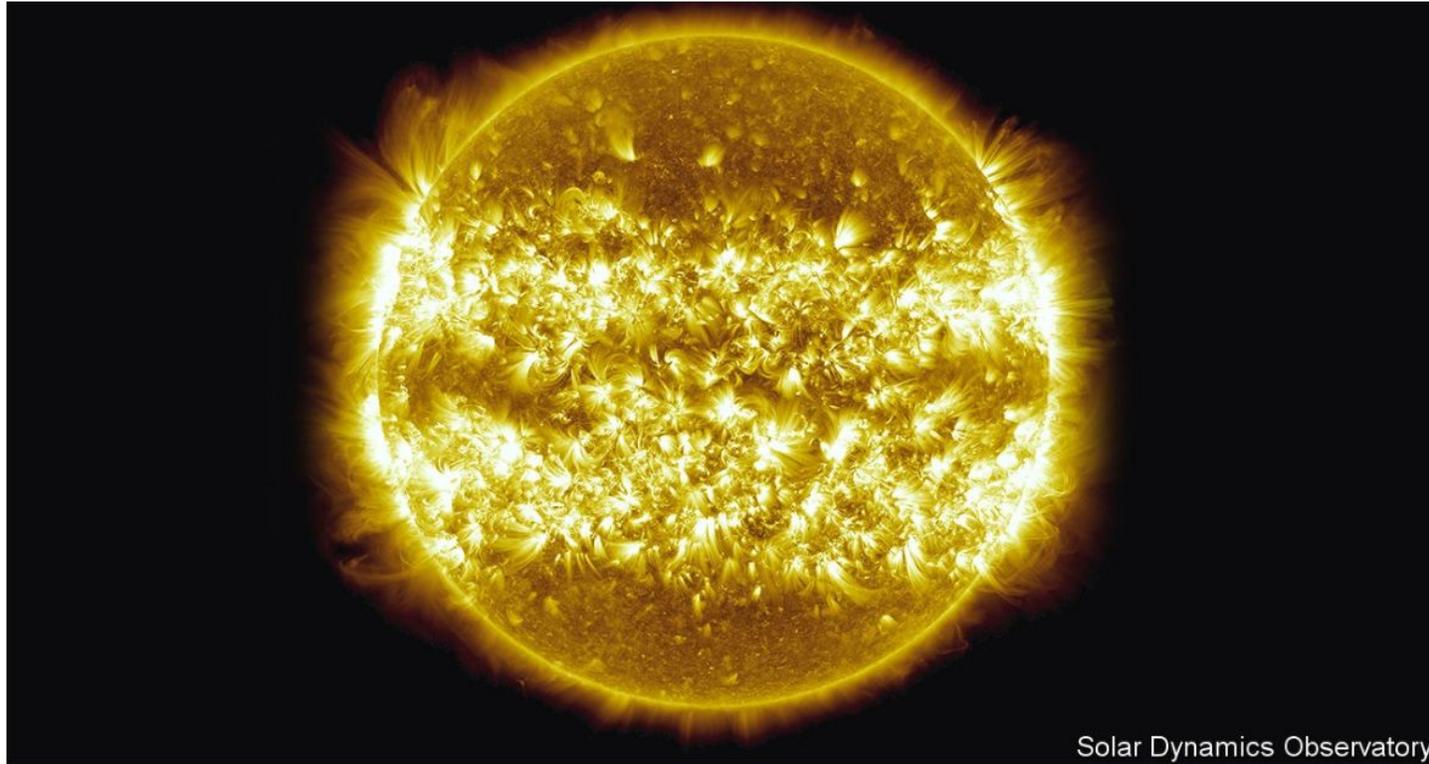
Robotics Research

Posted on May 25, 2020



Tiny Drug Delivery Robots Travel Through the Blood Stream





**Science &
technology**

May 21st 2020 edition >

Solar's new power

New solar cells extract more energy from sunshine

EDITORS' PICK | May 21, 2020, 05:55am EDT

What The Post-Pandemic World Needs Is A Solar Energy Revolution



Enrique Dans Senior Contributor 

Leadership Strategy

Teaching and consulting in the innovation field since 1990

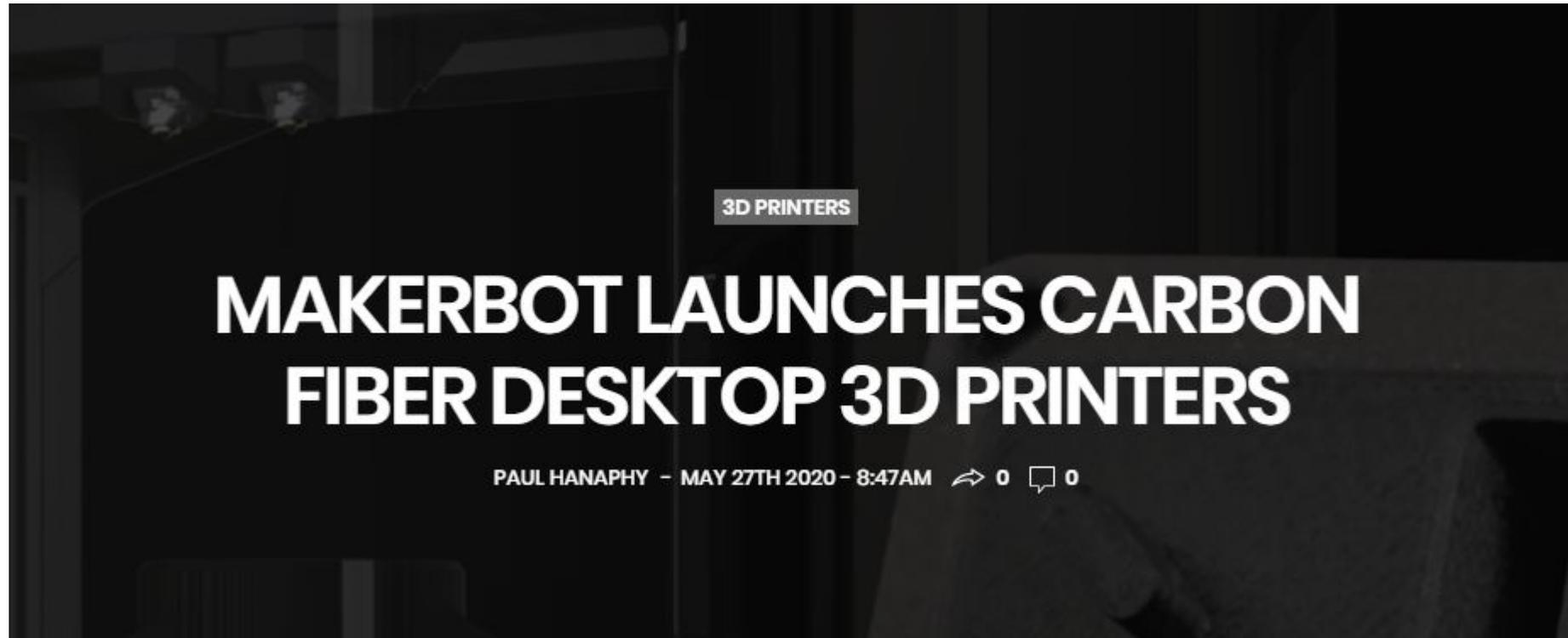
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June 2020



