

AI ‘EMOTION RECOGNITION’ CAN’T BE TRUSTED

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As artificial intelligence is used to make more decisions about our lives, engineers have sought out ways to make it more emotionally intelligent. That means automating some of the emotional tasks that come naturally to humans — most notably, looking at a person’s face and knowing how they feel.

To achieve this, tech companies like Microsoft, IBM, and Amazon all sell what they call “emotion recognition” algorithms, which infer how people feel based on facial analysis. For example, if someone has a furrowed brow and pursed lips, it means they’re angry. If their eyes are wide, their eyebrows are raised, and their mouth is stretched, it means they’re afraid, and so on.

Clients can put this tech to use in a variety of ways, building everything from automated surveillance [systems](#) that look for “angry” threats to job interview [software](#) that promises to weed out bored and uninterested candidates.

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“Companies can say whatever they want, but the data are clear,” Lisa Feldman Barrett, a professor of psychology at Northeastern University and one of the review’s five authors, tells *The Verge*. “They can detect a scowl, but that’s not the same thing as detecting anger.”

The review was commissioned by the Association for Psychological Science, and five distinguished scientists from the field were asked to scrutinize the evidence. Each reviewer represented different theoretical camps in the world of emotion science. “We weren’t sure if we would be able to come to a consensus over the data, but we did,” Barrett says. It took them two years to examine the data, with the review looking at more than 1,000 different studies.

Their findings are detailed — they can be read in full [here](#) — but the basic summary is that emotions are expressed in a huge variety of ways, which makes it hard to reliably infer how someone feels from a simple set of facial movements.

“People, on average, the data show, scowl less than 30 percent of the time when they’re angry,” says Barrett. “So scowls are not *the* expression of anger; they’re *an* expression of anger — one among many. That means that more than 70 percent of the time, people do not scowl when they’re angry. And on top of that, they scowl often when they’re not angry.”