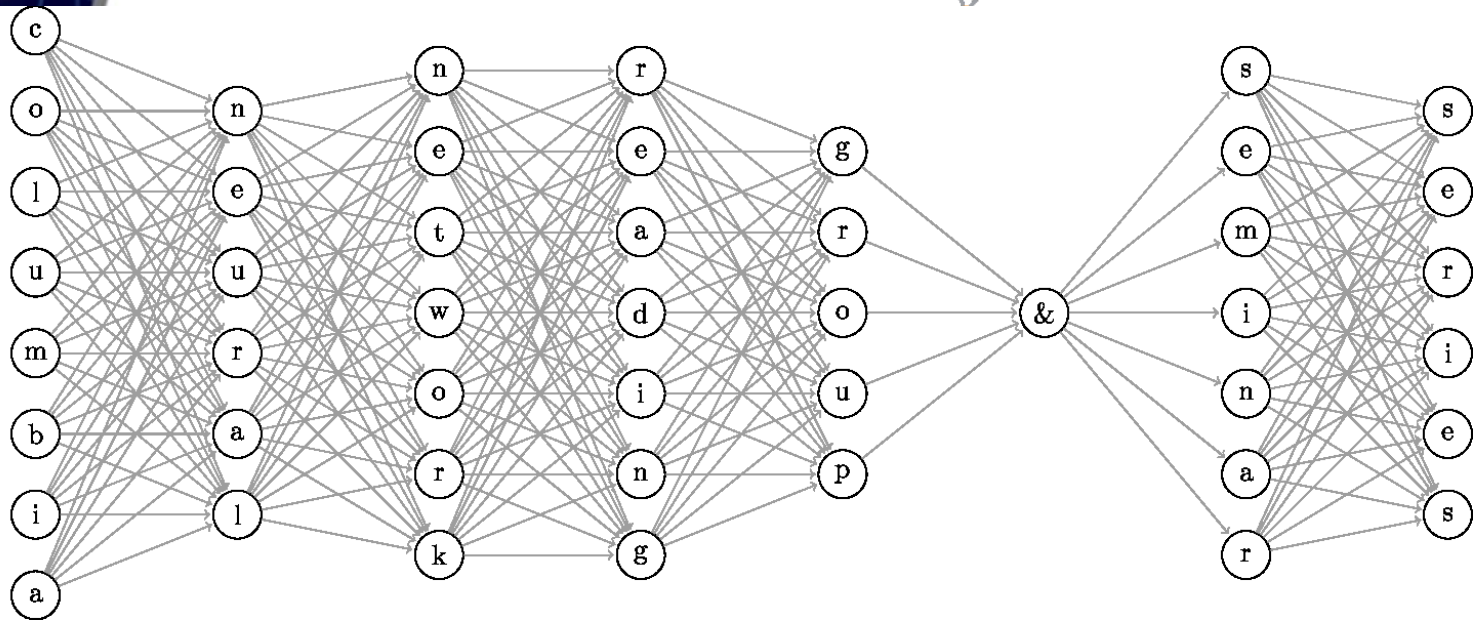
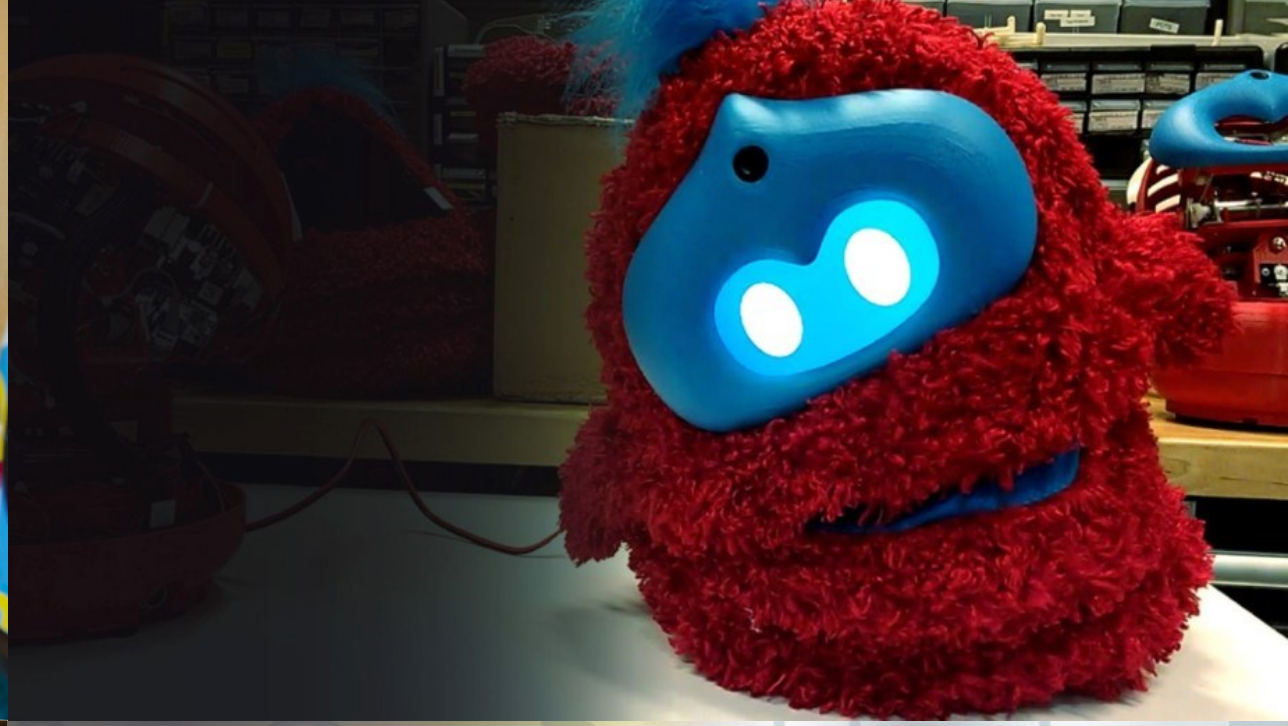
Beyond Artificial Intelligence …

