

FORM DOES THE WORK

Glasses bring computing into the room. Robot bodies steer a collective. Crochet defines sensing, a hydrogel repairs its own touch, and a plug becomes the most consequential part of a wearable. Across scales, capability is moving out of instructions and into form.



MORPHOLOGY-LED PRODUCTS
AND INTERFACES

The calmest interface may be the one whose geometry has already resolved part of the task.

01



Snap opened pre-orders for SPECS, its standalone see-through AR glasses, after a live launch in Los Angeles. The official product record specifies a 51-degree field of view, open-ear stereo, six microphones, hand tracking, and a 132- or 136-gram frame depending on size. Snap also positioned the glasses inside a broader system called Specs Intelligence, with navigation, communication, media, creation, and contextual assistance shown as uses. The product page promises an in-person preview beginning October 1; launch reporting noted a failed first attempt to start a YouTube video during the live demo. This is therefore a commercial launch with visible capability and visible friction—not proof that a face-worn computer has become effortless.

A QUESTION FOR DESIGN

THE FRAME BECOMES THE COMPUTER

Can a spatial computer make its weight, field of view, social signaling, and moments of failure legible enough that wearing it feels like choosing a tool rather than accepting a system? ^{*1} ^{*2}

02



A Nature Communications study placed Kilobots inside exoskeletons whose geometry changed how each robot aligned with external force. In a light-seeking task, the contrast between two morphologies became pronounced when the robots could slow down but were not allowed to stop. A physical model then showed that efficient collective motion depended on tuning self-alignment around a narrow useful range; other settings produced different group behaviors. The result is not a general swarm controller. It is a sharper demonstration that control policy and body design are coupled—and that changing shape can alter what the same limited controller can achieve.

A QUESTION FOR DESIGN

THE BODY STEERS THE SWARM

Where could product geometry carry a simple behavioral bias so that coordination needs less sensing, computation, and correction? ^{*3}

03



Researchers at EPFL presented Hooked, a crocheted garment in which stitch-by-stitch construction defines both the textile and its capacitive sensing geometry. The prototype distinguishes proximity, soft contact, and pressure, maps capacitance to integrated light feedback, and uses adaptive baseline calibration to remain stable across positions and environments. For pressure estimation, the team reports 87.1 percent test accuracy from an LSTM model. Four hand-drawn patterns demonstrate that electrode layout can remain part of aesthetic authorship. This is a conference prototype, not a production garment, but it makes fabrication itself the configuration interface.

A QUESTION FOR DESIGN

THE STITCH SETS THE SENSOR

Could a craft pattern become a readable functional specification—letting makers tune sensing through form without inheriting a separate layer of electronics complexity? ^{*4}

04



An Advanced Science paper reports a GelMA hydrogel engineered with polyvinyl alcohol, acrylic acid, sodium tetraborate, and glycerol to address damage, drying, and freezing in soft tactile sensors. The material stretched at least 220 percent, retained 81 percent moisture after ten days, and autonomously healed between -40 and 25 degrees Celsius. Built into an ionotronic pressure sensor, it covered 0–25 kilopascals and recovered its full sensing range after repair in the reported tests. The evidence remains laboratory-scale, but the notable move is integration: durability is treated as material behavior, not as maintenance delegated to the wearer.

A QUESTION FOR DESIGN

TOUCH REPAIRS ITS SURFACE

If a soft interface can restore both structure and signal after damage, what failures should still be exposed so repairability does not become invisible uncertainty? ^{*5}

05



A Microsystems & Nanoengineering study moved a sweat-sensing platform toward ordinary manufacturing by focusing on the soft-to-rigid junction. Its flexible circuit uses ENIG-finished contacts, a 0.1-millimeter polyimide stiffener, and a plug-and-play metal connection between the disposable sensing front end and reusable electronics. A carbon transducer shields the gold from chloride-rich sweat. The system measured lactate, sodium, and sweat rate and maintained 51 minutes of uninterrupted monitoring during vigorous aerobic and anaerobic exercise. The personalized exercise zones are still a proof of concept; the more mature contribution is a physical interface designed for replacement, reuse, and motion.

A QUESTION FOR DESIGN

THE CONNECTOR MAKES IT WEARABLE

Could a deliberate connector make a wearable easier to trust, service, and replace than a seamless object whose disposable and durable parts are fused together? ^{*6}

AUXETIC LENS

EXPAND WITHOUT ADDING WEIGHT.

The useful future is not the one with the most technology. It is the one that adapts without transferring its complexity to the person.

01

Which decisions belong in software, and which become calmer when geometry, material, or assembly has already made them?

02

How can form carry useful bias without hiding limits, failure modes, or the possibility of human interruption?

03

When capability is distributed across replaceable parts, can the connection itself explain what lasts, what adapts, and what should be renewed?

04

Could fabrication become an authoring language that lets more people shape behavior without adding another interface?

Images: editorial illustrations, not prototype photography.

***1** SPECS.COM / 2026-09-16T23:40:22.398Z
SPECS — DESIGNED FOR REAL LIFE
[Open source ↗](#)

***2** ENGADGET.COM / 2026-09-16T15:00:00Z
SNAP SPECS LAUNCH 2026: LIVE UPDATES FROM CEO EVAN SPIEGEL'S KEYNOTE
[Open source ↗](#)

***3** DOI.ORG / 2026-09-16T12:15:31Z
LEVERAGING DESIGN FOR COLLECTIVE PHOTOTAXIS IN MORPHOLOGICAL SWARM ROBOTICS
[Open source ↗](#)

***4** DOI.ORG / 2026-09-16T20:25:36Z
HOOKEED: PROGRAMMABLE, CAPACITIVE SENSING THROUGH CROCHET AS A MEDIUM FOR GARMENTS WITH TACTILE INTERACTION
[Open source ↗](#)

***5** DOI.ORG / 2026-09-17T05:51:07Z
MECHANICALLY ROBUST, SELF-HEALABLE, AND CRYOTOLERANT GELMA HYDROGEL FOR WEARABLE TACTILE SENSORS WITH ENHANCED DURABILITY, LIFETIME, AND ENVIRONMENTAL STABILITY
[Open source ↗](#)

***6** DOI.ORG / 2026-09-16T10:47:23Z
A MECHANICALLY ROBUST WEARABLE SWEAT ANALYSIS PLATFORM WITH PLUG-AND-PLAY INTERCONNECTS FOR CONTINUOUS BIOMARKER PROFILING
[Open source ↗](#)
