Weekly Discovery

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17 September 2018 - 21 September 2018

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ADVANCED MANUFACTURING

The Future Of Jobs Report 2018

"The emerging contours of the new world of work in the Fourth Industrial Revolution are rapidly becoming a lived reality for millions of workers and companies around the world."

Source: World Economic Forum (September 2018)

AUTONOMOUS VEHICLES

Self-Driving Cars Can Handle Neither Rain nor Sleet nor Snow

"To help autonomous vehicles solve inclement conditions, WaveSense will sell a sensor that can see below the ground."

Source: Bloomberg Business (17 September 2018)

BLOCKCHAIN

Blockchain-Based AI Voice Assistant Brings Data Privacy To Smart Homes

"Snips AIR is an example of the privacy by design concept, as it's an AI voice platform that utilizes blockchain technology to ensure that user data never gets sent to the cloud... Rather than storing user data in the cloud, Snips AIR processes all data on-device, ensuring that personal information remains within the walls of connected homes."

Source: Forbes (14 September 2018)

CYBERSECURITY SKILLS

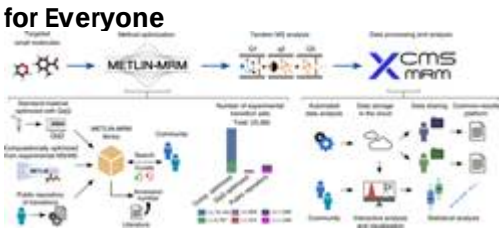
How to Solve your Cybersecurity Skills Shortage

"The nonprofit group ISACA predicts that by 2019, there will be a global shortage of 2 million cybersecurity experts. That is a skills gap crisis of epic proportions, and few organizations or companies have any clue what to do about it."

Source: VentureBeat (16 September 2018)

DATA SHARING

Scientists Design New Metabolic Technology to Open Scientific Data for Everyone



"XCMS-MRM and METLIN-MRM represent a cloud-based analysis platform that allows scientists to quantify molecules from biological samples and make their results publicly available."

Source: Science Daily (13 September 2018)

FINTECH

The Fintech Banks Are Coming: Why You Should Care

"With regulators accepting applications from financial technology startups for national bank charters, traditional banks are going to see a lot more competition. Potentially bad news for them. But for consumers, it could be a win if it results in better service and lower costs."

Source: Forbes(13 Sep 2018)

MEDICAL DEVICE

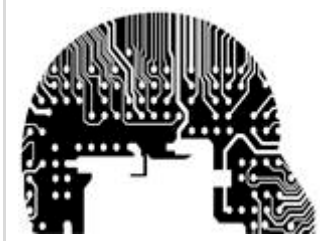
Cincinnati Medical Device Startup Wins Statewide Award

"Genetesis ...It determines whether that pain is heart-related by using biomagnetic imaging, a non-invasive technology with no radiation or exercise required. It combines that with software it developed to detect the presence of ischemic cardiac tissue, an issue that restricts blood supply to the heart." Additional patent info."

Source: Cincinnati Business Courier (14 September 2018)

NEUROSCIENCE

Engineers Decode Conversations In Brain's Motor Cortex



"... journal Nature Methods. In this study, the researchers leveraged advances from the field of "deep learning"... The new computing approaches, which use artificial neural networks, let researchers uncover patterns in complex data sets that have been previously overlooked..."

Source: Medical Xpress (18 September 2018)

ROBOTIC FABRICATION

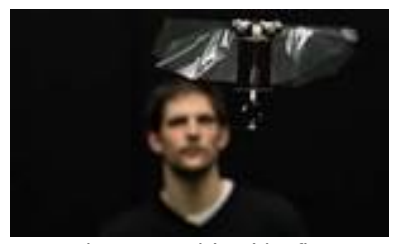
Robotics meets Architecture in the Room That Changes Shape just for you

"When a person in a building moves, behaves or operates in any way, the 'robot' will sense this behaviour and starts learning from this behaviour and other people's behaviour and will create knowledge from the behaviour and the knowledge will translate into the space to change"

Source: University of New South Wales (17 September 2018)

ROBOTICS

Novel Flying Robot Mimics Rapid Insect Flights



"Experiments with this first autonomous, free-flying and agile flapping-wing robot improve the understanding of how fruit flies control aggressive escape manoeuvres. Apart from its potential in insect flight research, the robot's exceptional flight qualities open up new drone applications."

Source: TechXplore (13 Sept 2018)

SENSORS

New Sensors Track Dopamine for more than a Year

"MIT neuroscientists have devised a way to measure dopamine in the brain for more than a year, using micro-fabricated sensors that are so tiny they don't lead to the formation of scar tissue. Tiny probes could be useful for monitoring patients with Parkinson's and other diseases."

Source: MITNews (12 Sept 2018)

SURVEILLANCE

Leave No Dark Corner

"China is building a digital dictatorship to exert control over its 1.4 billion citizens. For some, "social credit" will bring privileges — for others, punishment."

Source: ABC (18 September 2018)

URBAN PLANNING

Active Cites

"The Dutch urban researcher, Vincent Kompier and the Portuguese urban planner, Daniel Casas Valle have been researching the changing significance of sport in urban centres for years"

Source: Detail(7/8. 2018, Pg. 24 -31)
Call number : NA 3 DET

WEARABLE TECHNOLOGY

Could a DIY Ultrasound be in your future? UBC Breakthrough Opens Door to $100 Ultrasound Machine

"Engineers at the University of British Columbia have developed a new ultrasound transducer, or probe, that could dramatically lower the cost of ultrasound scanners to as little as $100. "

Source: The University of British Columbia (11 Sep 2018)

WEARABLES

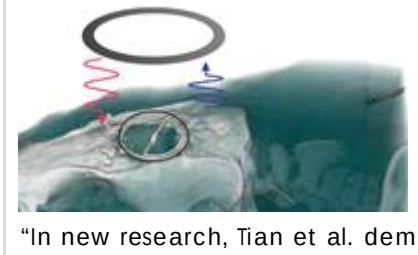
Wearable Electronics in Singapore

"Retail volume sales of smart wearables grow by 16%, reaching 89,500 units in 2018. ... Wearable electronics is expected to post a 19% retail volume CAGR over the forecast period, reaching 618,900 units in 2023. ... Singaporeans typically demand some of the functionality of activity watches alongside the timeless and elegant style of an analogue piece."

Source: Euromonitor (August 2018)

WIRELESS POWER

Novel use of Harmonic Feedback Enables Powering of Bioelectronic Devices



"In new research, Tian et al. demonstrate a wireless power transfer system that adapts to changes in an implanted device by using harmonic feedback from a backscattered field."

Source: Aip Scilight (12 September 2018)