

FAST COMPANY

Next Big Things in Tech 2024

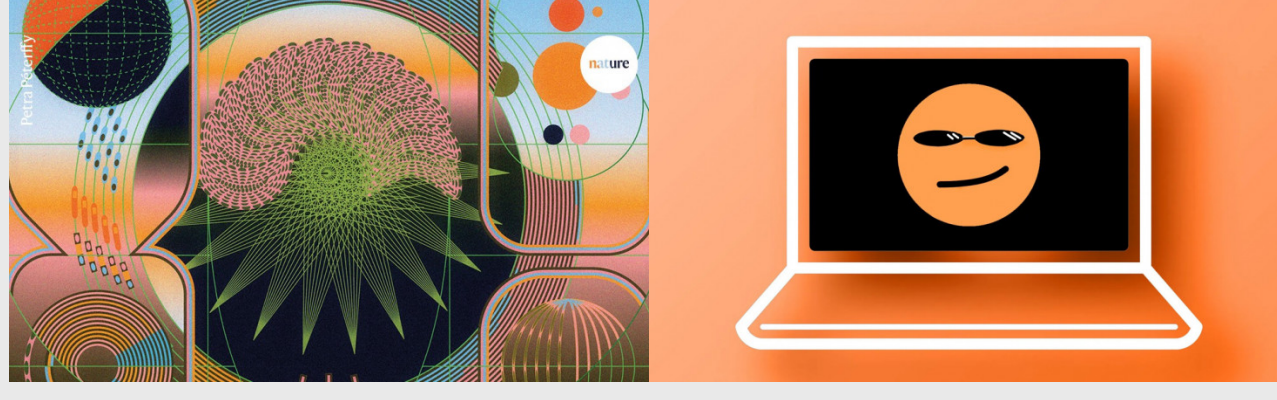
Next Big Things in Tech 2024

From AI-generated video breakthroughs to greener bitcoin mining techniques, these technologies are shaping the future of our economy-and our world at large.

FC fastcompany.com



ARTIFICIAL INTELLIGENCE



How close is AI to human-level intelligence?

Large language models such as OpenAI's o1 have electrified the debate over achieving artificial general intelligence, or AGI. But they are unlikely to reach this milestone on their own. Large language models such as OpenAI's o1 have electrified the debate over achieving artificial general...

nature.com

Explainer: What Are AI Agents?

What exactly are AI agents, and how does agentic AI work? This explainer provides a rundown on this hot topic within artificial intelligence. AI agents can make people more efficient and productive by taking charge of mundane tasks, and acting autonomously to get them done. But risks remain...

spectrum.ieee.org



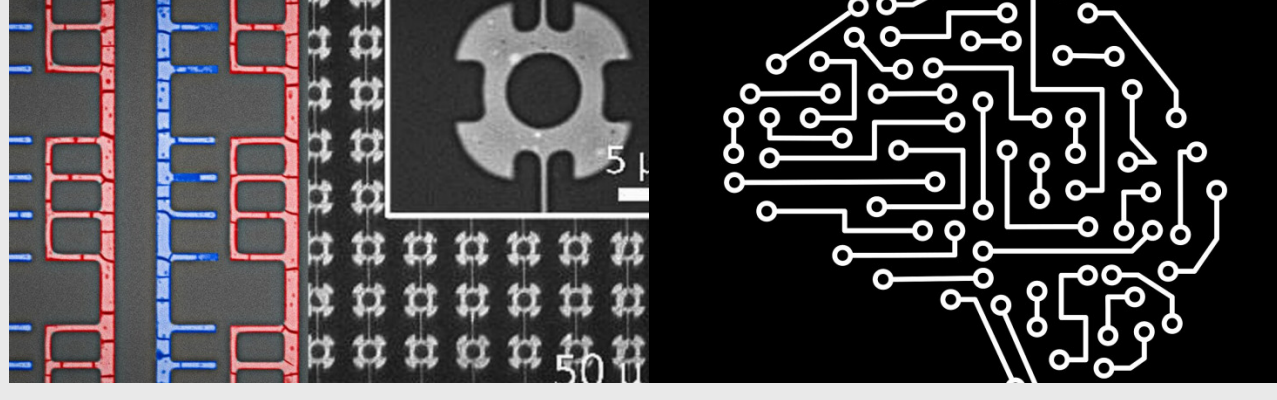
Generative AI Is Still Just a Prediction Machine

To understand the strategic implications of AI's new capabilities, managers need a framework for when AI will be helpful and when it might fail. Under the hood, generative AI tools are still prediction engines, enabled by improvements in computational statistics and large amounts of data.

hbr.org



INFRASTRUCTURE



'Self-assembling' electronics: A wild new manufacturing process

A remarkable proof-of-concept project has successfully manufactured nanoscale diodes and transistors using a fast, cheap new production technique in which liquid metal is directed to self-assemble into precise 3D structures.

newatlas.com

Photonic processor could enable ultrafast AI computations with extreme energy efficiency

The deep neural network models that power today's most demanding machine-learning applications have grown so large and complex that they are pushing the limits of traditional electronic computing hardware.

