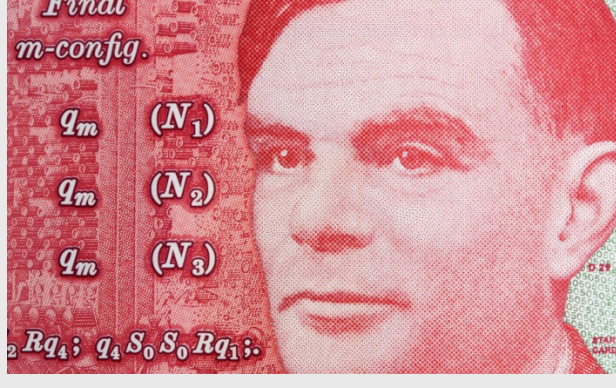




## ARTIFICIAL INTELLIGENCE



**Which Economic Tasks are Performed with AI? Evidence from Millions of Claude Conversations**  
Hondo & Tomasek et al.



### AI pioneers scoop Turing Award for reinforcement learning work

Two trailblazing computer scientists have won the 2024 Turing Award for their work in reinforcement learning.

[techcrunch.com](#)

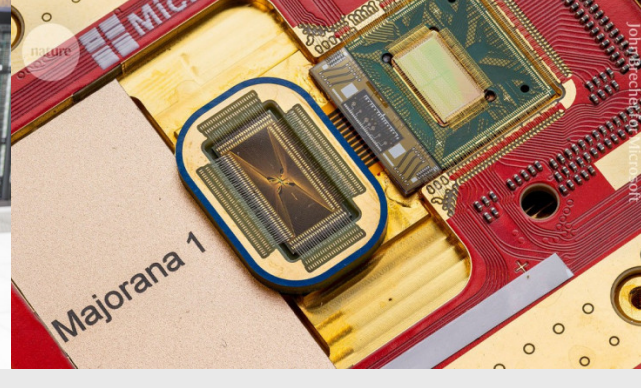
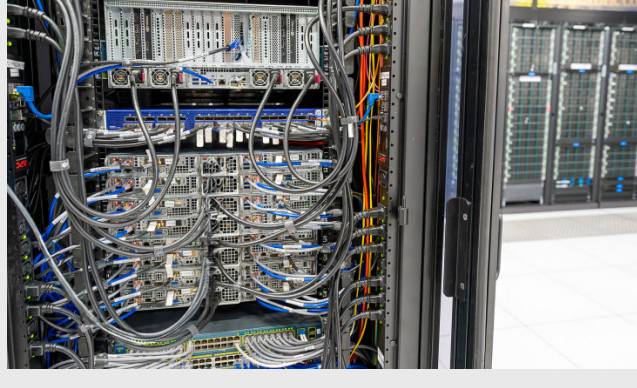
### The Anthropic Economic Index

Announcement and description of the new Anthropic Economic Index and description of the new data on AI use in occupations

[anthropic.com](#)



## INFRASTRUCTURE



### Next top model: Competition-based AI study aims to lower data center costs

Who, or rather what, will be the next top model? Data scientists and developers at the U.S. Department of Energy's Thomas Jefferson National Accelerator Facility are trying to find out, exploring some of the latest artificial intelligence (AI) techniques to help make high-performance computers more...

[techxplore.com](#)

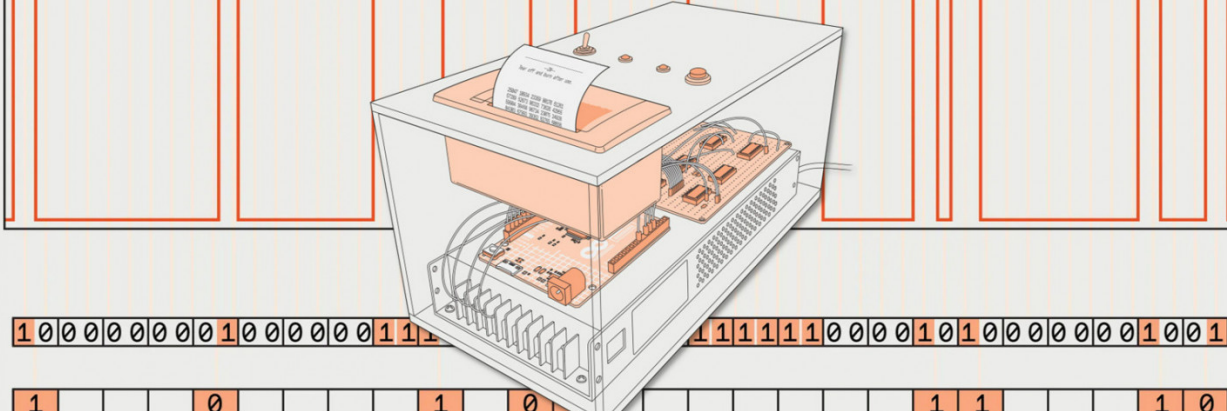
### Microsoft quantum computing 'breakthrough' faces fresh challenge

Analysis pokes holes in protocol that underpins Microsoft's claim to have created the first topological qubits. Analysis pokes holes in protocol that underpins Microsoft's claim to have created the first topological qubits.

