

**The World's Most Innovative Companies of 2024**

Fast Company's annual ranking of the world's most innovative companies covers 58 industries and sectors, from advertising to video

[FC fastcompany.com](https://www.fastcompany.com)



**ARTIFICIAL INTELLIGENCE**



**8 Google Employees Invented Modern AI. Here's the Inside Story**

They met by chance, got hooked on an idea, and wrote the "Transformers" paper—the most consequential tech breakthrough in recent history.

[wired.com](https://www.wired.com)

**Talking about Large Language Models**

Interacting with a contemporary LLM-based conversational agent can create an illusion of being in the presence of a thinking creature. Yet, in their very nature, such systems are fundamentally not like us. The advent of large language models (LLMs) such as Bert12 and GPT-228 was a game-changer for...

[arxiv.org](https://arxiv.org/abs/2305.18250)



**ROBOTICS**



**Understanding humanoid robots**

Robots made their stage debut the day after New Year's 1921. More than half-a-century before the world caught its first glimpse of George Lucas' droids, a

[techcrunch.com](https://www.techcrunch.com)

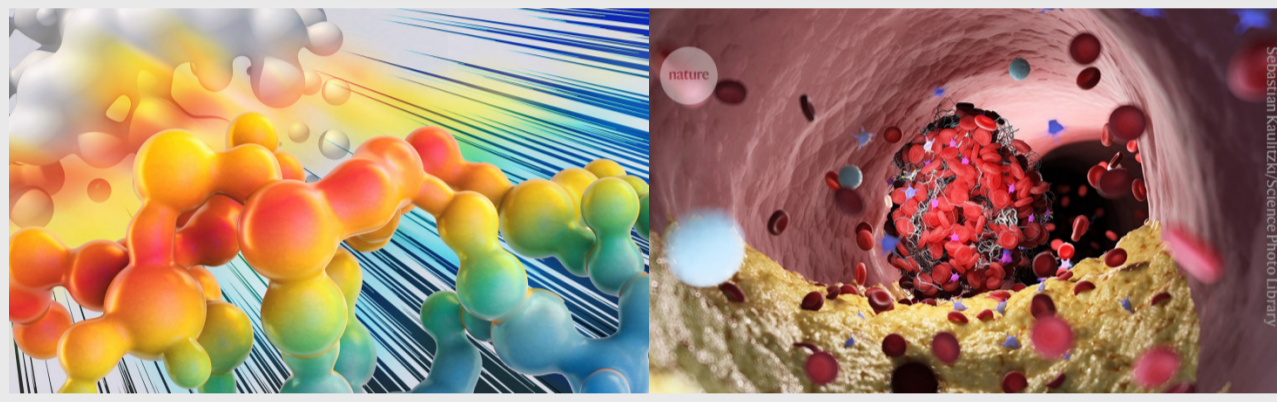
**Scientists Are Putting AI Brains Inside Robot Bodies. What Could Possibly Go Wrong?**

The effort to give robots AI brains is revealing big practical challenges—and bigger ethical concerns

[sciencemag.org](https://www.sciencemag.org)



**LIFE SCIENCES**



**A new computational technique could make it easier to engineer useful proteins**

A new computational approach developed at MIT makes it easier to predict mutations that will lead to optimized proteins, based on a relatively small amount of data.

[news.mit.edu](https://news.mit.edu)

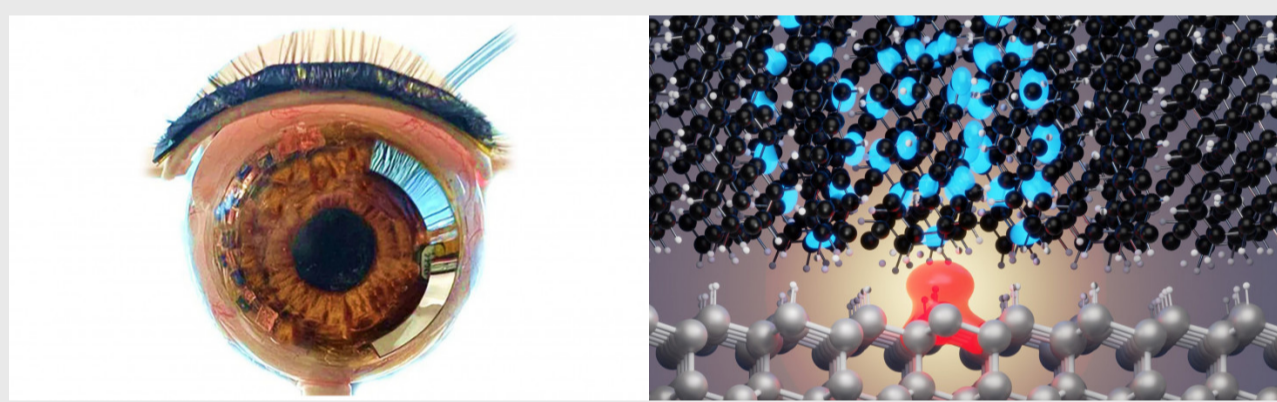
**Gut bacteria break down cholesterol - hinting at probiotic treatments**

Species in the human microbiome have enzymes that can metabolize a potentially dangerous lipid. Species in the human microbiome have enzymes that can metabolize a potentially dangerous lipid.