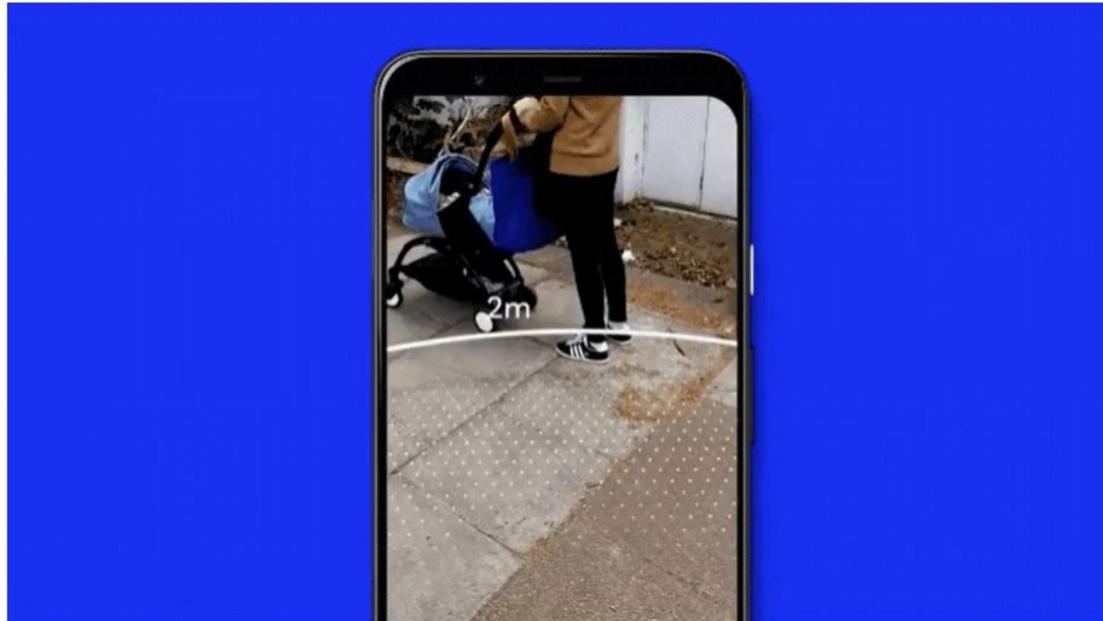


Google's AR tool helps you measure two meters to maintain proper social distancing

Easier than carrying a tape measure around with you

By [James Vincent](#) | May 29, 2020, 9:11am EDT

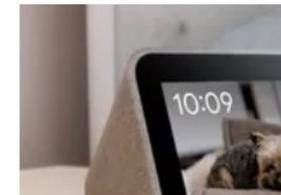
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If anyone steps inside the circle you're legally allowed to fight them. | GIF: Google



GOOD DEA



This German town replicated itself in VR to keep its tourism alive

 by CITIES TODAY — 15 hours ago in SYNDICATION



SoftBank led \$500M investment in Didi in China's biggest autonomous driving round



Rita Liao @ritacyliao / 1:21 pm SAST • May 29, 2020

 Comment



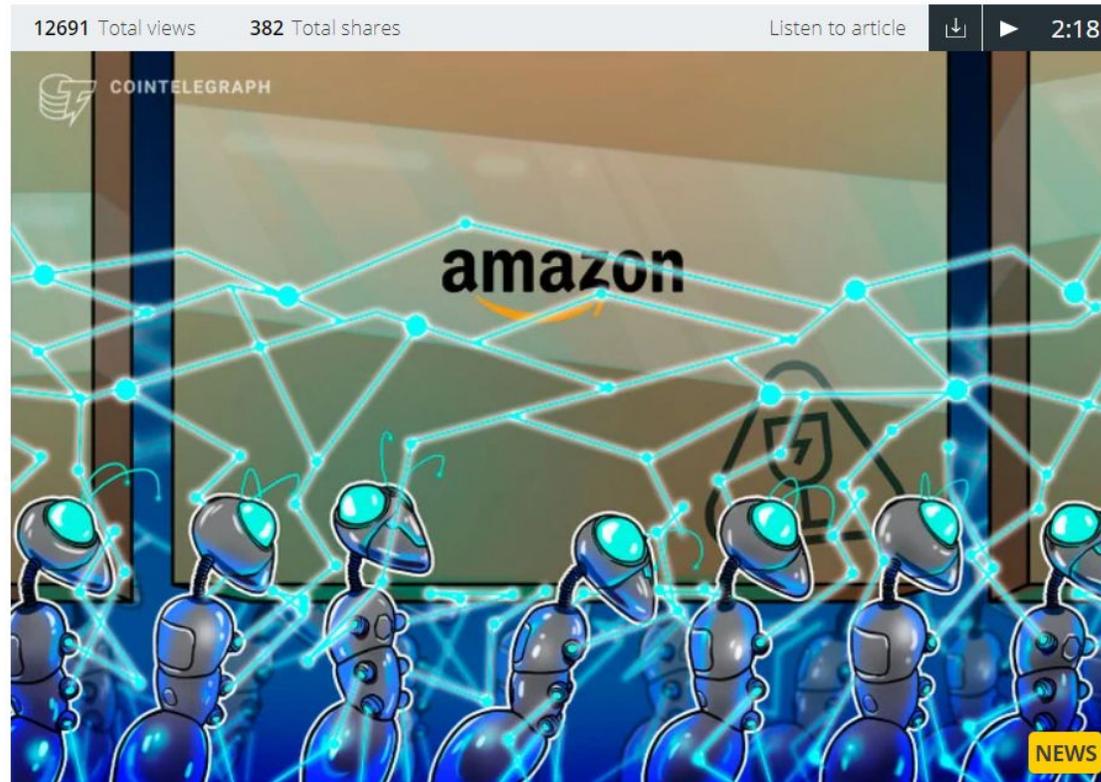
Tech / Enterprises

China's Baidu finishes building 'world's largest' test ground for autonomous vehicle, smart driving systems

- Baidu says it has completed the world's largest site to test both autonomous driving and vehicle-to-infrastructure communication
- The Apollo Park in Beijing is equipped with facilities to support the full autonomous vehicle development process from research to testing

Amazon Patented a Blockchain System for Supply Chain Tracking

World's top ecommerce firm Amazon filed a patent for a blockchain system that tracks goods as they move on the supply chain.



