

Weekly Discovery

We SHARE to inspire and ignite ideas!

20 February 2017 – 24 February 2017

ARCHITECTURE

White translucent box forms Singapore residence by Park+Associates Architects

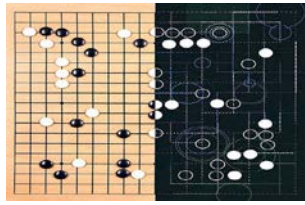


Presenting the Greja House, an award-winning house that consists of a box surrounded by white mesh on top of a transparent ground floor. The mesh allows light to enter, while safeguarding privacy.

Source: [Dezeen](#) (20 February 2017)

INNOVATION

Five technologies that will change how we live

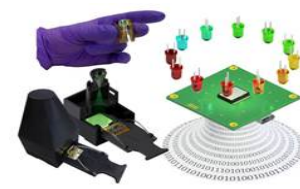


Get details on [five technologies](#) that are set to transform our lives. They are biotechnology, artificial intelligence, renewable energy, connectivity and smart appliances.

Please click [here](#) to create your FT login
Source: [Financial Times](#) (16 February 2017)

MACHINE LEARNING

Machine learning helps researchers design less costly optical sensors



An [algorithm](#) was applied to improve the design of optical sensor readers, making them more accurate, portable and inexpensive. Also read the [ACS publication](#).

Source: [Nanowerk](#) (16 February 2017)

MATERIAL SCIENCE

New 'living material' gloves light up when they touch target chemicals



Scientists have designed a biocompatible hydrogel material which keeps bacteria cells active within wearable devices. This new material makes it possible for any strains of bacteria to be incorporated to detect toxic chemicals or skin diseases. Read more about it at [PNAS](#).

Source: [UPI](#) (16 February 2017)

PRODUCT DESIGN

Bulletproof origami shield unfolds in seconds to protect cops from danger



Check out a bulletproof [origami shield](#). The shield is made out of 12 layers of Kevlar combined with a thin aluminum core in the center and its design hinges upon an origami fold pattern called Yoshimura.

Source: [Digital Trends](#) (20 February 2017)

SENSORS

Sensors embedded in sports equipment could provide real-time analytics to your smartphone



Researchers have designed [inexpensive sensors](#) that can be incorporated into both sporting equipment and wearable devices. This could potentially replace current process that uses many cameras and data analytics with high costs involved. Also read the [full paper](#).

Source: [Sciencedaily](#) (16 February 2017)

TRANSPORTATION

Dubai is to test passenger-carrying drones



Dubai has just announced its trial scheme of the unmanned aerial vehicles by this July 2017. If successful, the drones may have long-term significance for all congested regions over the world.

Source: [The Economist](#) (17 February 2017)

VEHICLES

World's first rideable hoverbike looks cool as hell but will probably kill you

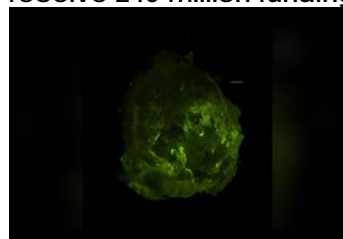


A [combination](#) of a motorbike and quadcopter drone and is for extreme sports. Learn more about it in this [video](#).

Source: [The Verge](#) (20 February 2017)

VIRTUAL REALITY

Virtual reality journey through a tumour: Cambridge scientists receive £40 million funding boost



This VR-enabled 3D map of tumours allows scientists to study cancer with much more details and interactivity as compared to the existing 3D scanning technologies.

Source: [University of Cambridge](#) (10 February 2017)

WEARABLES

Smart glasses are digital eyes for the legally blind



With one camera and two sensors, this pair of smart glasses can provide its wearer with a super-sharp, high-contrast, HD image of the surroundings. Enabling the visually impaired to see clearly what usually would be a blurry mass of colors.

Source: [Mashable](#) (15 February 2017)

3D PRINTING

This Super-Fast 3-D Printer Is Powered by Holograms



This new 3D printer is faster and the finished products do not have inherent weaknesses due to the "grain" produced by traditional 3D printing methods. Also, unlike traditional 3D printing techniques, this new printing method does not require the use of supporting structures.

Source: [MIT Technology Review](#) (17 February 2017)

3D SCANNING

Ten Ways Industry Uses 3D Scanning



Read about [ten industrial uses of 3D scanning](#). They include prototype design, detailed product fabrication, digital archiving, quality assurance and digital tailoring.

Source: [New Equipment Digest](#) (21 February 2017)

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