May Amr
Director, Data acquisition and annotation

:) Affectiva

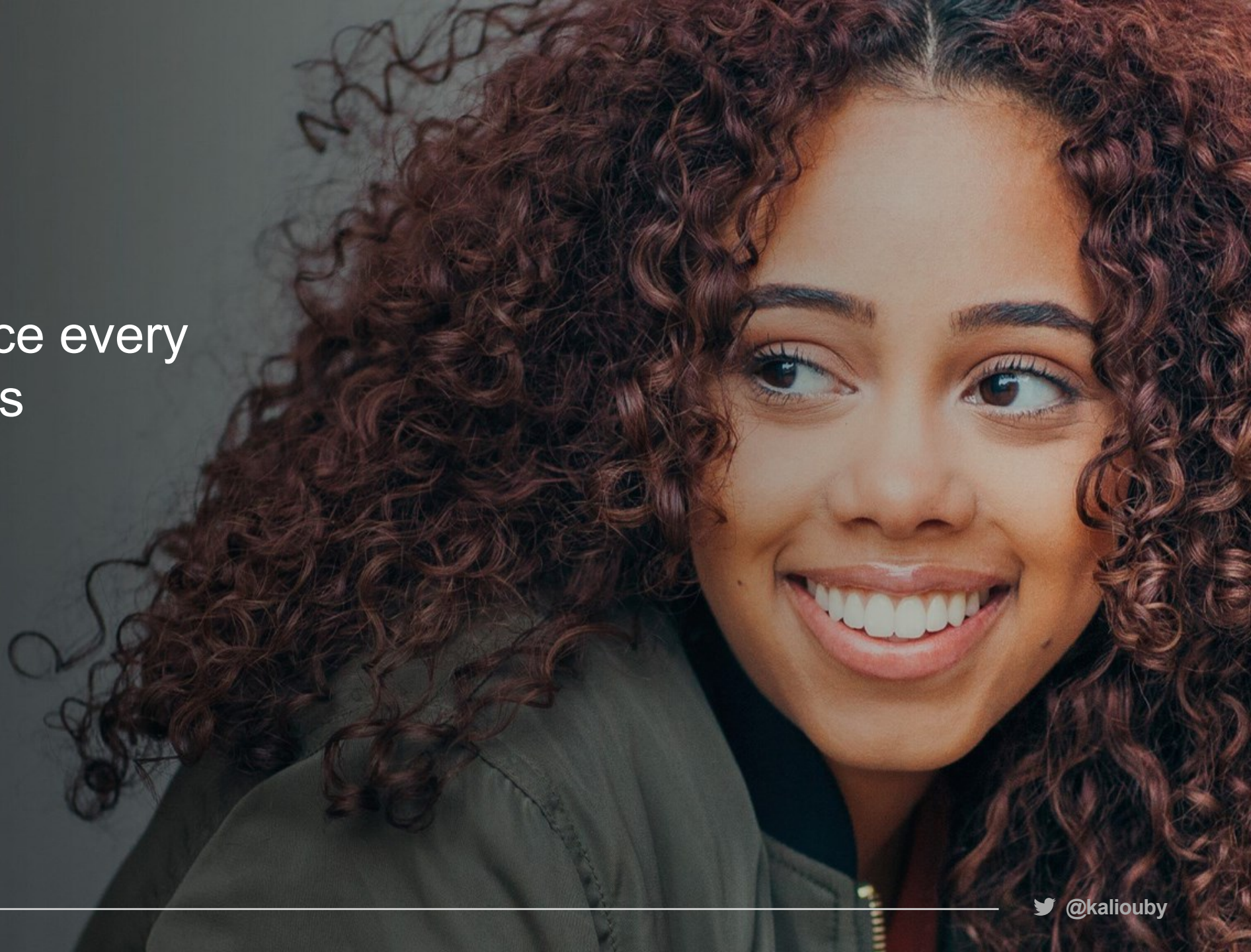
Human Brain Inspiring AI Scientists



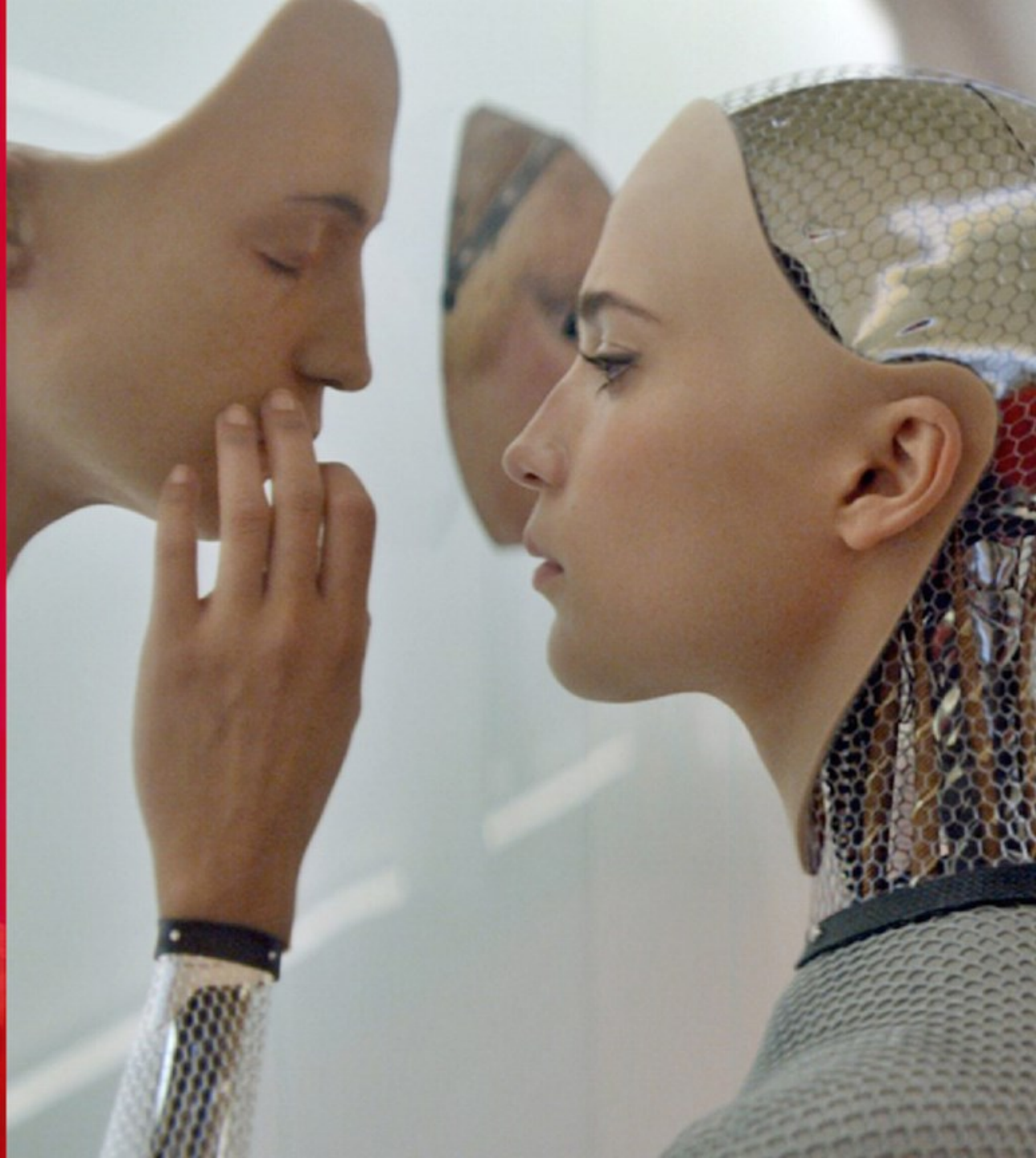


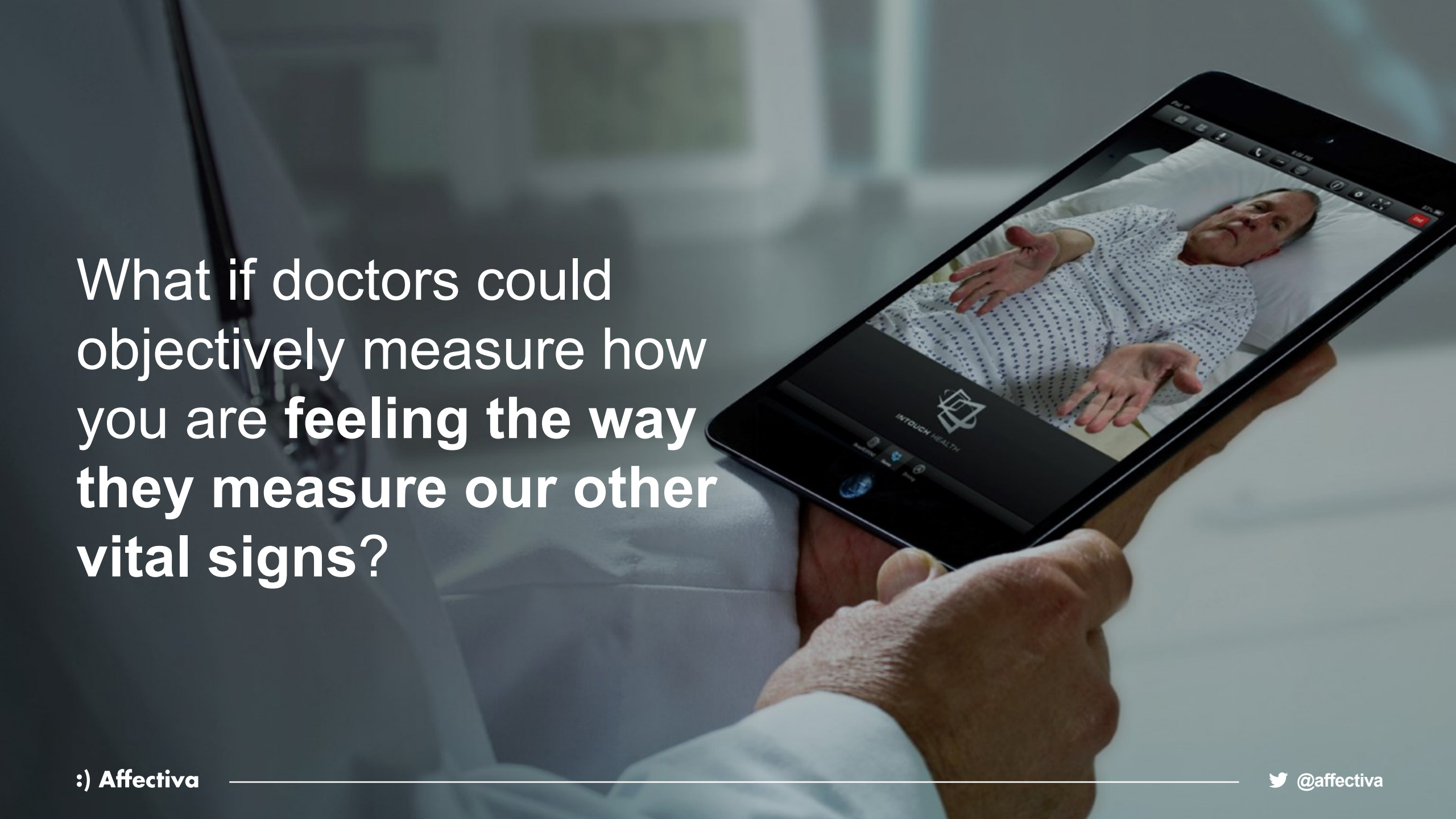
I'll be able to hear your tone of voice, understand how you're feeling, and detect any concerns that may be troubling you.
Hello, Norrie. Thank you for participating in this very important medical trial.
YES

Emotions influence every aspect of our lives



her
A SPIKE JONZE LOVE STORY




What if doctors could objectively measure how you are **feeling the way they measure our other vital signs**?

What if our cars knew we were getting angry and **could make our brakes more responsive**?

