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BIG PROBLEM**

Can DNA storage
fill the memory gap?
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REPLACEMENT?**

Getting the bugs out
of carbon nanotubes
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Full-duplex wireless
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IS GETTING SLOWER**

But we have
a plan to fix it
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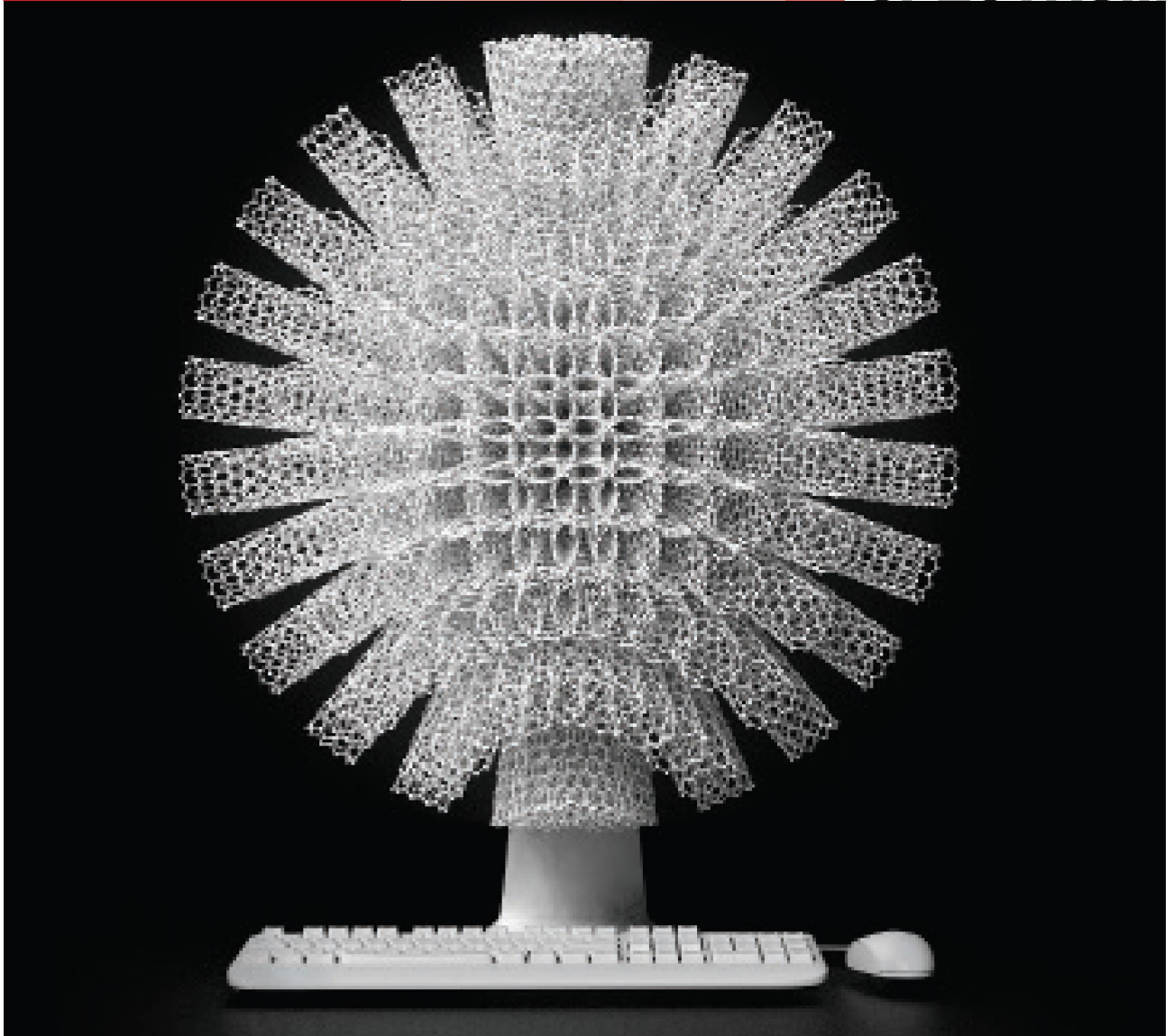
IEEE
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POLICE BODY CAMS

sometimes do
more harm than
good—but it's
a problem that
tech can solve

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COMPUTING WITH CARBON NANOTUBES

The tiny carbon nanocylinders are ready to compete with silicon.

