Weekly Discovery

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15 October 2018 - 19 October 2018

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AGEING

Enhancing Older People's Activity and Participation with Socially Assistive Robots: a Multicentre Quasi-Experimental Study Using the ICF Framework

"A total of 67 people aged 65 and over participated in a 24-week-long, quasi-experimental study in five residential nursing homes in Japan. ...based on the framework of the WHO's International Classification of Function, Disability and Health (ICF)."

Source: Advanced Robotics (14 October 2018)

ARTIFICIAL INTELLIGENCE

Retool AI to Forecast and Limit Wars

Credit: Chris Hondros/Getty

"Future AI and conflict models need to do more than make predictions: they must offer explanations for violence and strategies for preventing it. This will be difficult because conflict is dynamic and multi-dimensional."

Source: Nature (15 Oct 2018)

AUTONOMOUS VEHICLES

New Technology Tested by Ford Allows Drivers to Avoid Stopping at Red Lights

"CARS could be allowed to run red lights and roll past stop signs in the future if authorities give the go ahead to new automated technology being trialled in the United Kingdom."

Source: News.com.au (14 October 2018)

CHILDCARE ROBOTS

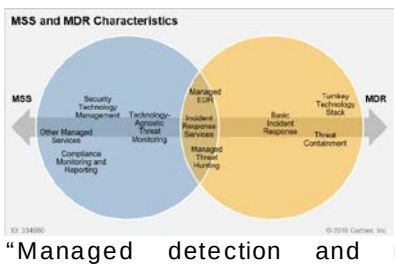
Childcare Robots May Soon Become The New Norm

"Now that technology is sufficiently advanced, Chinese parents are entrusting some childcare and parenting duties to AI robots...Will childcare robots serve as the launching pad for social AI?"

Source: Edgy Labs (15 October 2018)

CYBERSECURITY

Market Guide for Managed Detection and Response Services



"Managed detection and response services allow organizations to add 24/7 dedicated threat monitoring, detection and response capabilities via a turnkey approach. Leaders can use this research to determine whether MDR services are appropriate for their environments."

Source: Gartner (2018)

DEEP LEARNING

RIT Researchers Use Deep Learning to Help Preserve the Seneca Language

"Using deep learning, a form of artificial intelligence, RIT researchers are building an automatic speech recognition application to document and transcribe the traditional language of the Seneca people."

Source: EurekAlert(15 Oct 2018)

DIGITAL FABRICATION

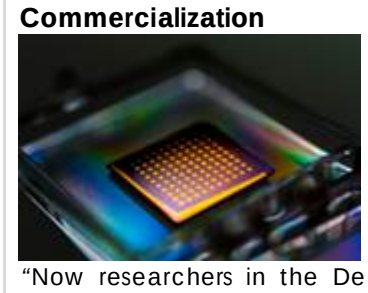
See a Bizarre Robot Make a Building Out of Loose Rocks and String

"No cement. No nails. No screws. This robot arm needs just two things to build structures: gravel, and a really, really long string."

Source: Fast Company (12 October 2018)

ELECTRONICS

Researchers Quickly Harvest 2-D Materials, Bringing Them Closer to Commercialization

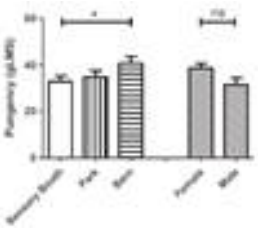


"Now researchers in the Department of Mechanical Engineering at MIT have developed a technique to harvest 2-inch diameter wafers of 2-D material within just a few minutes. They can then be stacked together to form an electronic device within an hour."

Source: MIT News (11 October 2018)

FOOD SENSING

Eating with Your Eyes: Virtual Reality can Alter Taste



Humans not only relish the sweet, savory and saltiness of foods, but they are influenced by the environment in which they eat. Food scientists used virtual reality to show how people's perception of real food can be altered by their surroundings.

Source: Science Daily (15 October 2018)

HEARING AID

Study Points to Possible Therapy For Hearing Loss

"Scientists have been able to regrow the sensory hair cells found in the cochlea a part of the inner ear that converts sound vibrations into electrical signals and can be permanently lost due to age or noise damage."

Source : University of Rochester (15 Oct 2018)

INFORMATION TECHNOLOGY

Study Exposes Security Vulnerabilities in Terahertz Data Links

"A new study shows that it's possible to steal data undetected from terahertz wireless links even though those links involved beam transmissions from transmitter to receiver."

Source: Brown School of Engineering (15 October 2018)

MANUFACTURING

Teardown: Opening a Jar of Simple Design

"Taking the Robotwist apart shows how simple assembly, what we call design for assembly (DFA), can reduce bottom line manufacturing costs while improving product efficiency."

Source: Forbes (10 October 2018)

MATERIALS

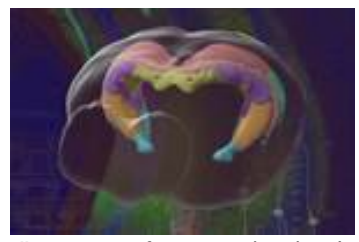
Snap, Crackle, Pop: What Rice Cereal Can Tell Us About Collapsing Ice Shelves

"The crackle of wet rice puffs is more than snappy advertising strategy: Pouring milk into a bowl of cereal might help shed light on the collapse of ice shelves and dams of compacted earth, a new study finds."

Source: Inside Science (12 October 2018)

MEDICAL

Neuroscientists Create Most Detailed Map Ever of Hippocampus



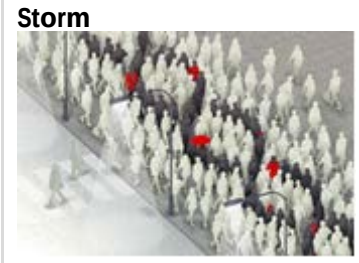
"A team of neuroscientists has produced the most detailed atlas yet of the hippocampus the brain's memory bank. Brain mapping helps neuroscientists understand how specific areas function and how to create new drugs and targeted treatments."

Read more Nature Nuroscience.

Source: SciNews (12 Oct 2018)

PREDICTIVE MEDICINE

The Approach to Predictive Medicine That is Taking Genomics Research by Storm



"Kathiresan, a geneticist at Massachusetts General Hospital in Boston, isn't alone in counting outrageously high numbers of variants. The polygenic risk scores he has developed are part of a cutting-edge approach in the hunt for the genetic contributors to common diseases."

Source: Nature (10 October 2018)

WATER SYSTEMS

Innovative Tool Allows Continental-Scale Water, Energy, and Land System Modeling

"A new large-scale hydroeconomic model, developed by the Water Program at IIASA, will allow researchers to study water systems across whole continents, looking at sustainability of supply and the impacts of water management on the energy and agricultural sectors."

Source: International Institute for Applied Systems Analysis (12 October 2018)

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