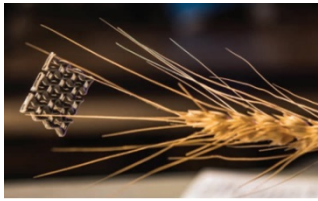# Weekly Discovery

We SHARE to inspire and ignite ideas!

28 August 2017 - 1 September 2017

3D PRINTING

3-D So Light a Flower Can Hold It: Professors Create Record-Breaking Graphene Aerogel for Better Electronics

The world's lightest 3d printed structure in the Guinness World Records. It may improve the quality of semiconductors, electronics, building insulation. Learn more about how it was manufactured.
Source: Industrial Engineer (September 2017)

ARCHITECTURE

MVRDV + ADEPT's Dynamic Ku.Be House of Culture in Movement, Photographed by Ossip van Duivenbode

A building designed to encourage you to jump, run, climb and move! Explore this unique buildings purpose and design via a set of photographs and sketches.
Source: Archdaily (24 August 2017)

AUTONOMOUS VEHICLES

Here's How Bosch Teaches Cars to See Using Artificial Intelligence

Wondering how artificial intelligence teaches an autonomous car to see the world? Here is Bosch's solution, in which real world objects were categorised into 19 groups with specific colour codes.
Source: Digital Trends (26 August 2017)

BIG DATA CAREERS

Big Data & Analytics Is the Most Wanted Expertise by 75% of IoT Providers

75% of Internet-of-Things (IoT) companies prioritise big data and analytics expertise in making recruitment decisions. Gain more insights from this IOT Business Report.
Source: Forbes (21 August 2017)

CAREER DEVELOPMENT

Career Development: A Plan for Action

Refine and keep track of your career goals through identifying personal development plans to learn or improve essential skills in your work or research.
Source: Nature (24 August 2017)

Gene Therapy

F.D.A. Approves First Gene-Altering Leukemia Treatment, Costing $475,000

Cells are genetically modified to enable patients with leukaemia to fight against cancer cells. 83% of 63 terminally ill went into remission after the treatment.
Source: NYT (30 August 2017)

HOLOGRAM

The First Hologram Table Is Here, and Could Be Yours for $47,000

This hologram table can connect up to 4 users simultaneously by putting on sleek-motion tracking glasses and projecting images on the table's surface.
Source: Arch Daily (23 August 2017)

MACHINE LEARNING SECURITY

Even Artificial Neural Networks Can Have Exploitable 'Backdoors'

Two different kinds of backdoor hacks in a neural network can easily confuse image recognition system as shown by the findings of NYU researchers.
Source: Wired (25 August 2017)

MEDICAL DEVICES

Mini-Antennas Could Power Brain-Computer Interfaces, Medical Devices

A new Antenna, which is 100 times smaller than the traditional ones, finds its promising place in numerous applications, including healthcare. Read more at Nature.
Source: Science (22 August 2017)

MUSIC & AI

Musician Taryn Southern on Composing Her New Album Entirely with AI

Singer Taryn Southern released her song "Break Free" which was entirely composed and produced with artificial intelligence (AI), marking the first AI album in the world.
Source: The Verge (27 August 2017)

SAND PRINTING

Cast Away

Sand cores in various sizes and shapes can be easily manufactured by low cost sand 3D printing. Read the stories of the leading sand casting solution provider in the automotive sector, Grainger & Worrall.
Source: Racecar Engineering
Available @ Level 1 Library, Call Number TL236 RAC
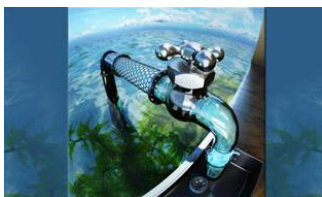(Page 62-70, Vol 27, No 9, September 2017)

TECHNOLOGY & LAW

Chinese Court Launches WeChat Account to Let Litigants Chat with Judges on Their Cases

China encourages judicial authorities to become more technology-friendly. A prompt response within 24 hours for all law cases reported by litigants is impressive.
Source: The Straight Times (22 August 2017)

WATER PURIFICATION

Carbon Nanotubes Worth Their Salt

This carbon nanotube filter can efficiently separate sea salt while maintaining biological protein contents in the water. Read also at Nature.
Source: Phys.org (24 August 2017)