10,725 views | May 27, 2020, 10:00am EDT

Google Goes Blockchain? New Deal Opens A Door To Crypto



Cory Johnson Contributor

Crypto & Blockchain

I write about decentralization in blockchain, business and beyond.

f *A new partnership is a boost for functional blockchain and, perhaps, a decentralized future for Google Cloud.*



Jumping robot helps farming robotics take leap forward

By combining the propellers of a quadcopter with an ingenious jumping mechanism, CropHopper is able to quickly travel across fields and work for much longer than a drone. It weighs 3kg, costs € 15/ha, can operate without an operator, it can work in-crop all season and it offers the potential to also automatically treat weeds, pests and diseases.



Transformational Challenge Nuclear Reactor: Microreactor Built Using 3D Printing

TOPICS: 3D Printing Energy Nuclear Oak Ridge National Laboratory

By OAK RIDGE NATIONAL LABORATORY JUNE 7, 2020



Artificial intelligence / Machine learning

This startup is using AI to give workers a “productivity score”

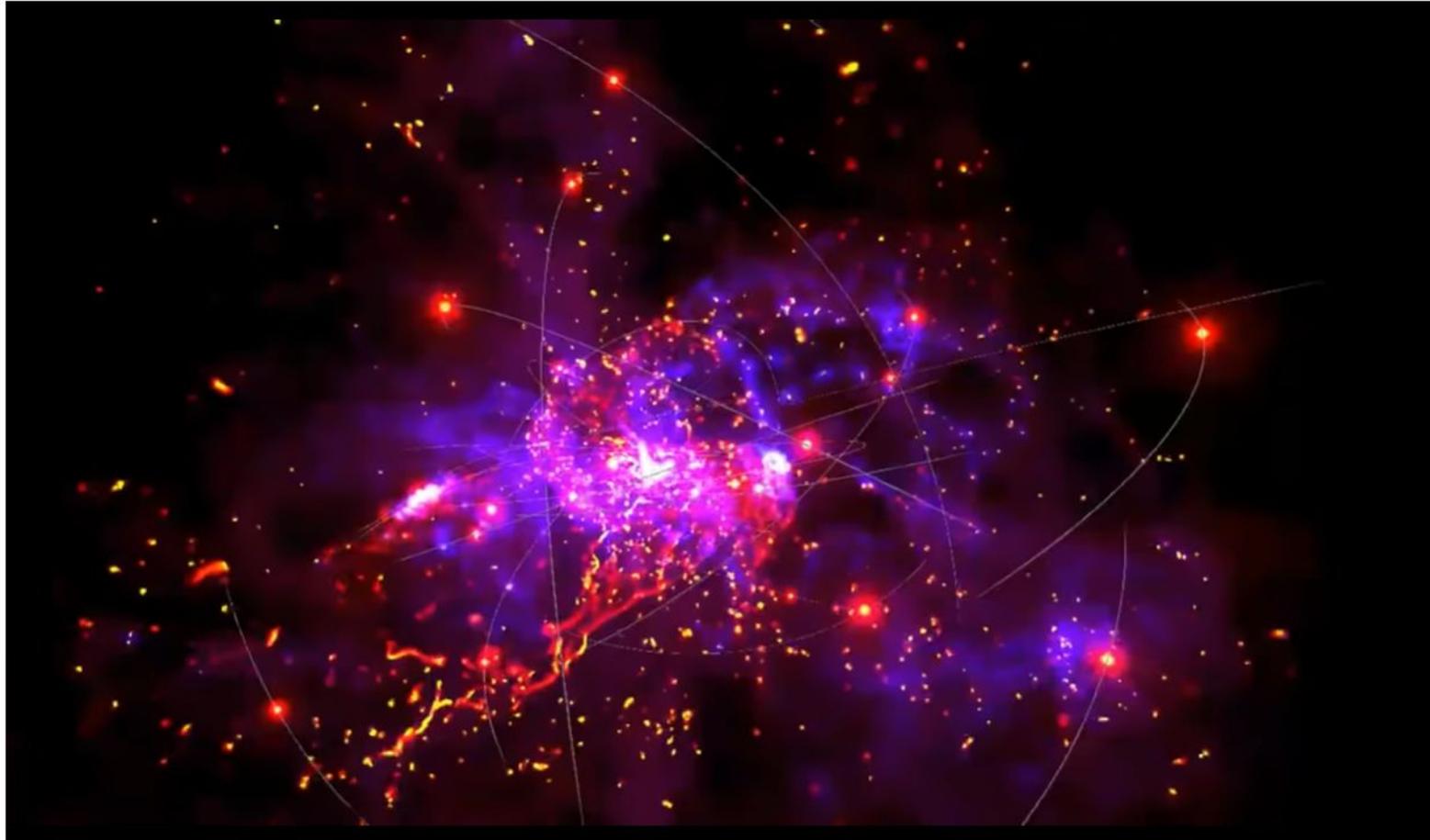
Enable is one of a number of new firms that are giving employers tools to help keep tabs on their employees—but critics fear this kind of surveillance undermines trust.

by **Will Douglas Heaven**

June 4, 2020

Augmented and Virtual Reality

A New Galactic Center Adventure in Virtual Reality



Combining data from Chandra and other telescopes with supercomputer simulations and virtual reality, a new visualization allows users to experience 500 years of cosmic evolution around the Milky

Why Self-Driving Cars Might Make Traffic Worse

Cities are working to decrease the number of cars on the road. Autonomous vehicles may make that harder.

