Weekly Discovery

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19 November 2018 - 23 November 2018

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AGEING

Longevity Innovators

"In a series of interviews, 18 visionaries reveal exciting trends and highlight new discoveries in biomedical and psychosocial science, as well as strategies to promote prevention and wellness for older adults."

Source: Milken Institute (16 November 2018)

ARTIFICIAL INTELLIGENCE

How to Make AI Less Biased

"Computer scientists are often quick to say that the way to make these systems less biased is to simply design better algorithms ... But algorithms are only as good as the data they're using, and our research shows that you can often make a bigger difference with better data."

Source: EurekAlert! (16 November 2018)

DIGITAL ECONOMY

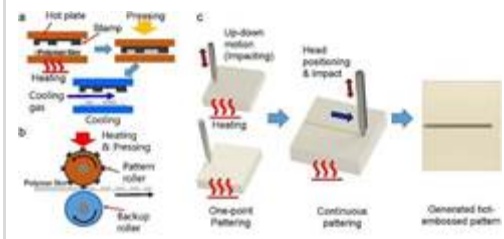
e-Conomy SEA 2018: Southeast Asia's Internet Economy Hits an Inflection Point

"Powered by the most engaged mobile internet users in the world, industries like e-Commerce, Online Media, Online Travel, and Ride Hailing grew at an unprecedented rate. Investors have taken notice, pouring record amounts of funds into the region - now it's time for everyone else to pay attention."

Source: Think with Google (November 2018)

EMBOSSING TECH

New Breakthrough in Hot Embossing Technology



"Korean researchers have developed a new hot embossing process technology that can freely imprint fine circuit patterns on flexible polymer substrate. The result is expected to be used in semiconductor processes, wearable devices and the display industry."

Source: Phys.org (13 November 2018)

ENERGY

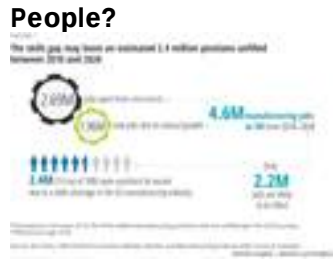
How 'Miniature Suns' Could Provide Cheap, Clean Energy

"We're just five years away from harnessing almost unlimited power from 'miniature suns', some start-ups say: nuclear fusion reactors that could provide abundant, cheap and clean energy."
Also read more about China's fake sun break through at The New Daily.

Source: BBC (16 November 2018)

FOURTH INDUSTRIAL REVOLUTION

The Jobs Are Here, but Where Are the People?



"Deloitte and The Manufacturing Institute launched their fourth skills gap study, to reevaluate their prior projections and move the conversation forward on today's hiring environment and the future of manufacturing work."
Also read the full report.

Source: Deloitte Insights (14 November 2018)

HEALTHCARE

Top 8 Healthcare Predictions for 2019

"What can you look forward to in healthcare in 2019? The debate expects to get hotter between AI vs. Physicians, Consumer vs. Clinical, Human empathy vs. Machine Intelligence as many new players enter the ecosystem."
Full report will be available on Frost & Sullivan on 1 Dec 2018.

Source: Forbes (13 November 2018)

IMPACTFUL INVENTIONS

The 65 Best Inventions of the Past 65 Years

"Between the 1950s and today, scientific and technological innovations have revolutionized the lives we lead, from the hospital to outer space to the kitchen. These are the most impactful inventions of our time."

Source: Popular Mechanics (20 November 2018)

INNOVATION

10 Ways Educators Can Make Classrooms More Innovative

"For the purpose of this article, I will focus on some of the most creative and innovative areas I've practiced or have seen over the past decade across classrooms."

Source: Forbes (19 November 2018)

INSPIRING ARCHITECTURE

INTERNATIONAL SNAPSHOT: Futuristic Japanese Space Lab; 'Origami lava' Art in Spain; Chinese "Courtyard Kindergarten"

"This week's international snapshot features a futuristic space lab planned for Japan, an 'origami lava' art display in Spain and a unique kindergarten being built above a historic Chinese site."

Source: Architecture & Design (19 November 2018)

MACHINE LEARNING

The Rare Form of Machine Learning That Can Spot Hackers Who Have Already Broken In

"Rather than train the algorithms on historical examples of attacks, however, they needed a way for the system to recognize new instances of anomalous behavior. They turned to unsupervised learning, a technique based on a rare type of machine-learning algorithm that doesn't require humans to specify what to look for."

Source: MIT Technology Review (16 November 2018)

MATERIALS SCIENCE

Treated Superalloys Demonstrate Unprecedented Heat Resistance

"Researchers at Idaho National Laboratory have discovered how to make 'superalloys' even more super, extending useful life by thousands of hours. The discovery could improve materials performance for electrical generators and nuclear reactors."

Source: EurekAlert! (16 November 2018)

NANOTECHNOLOGY

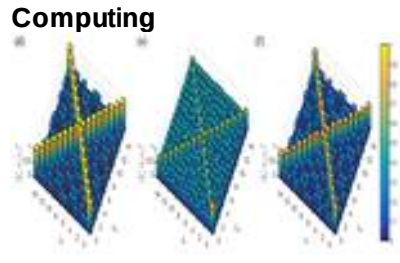
Solution for Next Generation Nanochips Comes Out of Thin Air

"Our air channel transistor technology has the current flowing through air, so there are no collisions to slow it down and no resistance in the material to produce heat."

Source: Phys.org (19 November 2018)

QUANTUM PHYSICS

Machine Learning, Meet Quantum Computing



"A quantum version of the building block behind neural networks could be exponentially more powerful."

Source: MIT Technology Review (16 November 2018)

RENEWABLE ENERGY

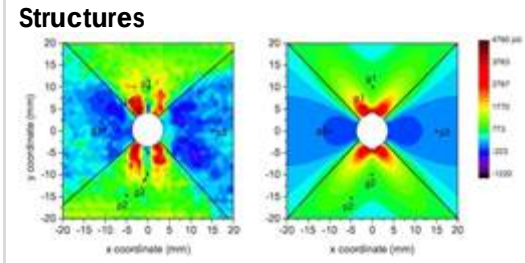
Bacteria Could Transform Human Feces and Wastewater into Energy

"Scientists from Spain have shown that a type of purple bacteria can convert waste into hydrogen gas for energy production. Purple bacteria just need an electric shock to transform human waste."

Source: Popular Mechanics (14 November 2018)

STRUCTURAL ENGINEERING

'Smart Skin' Simplifies Spotting Strain in Structures



"Thanks to one peculiar characteristic of carbon nanotubes, engineers will soon be able to measure the accumulated strain in an airplane, a bridge or a pipeline – or just about anything – over the entire surface or down to microscopic levels."

Source: Rice University (15 November 2018)

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