D12 | Saturday/Sunday, February 18 - 19, 2023

GEAR & GADGETS

My Coach Is a Computer These new devices intervene when you're working out the wrong way MARTIN RAMIN/ THE WALL STREET JOURNAL (3) MIRROR IMAGE Fiture Core has a hidden sensor. \$1,195, Fiture.com; Legging, \$128, LiveTheProcess.com

By Ashley Mateo

MAGINE HOISTING a pair of heavy dumbbells off the floor in a sweaty gym or studio class: "Keep your back straight!" a trainer might bark, or "squeeze your glutes!" When you're working out at home, by contrast, no one tells you what you might be doing wrong.

Enter a new class of athome fitness equipment that monitors your movements and can correct you in the moment. These devices use a type of artificial intelligence called computer vision, a field related to how machines interpret photos and videos. A company will

train its software to understand the mechanics of how the body moves, then equip it to identify proper form.

As you perform a work-

out with Nautilus's JRNY tablet app and a supported set of dumbbells, for example, a camera tracks your body—displayed as a stick figure on the screen's top corner—and delivers audio cues (such as "Look forward and keep your neck aligned," if you're in a squat) that tell you how to adjust your movements. (Generally, you need about 4.5 feet by 6 feet of unobstructed space to "train" a camera via a few basic poses—like standing with arms overhead and laying flat with arms and legs extended—so it can properly detect your movements.)

Some machines use input from live experts to determine correct form, but others, like the workout mirror

This at-home fitness equipment monitors you and can correct you in the moment.

Fiture, look for trends in data. Fiture uses a sensor to map points on your body against millions of movements in its database to formulate advice in real time.

Similarly, Tempo Studio, an all-in-one smart home gym, houses a motion-sensor camera that homes in on essential joints; with each rep, AI measures range of motion to provide visual insights and personalized technique tips. Ali Van Straten, 34 years old, a blogger from Plymouth, Minn., said that when she's lifting weights overhead, the critique Tempo most often offers is that she's leaning backward, "which is totally in line with what my physical therapist told me. As soon as I engage my core, like the machine and my PT suggest, the Tempo tells me 'Good job.'"

Though most such AI systems spit out feedback on

your form in real time, some platforms also tap into a predictive element. Every time you perform a workout, these machines ingest information-metrics including number of reps, weights used and heart rate—that helps it recommend what you should do next, said Jerrold M. Jackson, the head of Machine Learning and Data at Exos, a performance brand which trains professional athletes and corporate clients.

In the case of JRNY and Tempo, AI uses this types of information to suggest what weights you should use next. Peloton Guide's Movement Tracker, on the other hand, shows what muscles you worked most after you finished exercising and then recommends additional classes to round out a whole-body routine.

"The AI system takes into account the workouts I've done before, so if I've been focusing on upper body strength, it might recommend a lower body strength class to help build balance and symmetry," said Michael Hamlin, 35, a certified trainer from Calgary, Alberta.

This ensures your workouts are always evolving. but it doesn't necessarily mean that an AI-enhanced tool can replace your coach. As Mr. Jackson points out, machine-learning models, unlike human trainers, treat all people as generic, rather than individuals with their own needs and quirks.

Just think about everything you bring to a training session that software wouldn't know. Did you tweak your shoulder while carrying a heavy box? Did you recently get your heart broken, leaving you sluggish and distracted? In these instances, AI could tell you what you're doing wrong, but it can't sympathize.

All Eyes on You Equipment that harnesses artificial intelligence to help you improve your workouts



SQUAT CORRECTED Bowflex SelectTech 552 Dumbbells, \$429, Bowflex.com





Peloton Guide, \$295, One.Peloton.com

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Netflix and Chilly Cinematic Guidance

Sure, ChatGPT is a capable communicator. But can it pick movies?

Wei Xu, an interactive

MORE OFTEN than I like, after scanning the endless carousels on streaming apps, I find myself re-watching "Seinfeld." I attribute this to a combo of laziness and mediocre recommendation engines, which rarely highlight anything I actually want to watch.

It's a problem that seemed custom-designed for ChatGPT, the bot made by Microsoftbacked artificial intelligence research firm, OpenAl. Over 100 million people have tried Chat-GPT since its launch in November, posing it tasks as disparate as writing English essays and negotiating down internet bills. By comparison, "What movie should I watch?" seemed simple.

I told ChatGPT I enjoyed the 2013 film "Her," whose protagonist develops a relationship with a virtual assistant. It spewed out a list of sci-fi titles like "Blade Runner 2049" and "Ex Machina." "These movies," it typed, "explore the relationship between humans and artificial intelligence, touching on themes such as consciousness, identity and the nature of existence." (It gave no sign it saw the irony.)

computing professor at the Georgia Institute of Technology, explained how ChatGPT managed to produce a list of legitimately comparable movies in seconds. The software, she said, is trained to spot patterns within a massive amount of text data—over 500 GBs—it scrapes off the internet. When sniffing out cinematic cousins to "Her." it's likely consulting sources like Reddit threads, IMDB forums, even "Best of" lists from editorial outlets. Traditional recommendation engines, said Dr. Xu, don't have this access. This presents issues for ex-

isting discovery platforms like Letterboxd, a socialnetworking site for discussing movies, and Likewise, a content-recommendation service that draws on AI and human curators. Letterboxd cofounder Matthew Buchanan told me he's concerned by ChatGPT's lack of transparency. To get the info it uses to

make recommenda-

tions, it could be plagiarizing the work of Letterboxd users without providing credit. (OpenAI declined to comment for this article.)

For now, Mr. Buchanan says he's taking solace in the fact that ChatGPT's "anodyne" responses lack a human touch. I can't help but agree. The humor and strangeness of Letterboxd reviews can leave me excited to watch particular movies. (In reference to the cinematographer of "Blade Runner 2049," for instance, one Letterboxd reviewer wrote "I'm pregnant and the father is Roger Deakins' camera.) Chat-GPTs responses are usually

> reasonable, but they rarely surprise.

MORE HELPFUL

ROBOT APPS

Mem Al Intelli-

gently organizes

all your emails,

appointments

Descript Allows

vou to edit vid-

eos as a text

search engine

fetches one final

answer instead

of a list of links.

transcript.

Neeva This

and notes.

And because the bot is only trained on data that predates September 2021, it has some blind spots, though I haven't yet encountered these. In any case, the last time I settled in to watch a film, I knew exactly what to stream-I had to see what all the Roger Deakins fuss was about. -Shubham Agarwal