JASON DEIGN | JUNE 03, 2020



11



AUTOS

Volkswagen closes \$2.6 billion investment in self-driving start-up Argo AI

PUBLISHED TUE, JUN 2 2020•10:52 AM EDT | UPDATED TUE, JUN 2 2020•1:29 PM EDT



Michael Wayland
@MIKEWAYLAND

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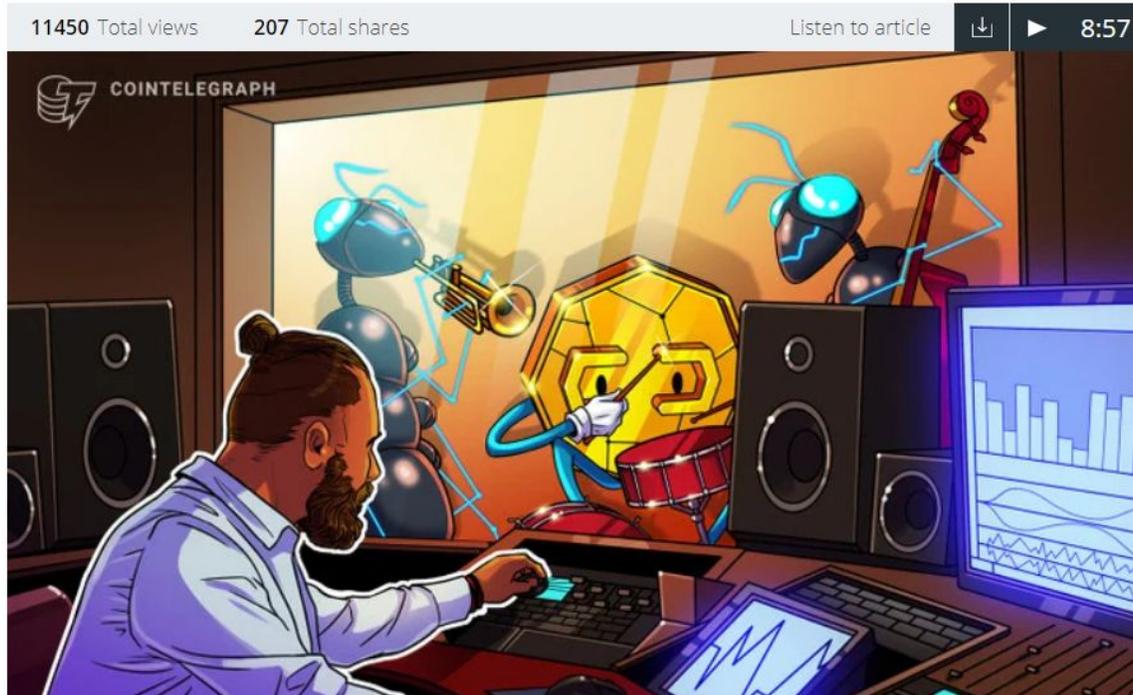


ANTÓNIO MADEIRA

JUN 06, 2020

Blockchain to Disrupt Music Industry and Make It Change Tune

Blockchain technology is tipping the scales of the music industry, shifting the power from intermediaries back to artists.



EDITORS' PICK | 9,385 views | Jun 5, 2020, 07:29am EDT

Want To Fly? You'll Need This Blockchain-Backed Health Passport



Carlton Reid Senior Contributor

Transportation

I have been writing about transport for 30 years.

f

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The Hi+ card could be your (digital health) passport to the world. TDDS

Combat drone to compete against piloted plane

By Paul Rincon
Science editor, BBC News website

5 June 2020

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Inside Iran's massive drone army

Iran's media: We have most combat drones in Middle East.

By SETH J. FRANTZMAN JUNE 7, 2020 23:46



04 Jun 2020 | 21:22 GMT

Robotic Third Arm Can Smash Through Walls

This waist-mounted supernumerary robotic limb is gentle enough to pick fruit but powerful enough to punch through a wall

By **Evan Ackerman**



Solar costs have fallen 82% since 2010

The levelized cost of energy generated by large scale solar plants is around \$0.068/kWh, compared to \$0.378 ten years ago and the price fell 13.1% between 2018 and last year alone, according to figures released by the International Renewable Energy Agency.

JUNE 3, 2020 CATHERINE ROLLET

- BALANCE OF SYSTEMS
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- COVID-19
- FINANCE
- INVERTERS
- MARKETS
- MODULES & UPSTREAM MANUFACTURING
- POLICY
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- UTILITY SCALE PV
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- CHILE
- CHINA
- ETHIOPIA
- FRANCE
- GERMANY
- INDIA
- ITALY
- MEXICO
- PERU
- SAUDI ARABIA
- SOUTH KOREA
- SPAIN
- UNITED ARAB EMIRATES
- UNITED STATES
- WORLD



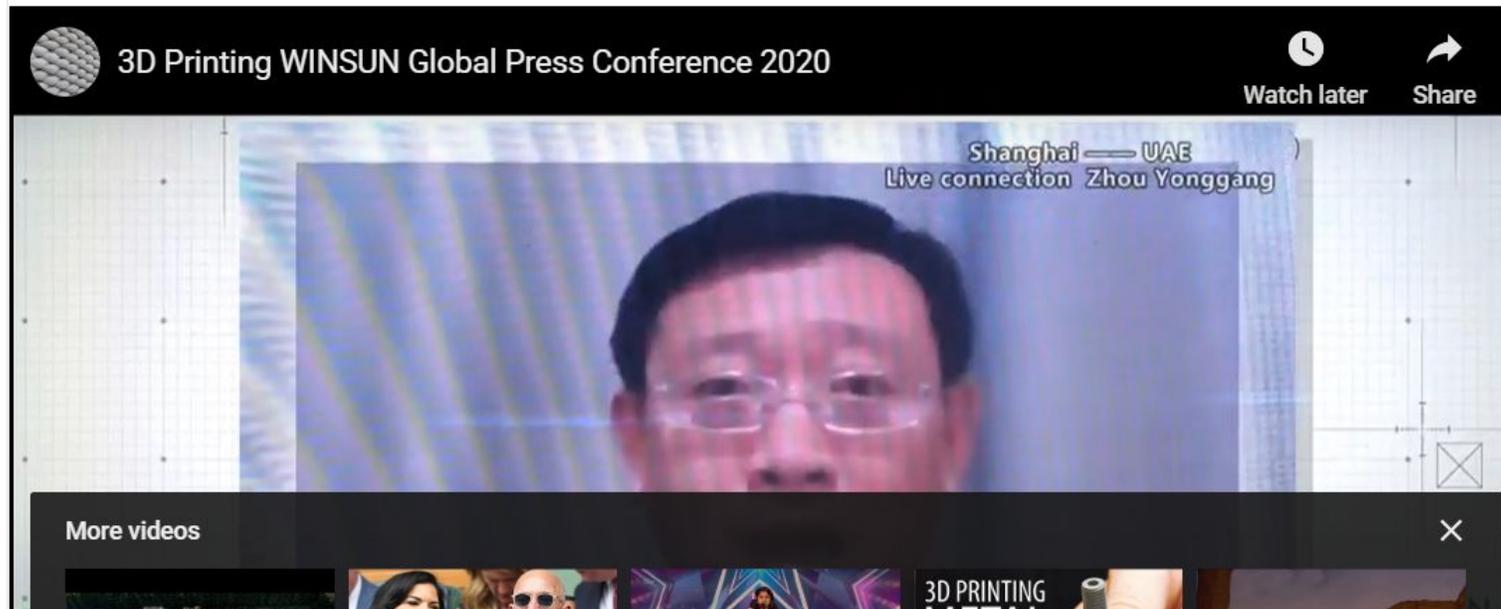
Winsun shows off massive recent and ongoing construction 3D printing projects

Global conference held in Shanghai shines light on Chinese infrastructure program



Davide Sher • June 12, 2020

0 576 2 minutes read



3,144 views | Jun 13, 2020, 12:30pm EDT

Facial Recognition Bans: What Do They Mean For AI (Artificial Intelligence)?



