

Weekly Discovery

We SHARE to inspire and ignite ideas!

14 August 2017 - 18 August 2017

AUTONOMOUS CARS

Google Spinoff Waymo Patents Softer Self-Driving Cars to Protect Pedestrians



Autonomous vehicles are being tested and some accidents have occurred. This patented car design becomes soft on impact with a pedestrian to reduce injury. Also check out the full [patent](#).

Source: [The Verge](#) (13 August 2017)

BAMBOO STRUCTURE

Chiangmai Life Architects Constructs Zero-Carbon Sports Hall in Thailand Entirely from Bamboo

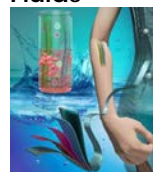


A structure made completely of bamboo and prefab bamboo is estimated to be functional for a minimum of 50 years. View actual pictures, sketches and floorplans of this eco-friendly design.

Source: [design boom](#) (9 August 2017)

BATTERIES

Scientists Have Made Implantable Batteries that Run on Body-Friendly Fluids



A [battery](#) that is thin, pliable and provides power from sodium based liquids which are completely biocompatible. This innovation could lead to safer wearables of the future. Also read more at [Cell](#).

Source: [Science Alert](#) (10 August 2017)

DISTRIBUTED DEEP LEARNING

IBM Just Achieved a Deep Learning Breakthrough



IBM's [Distributed Deep Learning \(DDL\)](#) can run algorithms simultaneously on 64 servers, improving learning efficiency by 95%. It could boost AI's performance in medical research and autonomous systems. Learn more at [DDL](#).

Source: [Futurism](#) (9 August 2017)

ELECTRIC CARS

The Death of the Internal Combustion Engine



The fuel powered engines will become a thing of the past with electric cars being poised to rise as the next big mode of transportation. Read on and explore the impacts that electric cars may soon bring.

Source: [The Economist](#) (12 August 2017)

INNOVATION

2017 Innovation Success: Insights and Tips from Leading CEOs



This guide highlights key takeaways from a survey study of 818 world's leading CEOs, in which they shared insights on the future innovations and strategies of staying relevant in the age of disruption.

Source: [Emerald](#) (4 August 2017)

INNOVATIVE CITIES

The Geography of Innovation



A study shows that a greater amount of [innovations](#) (measured by the quantity of patents) in suburbs, cities actually produce far more "unconventional" innovations. Also read the [full report](#).

Source: [CityLab](#) (3 August 2017)

NANOSCALE ELECTRONICS

New Nanowire Is World's Worst Electrical Conductor



[Siloxane wire](#), a new kind of molecular wire that features unprecedented conductance suppression, being an ideal option for molecular insulators in electronics. Read also at [ACS](#).

Source: [Scientific American](#) (7 August 2017)

NANO-TRANSFECTION

Repairing Organs with a Touch of a Nanochip



Heal injured tissues with a device that uses tissue nano-transfection technique. Stimulus from the outside starts cell type conversion takes place inside the body to restore tissues. Also read at [Nature](#).

Source: [IEEE Spectrum](#) (12 August 2017)

ROBOTS IN HEALTHCARE

Edible Robot Surgeons Will Cure You from the Inside Out



A feature of various robots designed to battle gastrointestinal conditions. From imaging to biopsies to surgery, these robots are even being designed to be autonomous to cure you.

Source: [Engaget](#) (9 August 2017)

SPACE EXPLORATION

50 Years of Rovers for Planetary Exploration: A Retrospective Review for Future Directions



An extensive review of robotics and autonomous systems in space exploration with a collection of 100 mobile robots from 1959 to 2016.

Source: [Robotics and Autonomous Systems](#) (August 2017)

Topography

Heatherwick Studio Releases New Video of 1000 Trees under Construction in Shanghai



A concept of installing trees on the roof columns of a multi-use complex is moving closer to reality. Read on and watch a [video](#) on this project by the studio of trending designer Thomas Heatherwick.

Source: [Dezeen](#) (10 August 2017)

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