phys.org



The Datacenter Is The Accelerator

There is a fractal nature in modern computing that is only becoming more and more apparent as workloads have long since outstripped the capacity of a

nextplatform.com



LIFE SCIENCES



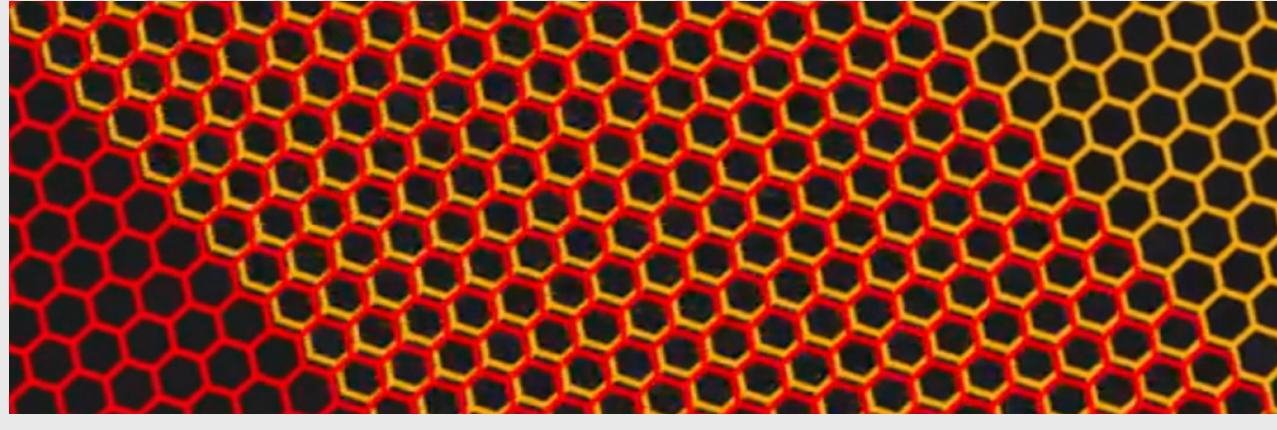
How Tech Is Breaking the Rules of Biology | Posthuman with Emily Chang

From birth to death, tech is stretching the boundaries of biology. In this episode of Posthuman, we explore the discoveries that could transform reproduction, healthcare and how we die. Technology that once seemed like science fiction is rapidly becoming reality, transforming the very essence of...

youtube.com



ADVANCED MATERIALS



Exotic New Superconductors Delight and Confound

Three new species of superconductivity were spotted this year, illustrating the myriad ways electrons can join together to form a frictionless quantum soup.

quantamagazine.org



ARTIFICIAL SENSING



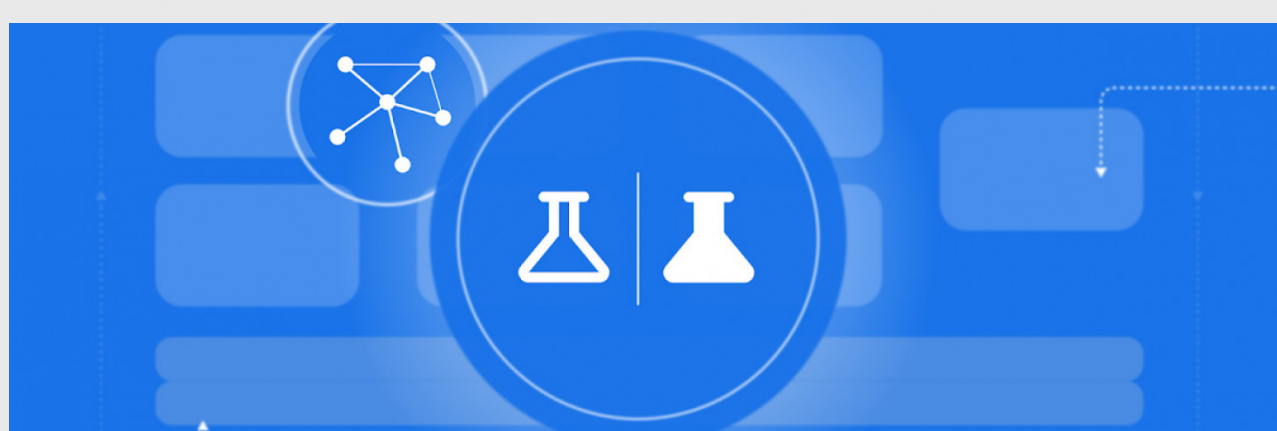
DeepMind AI weather forecaster beats world-class system

Artificial-intelligence model provides forecasts 15 days out, as well as the probability of accuracy. And it does so faster than the best operational model. Artificial-intelligence model provides forecasts 15 days out, as well as the probability of accuracy. And it does so faster than the best...

nature.com



IN THE LAB



A new golden age of discovery

In this essay, we take a tour of how AI is transforming scientific disciplines from genomics to computer science to weather forecasting. Some scientists are training their own AI models, while...

deepmind.google



AFTER HOURS



Deus in machina: Swiss church installs AI-powered Jesus

Peter's chapel in Lucerne swaps out its priest to set up a computer and cables in confessional booth

theguardian.com

Australia's under-16 social media ban sparks anger and relief

In Sydney, reaction to the ban was mixed. Children, meanwhile, said they would try to find a way around the ban.

reuters.com