Tom Tauli Contributor ©
Entrepreneurs
I write about tech & finance.

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IQBAL V. GANDHAM

JUN 13, 2020

Blockchain Is Evolving Like the Internet: Who Will Be the Crypto Hotmail?

Blockchain's evolution path is similar to the invention of the internet, and we are already in its second phase.

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5:53



4,563 views | Jun 10, 2020, 01:15pm EDT

13 Evolving And Emerging Uses For Blockchain Technology



Forbes Technology Council COUNCIL POST | Paid Program
Innovation

POST WRITTEN BY

Expert Panel, Forbes Technology Council

Successful CIOs, CTOs & executives from **Forbes Technology Council** offer firsthand insights on tech & business.



4,229 views | Jun 8, 2020, 02:37am EDT

Biotechnology In the Time of COVID-19: Past, Present, and Future



Alex Zhavoronkov, PhD Contributor

AI

Expert in AI for healthcare and longevity biotechnology

f While there are many biotechnology industry organizations worldwide, the most prominent one is called the **Biotechnology Innovation Organization (BIO)**. In addition to working with numerous stakeholders, including the government, to promote industry growth and innovation, education, and industry analytics, it runs the world's largest conference series, also called BIO. These conferences transpire in many different US cities, as well as around the world; however, as with many other events, this year's conference will be going digital. This will be one of the largest online conference experiments ever, as the highlight of the meeting is partnering.

The Quantum App Store Is Coming

Quantum computing is still the province of specialized programmers—but that is likely to change very quickly

By Dario Gil on June 9, 2020

The Other Solar Power: How Scientists Are Making Fuel From Sunlight and Air

Scientists find a way to use the sun's energy to pull carbon dioxide from the air and turn it into fuel.