[nature.com](#)



## CYBERSECURITY



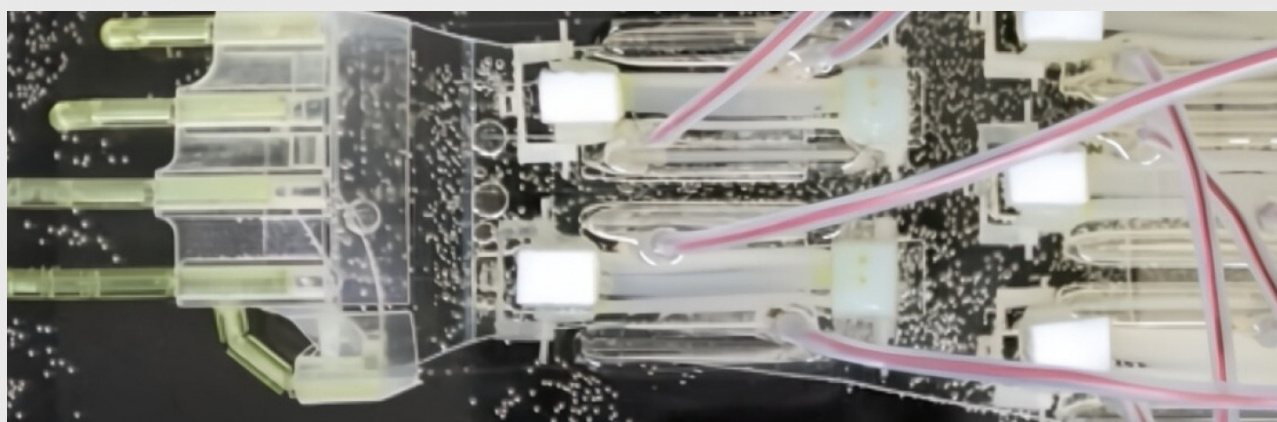
### Build a Perfect Cryptographic Machine

One-time pads are the only future-proof form of cryptography, but they are hard to create. The Pad-O-Matic generates one-time pads in convenient rolls of paper using a hardware random-number generator.

[spectrum.ieee.org](#)



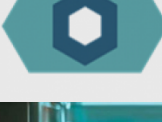
## ROBOTICS



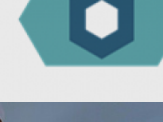
### Muscle tissue meets mechanics in biohybrid hand breakthrough

Combining lab-grown muscle tissue with a series of flexible mechanical joints has led to the development of an artificial hand that can grip and make gestures. The breakthrough shows the way forward for a new kind of robotics with a range of potential applications.

[newatlas.com](#)



## ARTIFICIAL SENSING



### AI-Powered Brain Implant Lets Paralyzed Man Control Robotic Arm

A new brain-computer interface (BCI) has enabled a paralyzed man to control a robotic arm by simply imagining movements.

[neurosciencenews.com](#)



### Fiber computer allows apparel to run apps and "understand" the wearer

MIT researchers developed a single-fiber computer that is soft, durable, and elastic. The fiber can be sewn into a garment to make wearable devices that provide richer and more accurate health data in real-time.

[news.mit.edu](#)



## LIFE SCIENCES



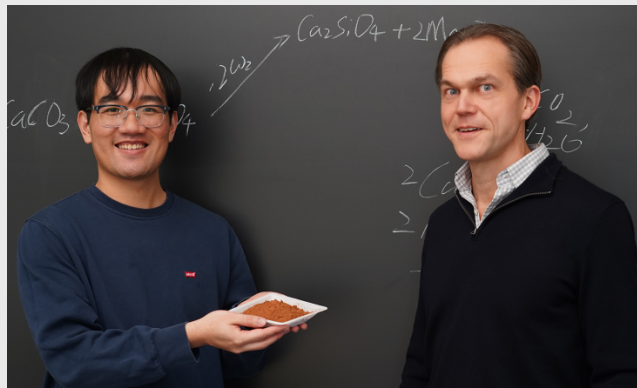
### The Biggest AI for Biology Yet Writes Genomes From Scratch

Built by the Arc Institute, Stanford, and Nvidia, Evo 2 trained on roughly 128,000 genomes-9.3 trillion DNA letter pairs-spanning all branches of life.

