

Weekly Discovery

We SHARE to inspire and ignite ideas!

ARTIFICIAL INTELLIGENCE

Global Artificial Intelligence Opportunities in Retail, 2017



Topics covered include artificial intelligence application cases in retail, upand-coming companies employing artificial intelligence in retail and future opportunities, such as the use of chat bots.

Source: Frost & Sullivan (1 March 2017)

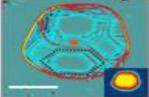
FUTURE CITIES 6 megatrends that will shape the future of cities



At a recent Green Cities conference in Sydney, experts predicted 6 trends that can help cities cope with the growing challenges. Some of the key trends include carbon neutral buildings, data analytics, augmented reality. Source: <u>Eco-Business</u> (14 March 2017)

SUPERCONDUCTIVITY

How small can superconductors be?



Scientists have validated a previous study on the optimal size of superconductors and this can have implications for the future design of computers.

Source: <u>Phys.org</u> (20 March 2017)

WIRELESS NETWORKS

Wi-fi on rays of light—100 times faster, and never overloaded



To mitigate the issue of slow Wi-Fi speeds, researchers have designed a wireless network based on harmless infrared rays that has a large capacity and fasters speeds as each wireless device gets a unique infrared ray. It is also inexpensive and does not require maintenance.

Source: Phys.org (17 March 2017)

AVIATION Soon we'll actually know where planes are as they fly over the ocean



Location of airplanes including flying over ocean and the poles will soon be possible by end of 2018. Satellites are being launched to monitor the position, speed and altitude of the airplanes across the globe. The receivers which are the size of mini refrigerators will be installed on planes by 2020.

Source: <u>Popular Science</u> (20 March 2017)

GREEN ENERGY Hydrogen Production Breakthrough Could Herald Cheap Green Energy



Hydrogen production from water utilizes fossil fuels in its production. A new approach uses renewable energy to generate hydrogen much more efficiently and also makes the whole production truly green. Learn more at <u>Science</u>. Source: Laboratory Equipment (20 March 2017)

SUSTAINABLE ENERGY Google's New Tool Says Nearly 80 Percent of Roofs Are Sunny Enough for Solar Panels



A newly developed tool that can search for your home and advise you on whether it is suitable to install solar panels, the costs involved and suggested vendors for installation.

Source: MIT Technology Review (15 March 2017)

WOMEN IN BUSINESS Special Report: Women in business



A collection of articles on women succeeding in the workplace, along with efforts being taken to hire and retain women. Topics covered include enabling women to contribute fully, avoiding bias against women, stopping the female brain drain and the role of women as company leaders. Source: <u>Financial Times</u> (March 2017)

20 March 2017 - 24 March 2017

BREAKTHROUGH TECHNOLOGY European team announces superconductivity breakthrough



A superconducting tape that could double the efficiency of wind turbines inexpensively. This tape allows electrical energy to be transmitted with no resistance and negligible power loss. It also conducts 100 times more electrical energy than copper. Read more at <u>Eurotapes</u>.

Source: <u>Phys.org</u> (15 March 2017)

SENSORS

Flexible sensor holds potential for foldable touch screens



This low-cost sensor is able to detect a hovering finger even when it is actively folded or stretched, being applicable to future wearables and human-friendly robot 'skins'. Explore more from <u>Science</u>.

Source: <u>newelectronics</u> (17 March 2017)

URBAN PLANNING

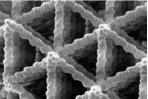
4 Important Things to Consider When Designing Streets For People, Not Just Cars



Here you can read about essential factors influencing street design. Firstly, the street is where utilities are. Secondly, the street is a drainage system. Thirdly, the street is an ecosystem and lastly the street is an area that the public has a right to occupy. Source: <u>ArchDaily</u> (17 March 2017)

3D PRINTING

Nanostructure 3D printing mimics biomaterials



Accurate to the nanoscale, this 3D printing technique can print out metal structures presenting the sophisticated textures of biomaterials such as wood and bone. Read more at <u>Science</u>.

Source: Cosmos (20 March 2017)

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