How do humans read emotions?

Emotion sensing is **highly complex. Humans interpret emotions by combining multiple channels:**

55%

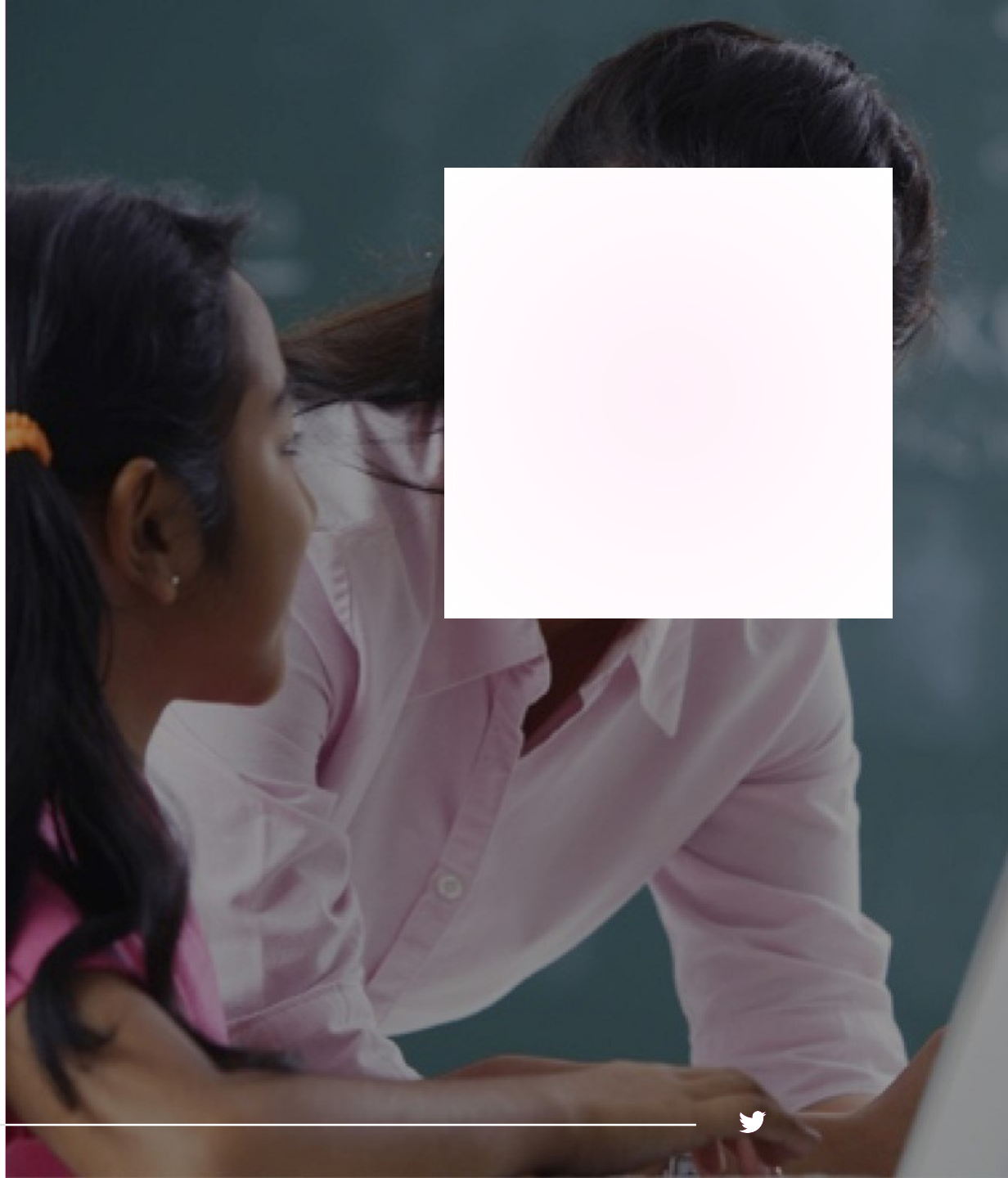
Facial expressions and gestures

38%

How the words are said

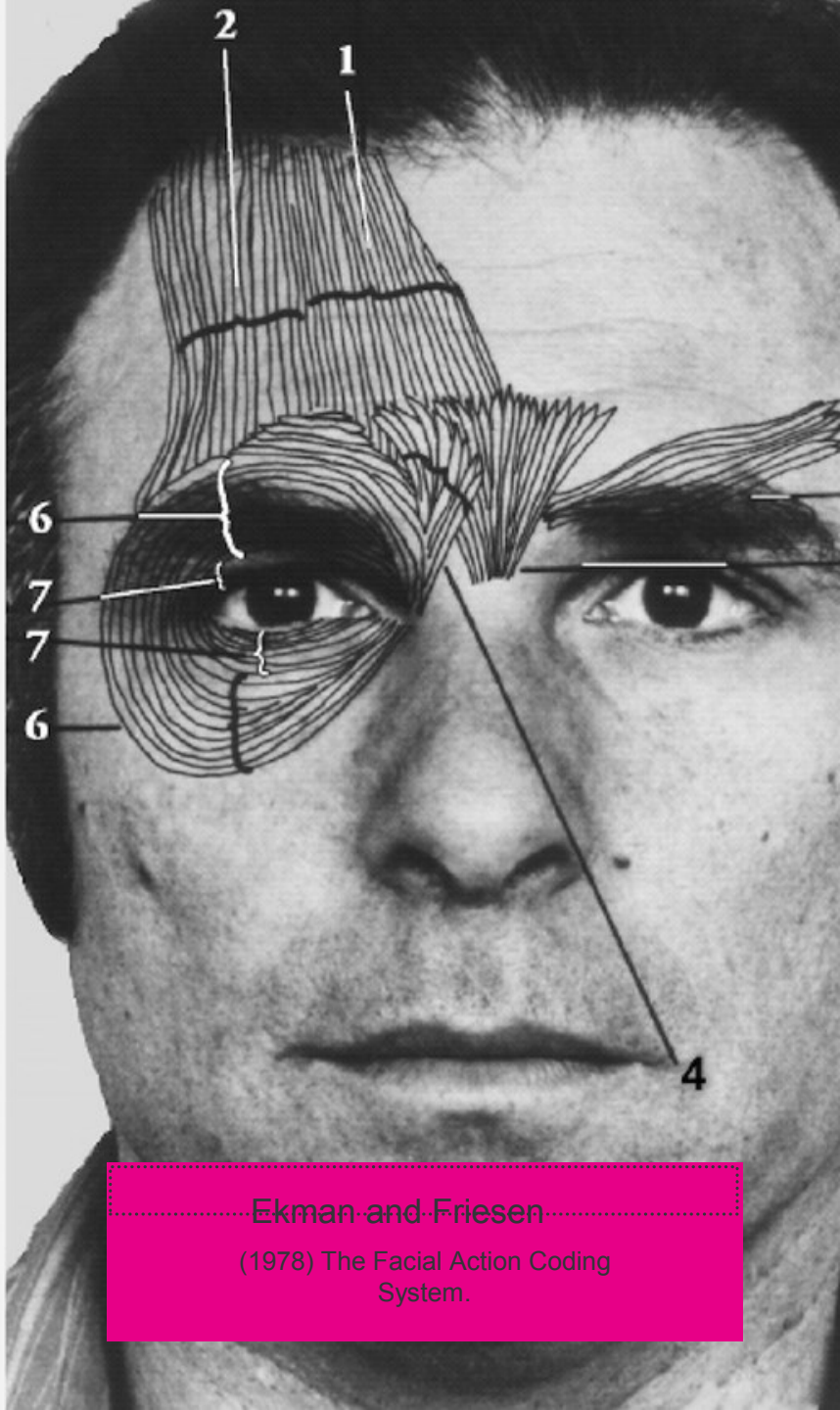