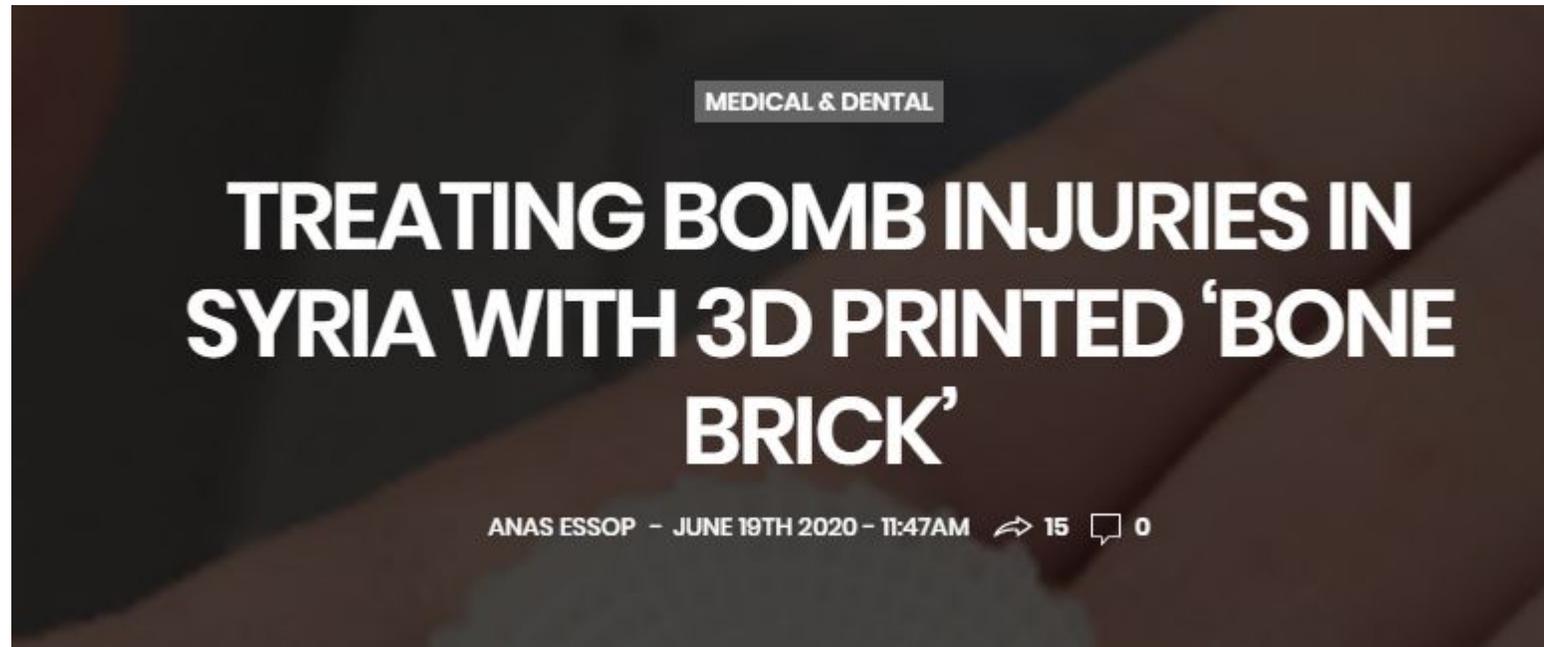
By Frank Swain | June 13, 2020 7:00 PM

World's Tallest Concentrated Solar Power Tower installed

By **Robert Barnes** - Modified date: Jun 13, 2020

83

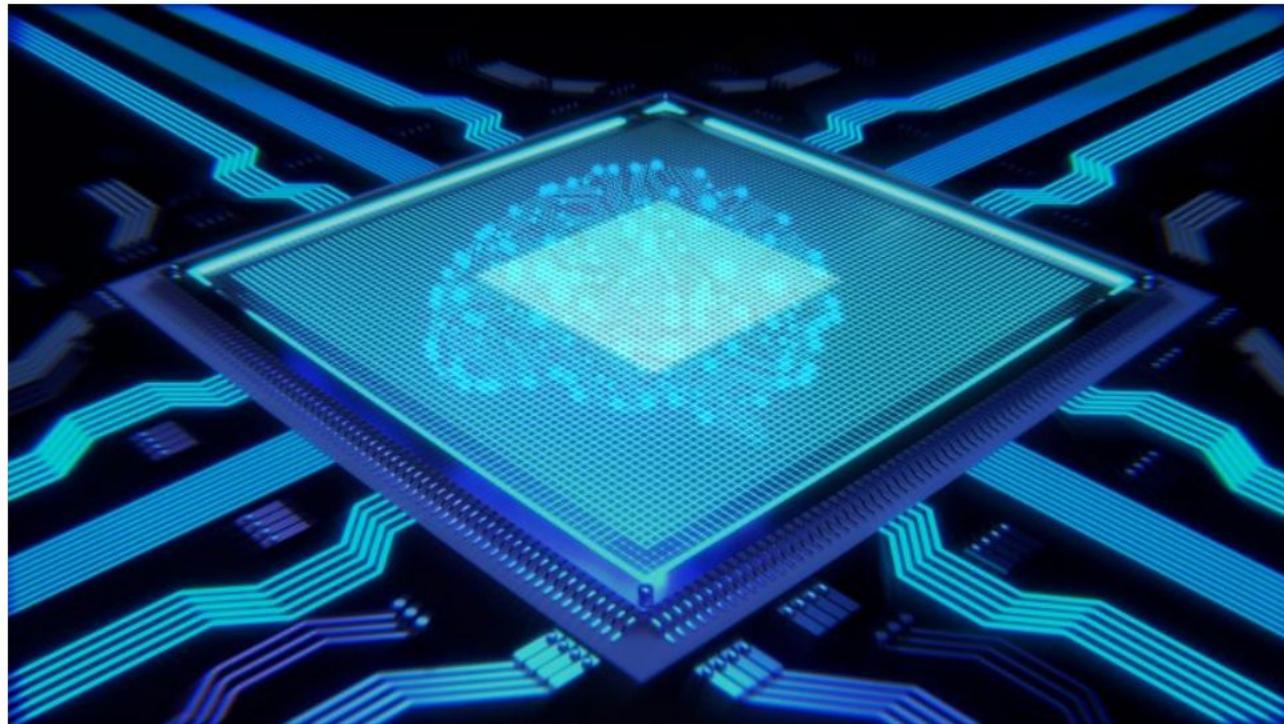




Engineers Put Tens of Thousands of Artificial Brain Synapses on a Single Chip for Portable AI Devices

TOPICS: Artificial Intelligence Brain Electrical Engineering MIT Nanotechnology

By JENNIFER CHU, MASSACHUSETTS INSTITUTE OF TECHNOLOGY JUNE 19, 2020



BMW cuts jobs, ends self-driving project with Mercedes

Saturday 20 June 2020 - 10:36am



File: The 6,000 positions make up a considerable chunk of BMW's more than 120,000 worldwide.

The Self-Driving Car Race Between Tesla, GM and Ford Takes a Big Turn

By [Sissi Cao](#) · 06/20/20 12:06pm



Why Saudi Arabia is turning to blockchain technology



TALAT ZAKI
HAFIZ

June 17, 2020
00:44

19126



Nano Drones: The Tiny Personal Drones the Military is Buying in Bulk

Posted By: Harry McNabb on: June 18, 2020



Nano drones, the advanced systems that pack a lot of functionality into a tiny form factor, are becoming a major military tool.

FLIR announced last month that they have won an additional \$20.6 million contract for their Black Hornet® 3 Personal Reconnaissance Systems (PRS).

Very few manufacturers in the drone industry can ignore the military market. As drone technology evolves, the more traditional military uses for unmanned systems are joined by new applications: and smaller drones join the fleets of larger aircraft. With the current ban on

commercial off the shelf (COTS) units and drones manufactured in listed countries, the U.S. military is still a major investor in new technologies – like nano drones.

Science News

from research organizations

The first intuitive programming language for quantum computers

Date: June 15, 2020

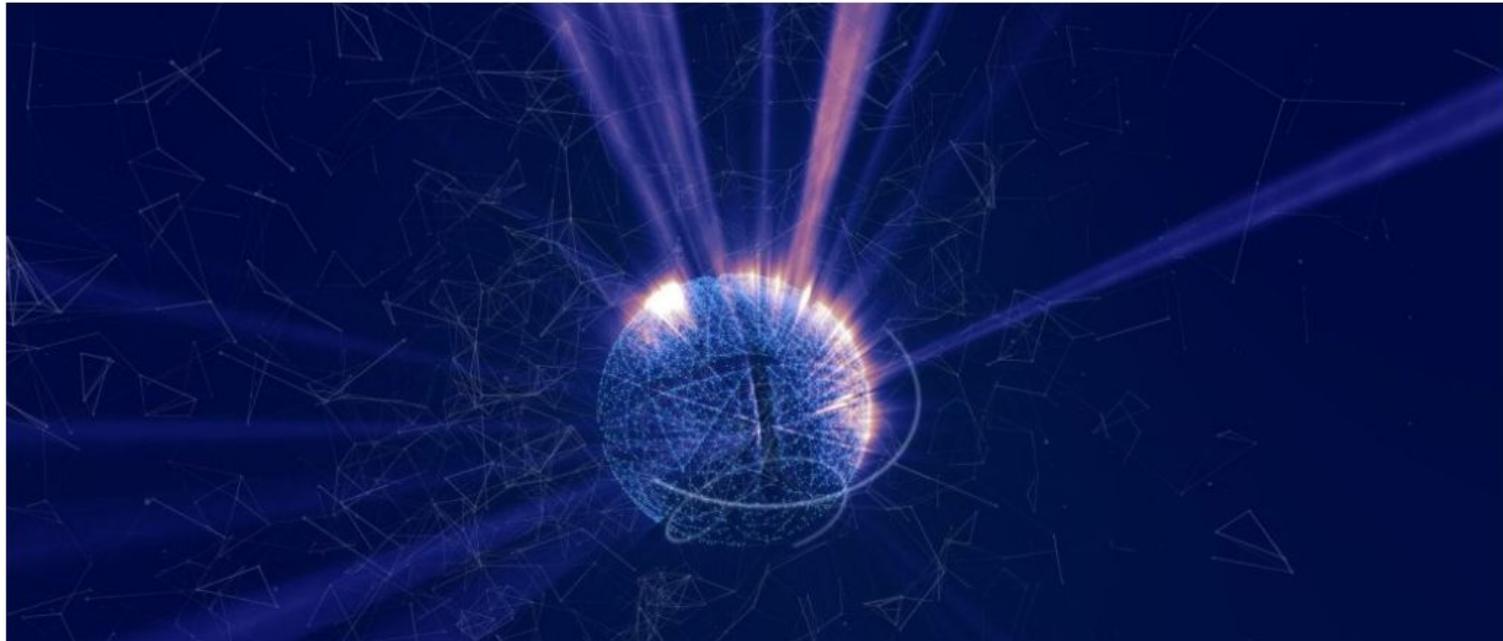
Source: ETH Zurich

Summary: Several technical advances have been achieved recently in the pursuit of powerful quantum computers. Now, Computer scientists have made an important breakthrough in the field of programming languages: their quantum language is the first of its kind that is as elegant, simple and safe as classical computer languages.