BY MAX SHULAKER, H.-S. PHILIP WONG
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The Puzzle of Police Body Cams

For reasons that remain unclear, these body cameras have produced mixed results.

By Barak Ariel

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One Chip, Twice the Bandwidth

Speaking and listening on one channel, through one antenna, using one chip.

By Harish
Krishnaswamy &
Gil Zussman

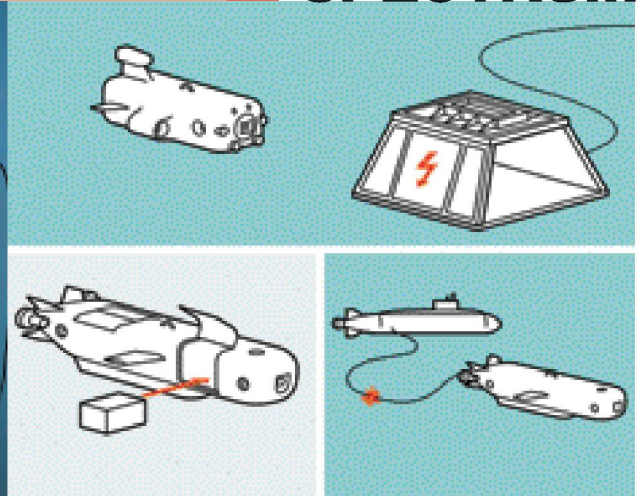
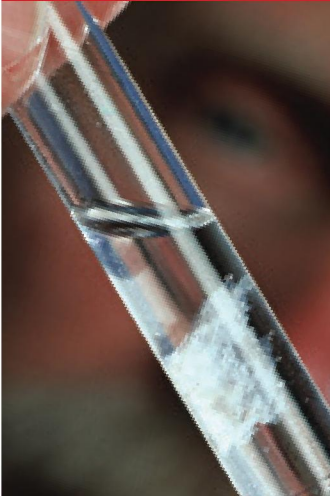
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Why Wi-Fi Stinks—And How to Fix It

Smarter routers can get you out of traffic jams on the wireless highway.

By Terry Ngo

On the cover Illustration for *IEEE Spectrum* by Flavio Montiel Cezaretti



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Spectrum.ieee.org

Beneath the Waves

Autonomous underwater vehicles are catching up with their aerial and terrestrial counterparts.

See how with *IEEE Spectrum's* interactive infographic.

<http://spectrum.ieee.org/auv0716>

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- ▶ How Simulation Is Assisting With the Adoption of Internet of Things Through the Development of Smart Medical Implants—Available On Demand
- ▶ PTC and Scrum Inc. Present: PTC AgileWorx for Product Engineering Teams—Available On Demand
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The Institute

Available at theinstitute.ieee.org

- ▶ **MADE-TO-ORDER CLOTHES** Nearly 10 percent of all unsold new clothing is thrown away. The founders of Unmade Studios aim to eliminate that waste with their suite of digital fabrication software for industrial knitting machines. The goal is to produce high-quality, made-to-order clothing in small batches for about the same price as mass-produced garments.
- ▶ **VIRTUAL BEAUTY** Senior Member Parham Aarabi is founder and CEO of ModiFace, the world's largest and most advanced virtual-reality makeover platform. The company's technology is used in many of today's skin-analysis and facial-visualization systems.
- ▶ **CONNECTING CONTINENTS** It's been 150 years since the first successful transatlantic cable was activated, reducing the time it took to send messages between Europe and North America from weeks to seconds.

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