7%

The actual words



Duchenne de Boulogne

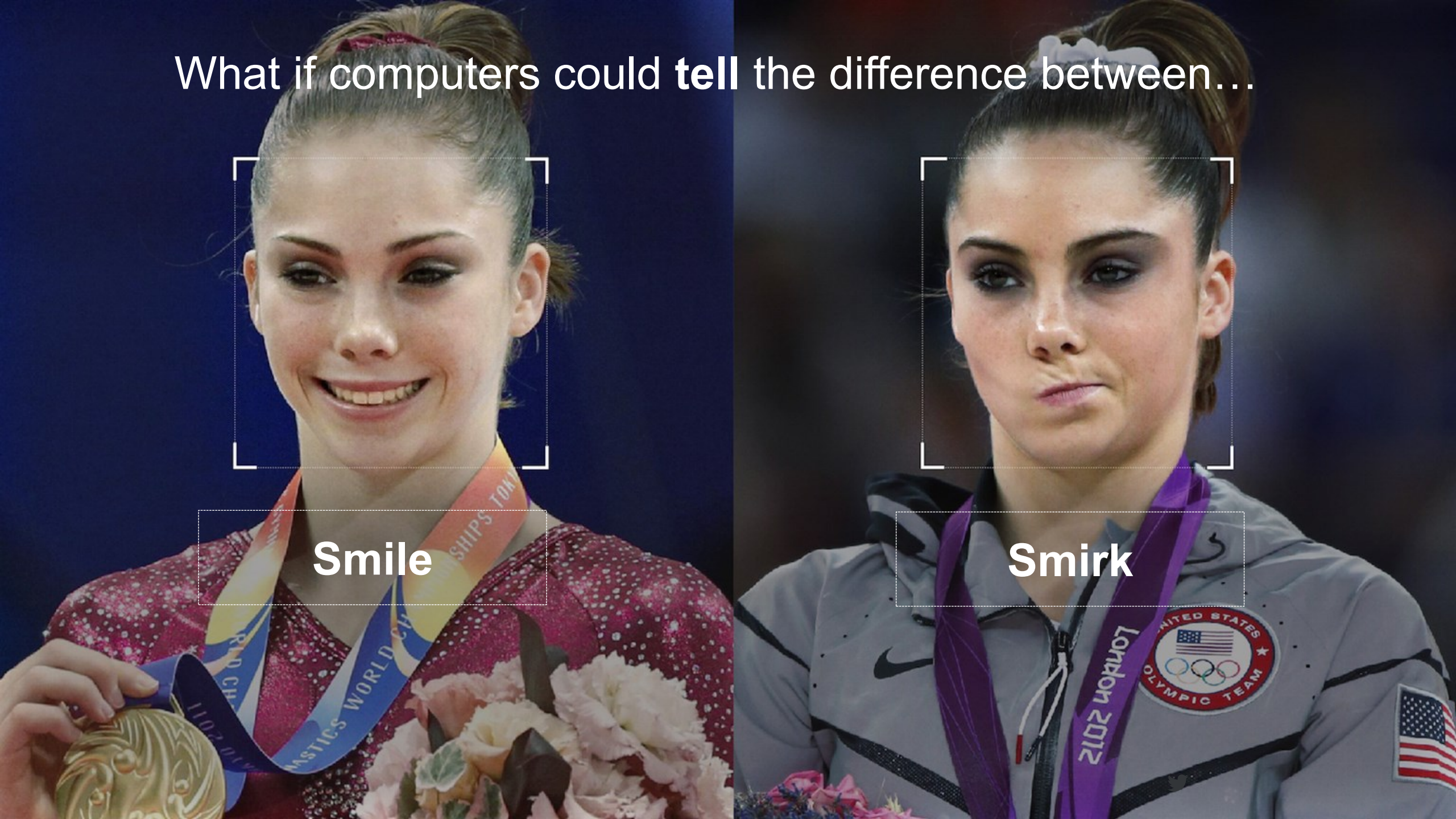
(1862) The Mechanism of Human Physiognomy.