THE INTER-DEPENDENCE OF QUANTUM COMPUTING AND ROBOTICS

LATEST NEWS QUANTUM COMPUTING ROBOTICS

by Priya Dialani / June 20, 2020 / 0 comments





Top 5 Industries That Will Be Transformed By Robotics and Automation

SOLAR

BlackRock Leads \$50M Investment Into Off-Grid Solar Technology That Generates Water

With backers that include Bill Gates' Breakthrough Energy Ventures, Zero Mass Water is scaling up its distributed solar technology — but not for electricity production.

Dubai commissions world's tallest solar power tower

Jun 15, 2020 · 0



MOST READ



South Africa begins preparatory work for nuclear build programme

Jun 15, 2020



KIFC affirms Rwanda's position on becoming Africa's financial hub

Jun 17, 2020



1,522 views | Jun 26, 2020, 08:10am EDT

15 Tech Experts Share Potential Impacts Of AI On Society



Expert Panel@ Forbes Councils Member
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Imagine being able to print replacement skin,
bone, muscle and even organs.

3D Bioprinting of Living Tissues

3D-printed thick vascularized tissue constructs for organ engineering and regenerative medicine

Progress in drug testing and regenerative medicine could greatly benefit from laboratory-engineered human tissues built of a variety of cell types with precise 3D architecture. But production of greater than millimeter sized human tissues has been limited by a lack of methods for building tissues with embedded life-sustaining vascular networks.