[singularityhub.com](#)



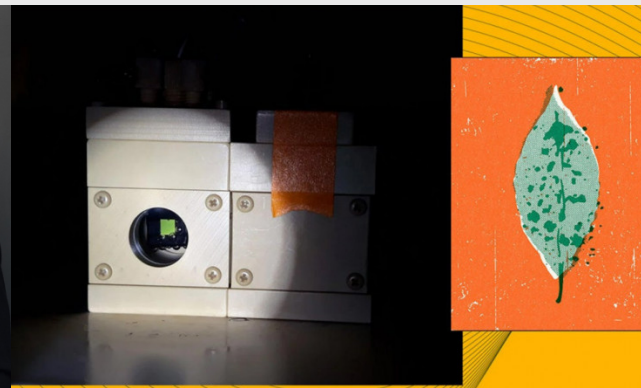
## ENERGY



### New Technique Turns Ordinary Rocks Into Carbon-Capturing Machines

The method speeds up CO2 absorption- potentially helping the fight against climate change.

[gizmodo.com](#)



### Scientists Reveal "Artificial Leaf" That Turns Carbon Into Sustainable Fuels

Scientists have developed a new "artificial leaf" that removes CO2 from the air and turns it into sustainable fuel.

[futurism.com](#)



## VIRTUAL AND AUGMENTED REALITY



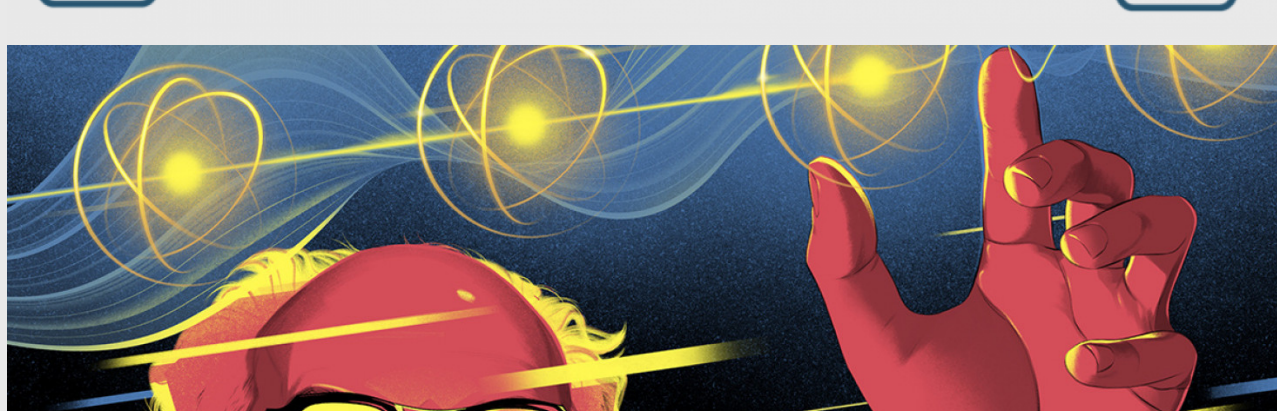
### How NASA is using virtual reality to prepare for science on Moon

When astronauts walk on the moon, they'll serve as the eyes, hands, and boots-on-the-ground interpreters supporting the broader teams of scientists on Earth. NASA is leveraging virtual reality to provide high-fidelity, cost-effective support to prepare crew members, flight control teams, and...

[phys.org](#)



## IN THE LAB



### How Hans Bethe Stumbled Upon Perfect Quantum Theories

Quantum calculations amount to sophisticated estimates. But in 1931, Hans Bethe intuited precisely how a chain of particles would behave - an insight that had far-reaching consequences.

[quantamagazine.org](#)



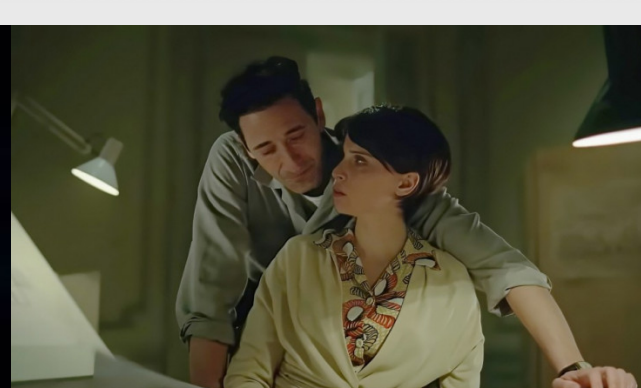
## AFTER HOURS



### The Mystery of the World's Oldest Writing System Remained Unsolved Until Four Competitive Scholars Raced to Decipher It

In the 1850s, cuneiform was just a series of baffling scratches on clay, waiting to spill the secrets of the ancient civilizations of Mesopotamia

[smithsonianmag.com](#)



### Oscars Consider Requiring Films to Disclose AI Use After 'The Brutalist' and 'Emilia Pérez' Controversies

Advancing AI tech can be used in a wide range of ways in motion picture production.

[variety.com](#)