[nature.com](https://www.nature.com)



**ENERGY**



**Blink to Generate Power For Smart Contact Lenses**

A dual-mode power pack harvests energy from light and from tears

[spectrum.ieee.org](https://spectrum.ieee.org)

**Unlocking Solar Secrets: New Research Paves the Way for Efficiency Gains**

Researchers at the University of Paderborn are enhancing the efficiency of solar cells through the strategic incorporation of imperfections in the system's design. Since the beginning of the 21st century, Germany has seen significant progress in the realm of solar energy. In 2000, solar power contr

[scitechdaily.com](https://www.scitechdaily.com)



**INFRASTRUCTURE**



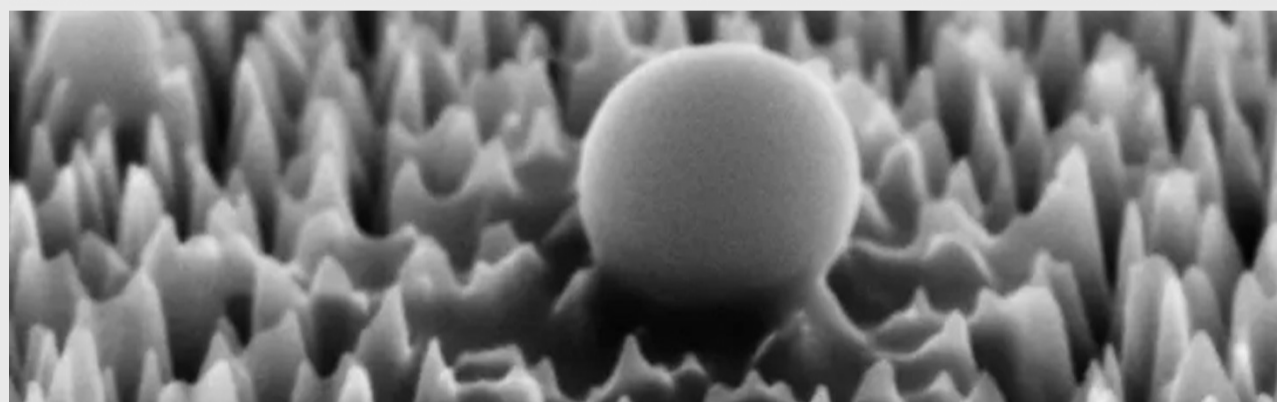
**Blazing bits transmitted 4.5 million times faster than broadband**

An international research team has sent an astounding amount of data at a nearly incomprehensible speed. It's the fastest data transmission ever using a single optical fiber and shows just how speedy the process can get using current materials.

[newatlas.com](https://www.newatlas.com)



**ADVANCED MATERIALS**



**New material neutralizes 96-percent of virus cells using nanospikes**

This 'smooth' silicon wafer is actually covered in very tiny, virus-slaying needles.

[popsci.com](https://www.popsci.com)



**IN THE LAB**



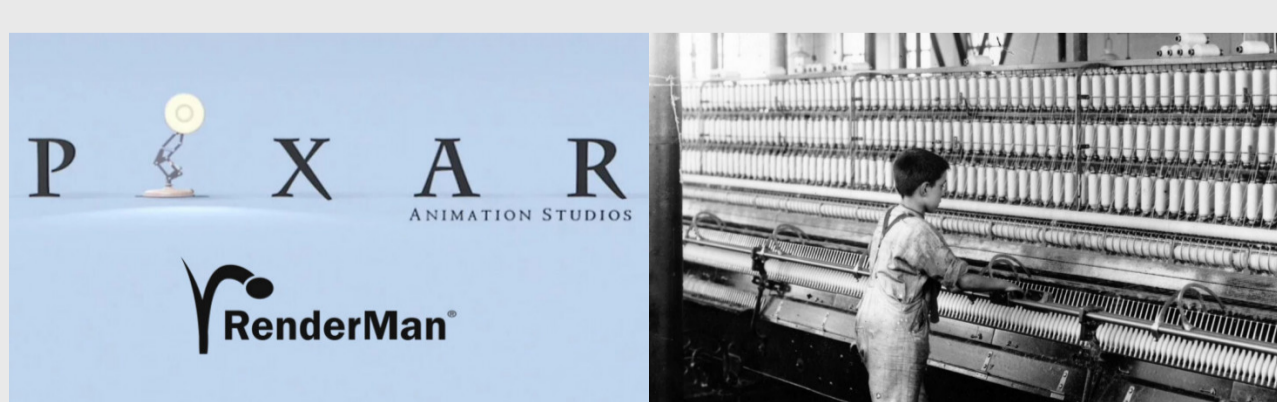
**Want to break the geekiest world record of them all? Here's how engineers spent 75 days to calculate Pi to 105 trillion digits - just in time for Pi day**

They broke their previous record of 100 trillion digits

[techradar.com](https://www.techradar.com)



**AFTER HOURS**



**The Story Behind Pixar's RenderMan CGI Software**

Used to create Toy Story, the tools revolutionized animation

[spectrum.ieee.org](https://spectrum.ieee.org)

**10 Modern 'Mechanical Turks': When Automation Is Just Humans in Disguise**

Several modern feats of automation have proven to be little more than humans in disguise.

[gizmodo.com](https://www.gizmodo.com)