Bioprinting a Healthier Future

June 18, 2020 • by Stella Pahinis • 3D Printing • Featured Stories • Sponsored



India First Country To Control Locusts Through Drones: Agriculture Ministry



India first country to control locusts through drones: Agriculture Ministry



Institute of Industrial Science, University of Tokyo

MECHANICAL & MOTION SYSTEMS

Soon, Robots Will Be Flexing Real Muscles

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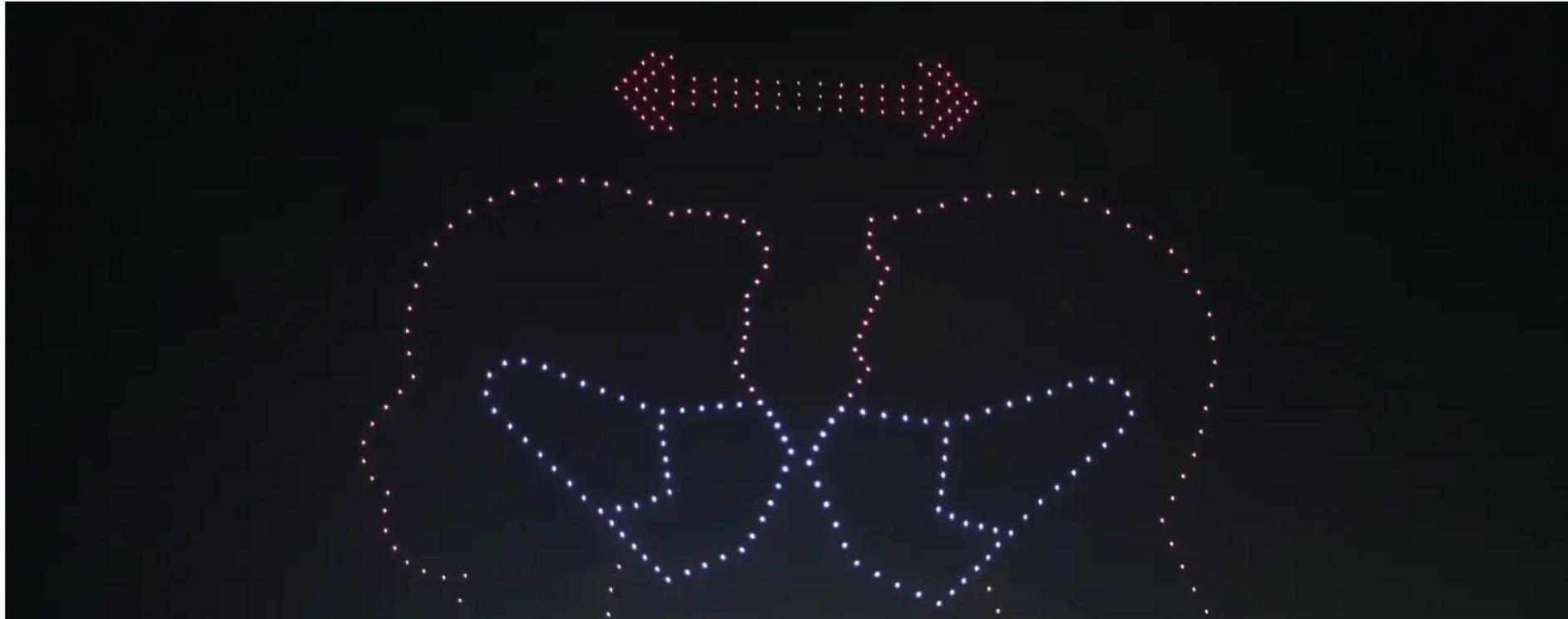
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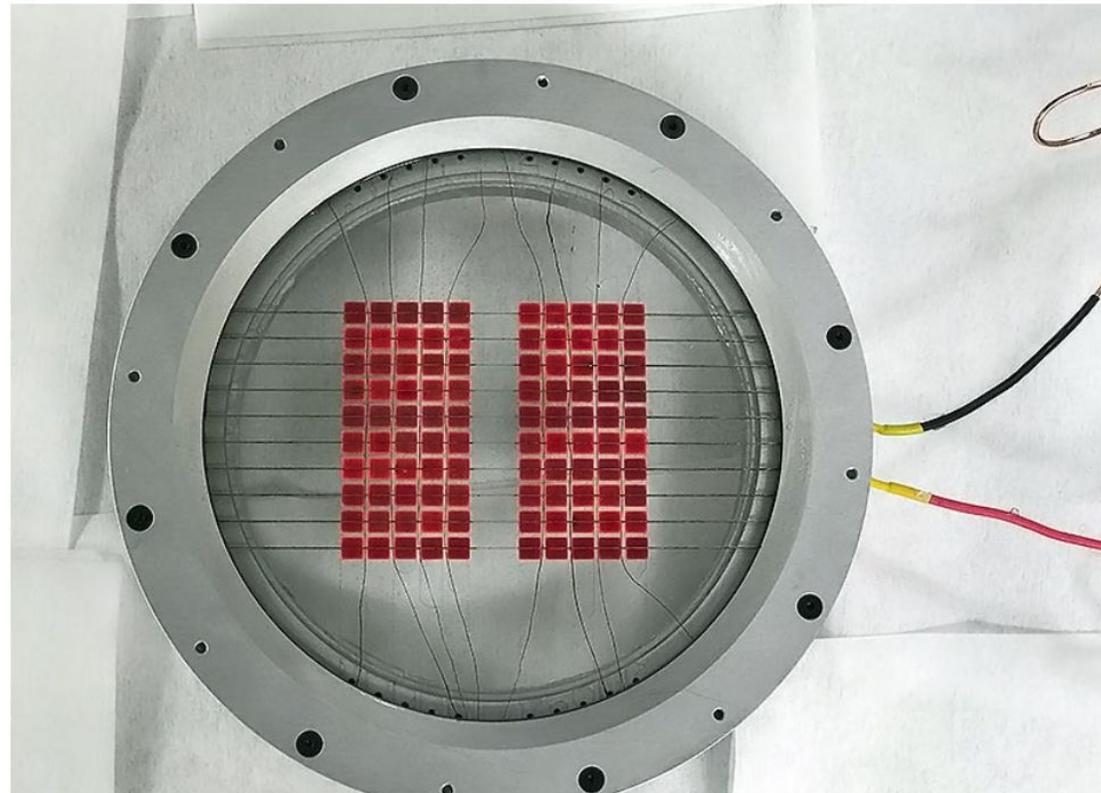
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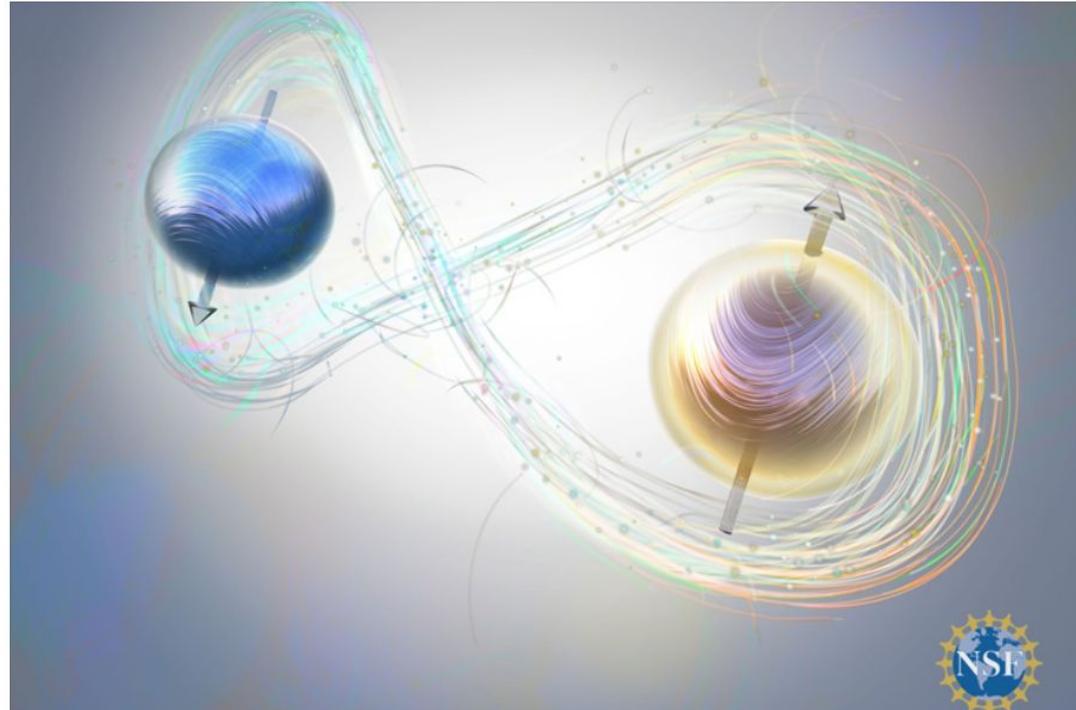
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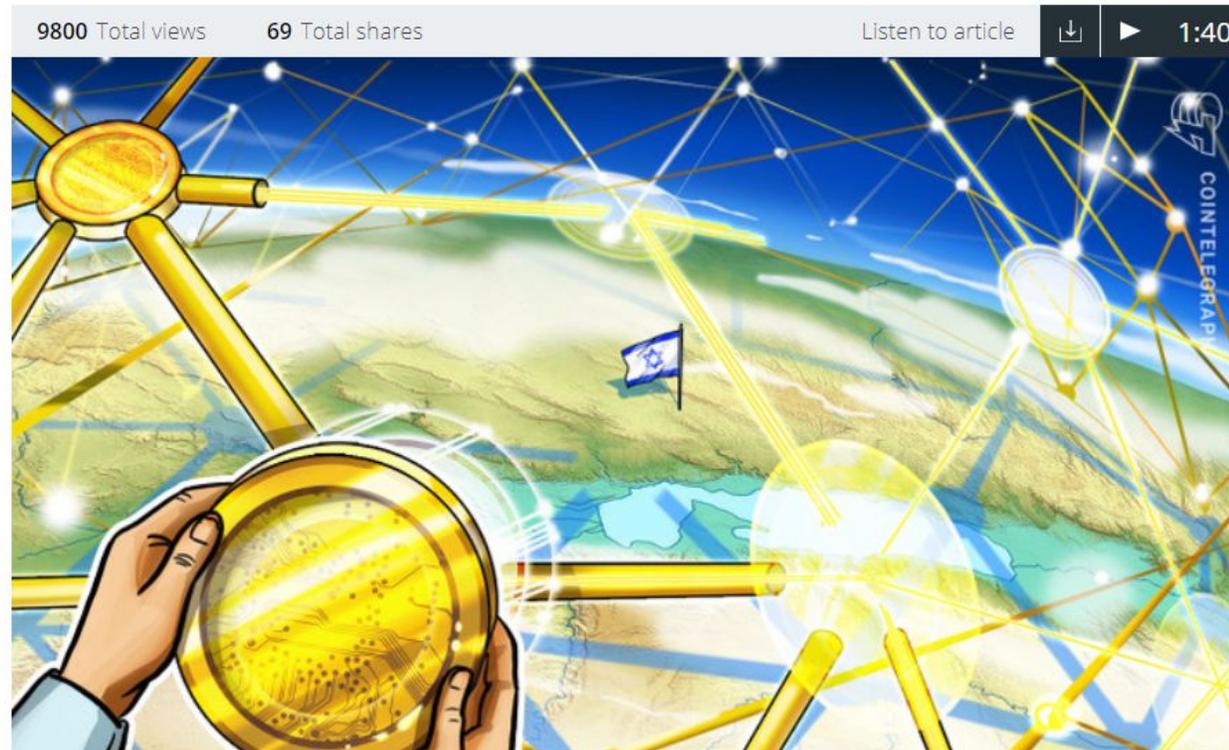
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