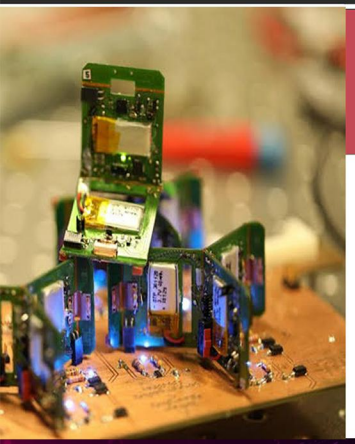
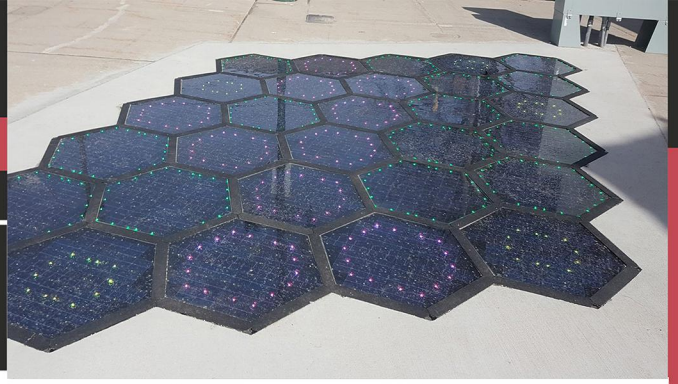
ISTE TECH TIMES



ANT INSPIRED ROBOTS

Researchers at the Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland, have developed tiny robots — Tribots, weighing 10g that can behave and operate like ants. The robots can jump or crawl across surfaces and communicate with each other to complete complex tasks and achieve goals. They are three-legged, T-shaped origami ants.

For detection and communication purposes, they are equipped with infrared and proximity sensors. They possess intelligence and strength, hence, as a colony, they may use complex strategies to achieve tasks and can evade large predators too. The tiny ant-inspired.Tribots are mainly required for emergency search and rescue operations. The study was published in Nature.



SOLAR ROADWAYS

Solar Roadways has taken the first step to creating the world's largest solar panel: tempered glass and photovoltaic cells are used to create intelligent, energy-harvesting pavement, complete with built-in heating elements for melting ice and LEDs for signage.

Solar Roadways is a modular system of specially engineered solar panels that can be walked and driven upon. Our panels contain LED lights to create lines and signage without paint. They contain heating elements to prevent snow and ice accumulation. The panels have microprocessors, which makes them intelligent. This allows the panels to communicate with each other, a central control station, and vehicles.

BREAKTHROUGH TECHNOLOGIES: SMOOTH TALKING AI-ASSISTANTS

We're used to AI assistants—Alexa playing music in the living room, Siri setting alarms on your phone—but they haven't really lived up to their alleged smarts.They recognize only a narrow range of directives and are easily tripped up by deviations. Recently, a team at Google unveiled a system called BERT that learned how to predict missing words by studying millions of sentences. In a test, it did as well as humans at filling in gaps. These improvements, coupled with better speech synthesis, are letting us move from giving AI assistants simple commands to having conversations with them. They'll be able to deal with daily minutiae like taking meeting notes, finding information, or shopping online.But while AI programs have gotten better at figuring out what you want, they still can't understand a sentence.

BODY'S 'BIOLOGICAL AGE' CAN BE REVERSED

A small clinical study in California has suggested for the first time that it might be possible to reverse the body's epigenetic clock, which measures a person's biological age. For one year, nine healthy volunteers took a cocktail of three common drugs - growth hormone and two diabetes medications - and on average shed 2.5 years of their biological ages, measured by analysing marks on a person's genomes. The participants' immune systems also showed signs of rejuvenation. The researchers were expecting slowing down of the clock, however a reversal took place which was taken by surprise by many. This all feels very futuristic, also the study is very small and not well controlled.

THOUGHT OF THE MONTH

Technology is nothing. What's important is that you have a faith in people, that they're basically good and smart, and if you give them tools, they'll do wonderful things with them.

Steve Jobs

EDITION 19.9.1