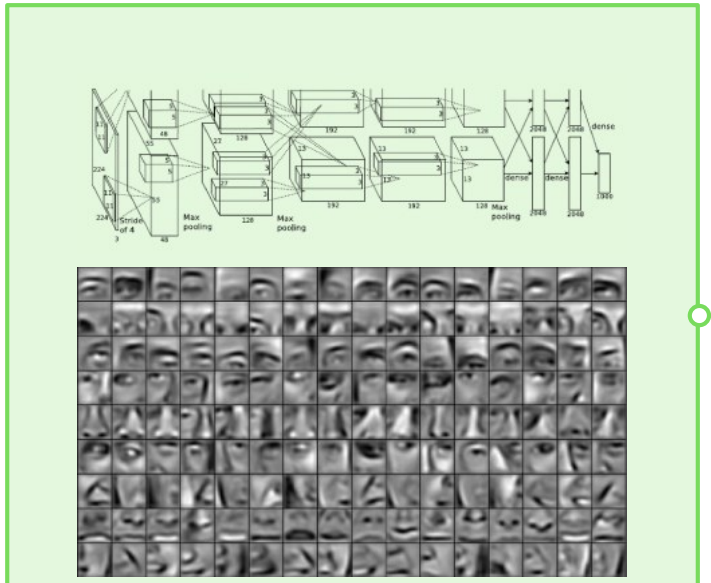
Ekman and Friesen

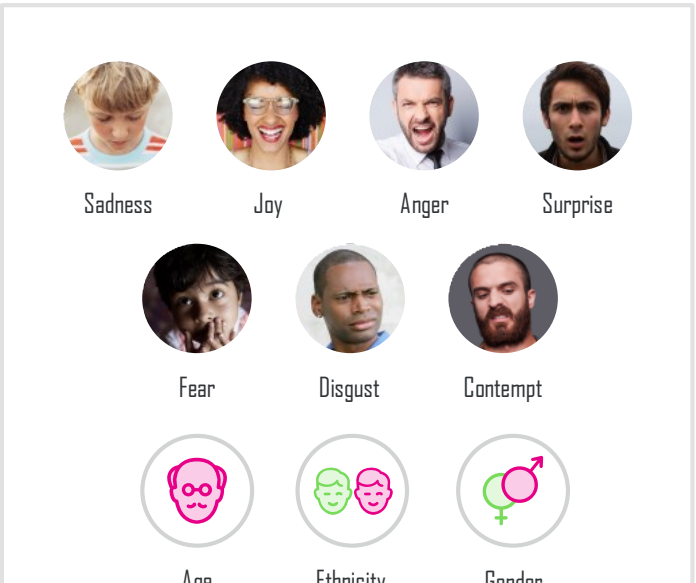
(1978) The Facial Action Coding System.

What if computers could **tell** the difference between…



Emotion AI platform built on **deep learning**



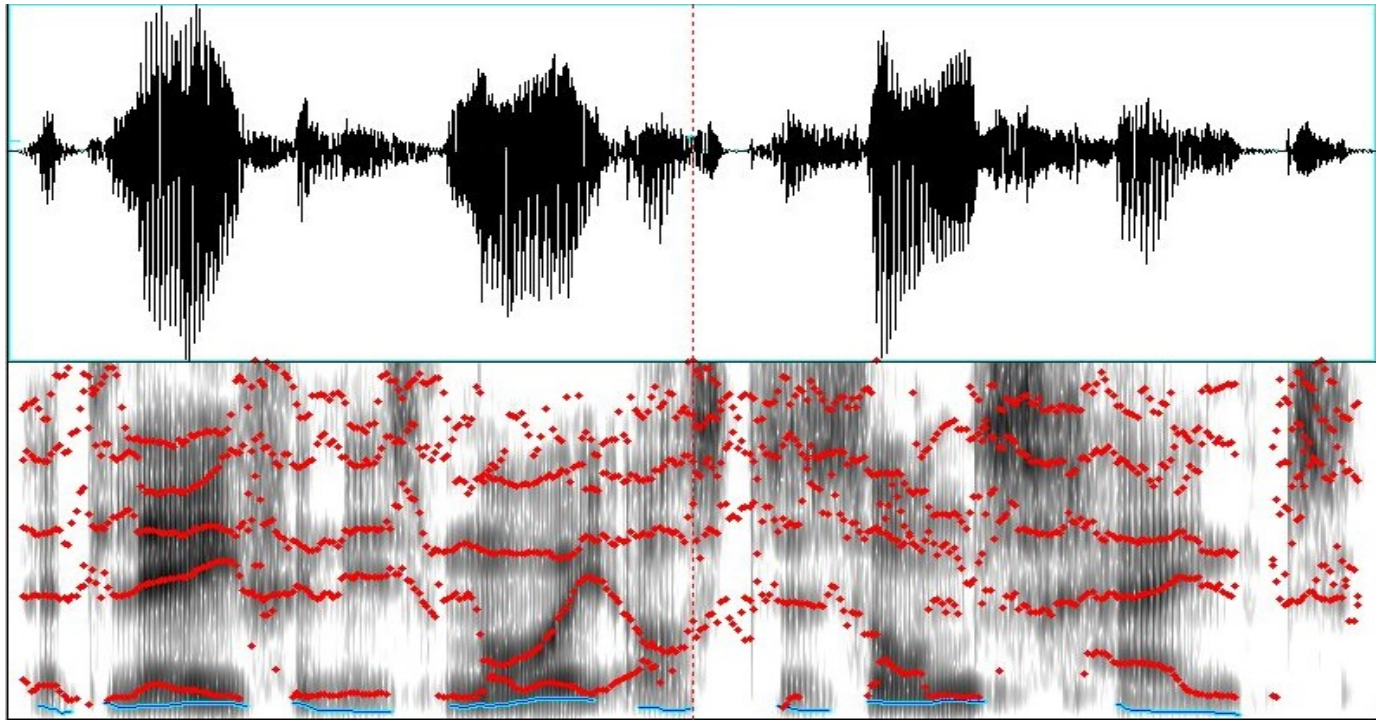


Input:
Labeled and unlabeled videos (+voice) data. Meta data. Latest training used 1M+ images.

Deep Neural Networks

Output:
23 Facial expressions
7 Emotions
Valence, Engagement, Attention, Age, Ethnicity, Gender

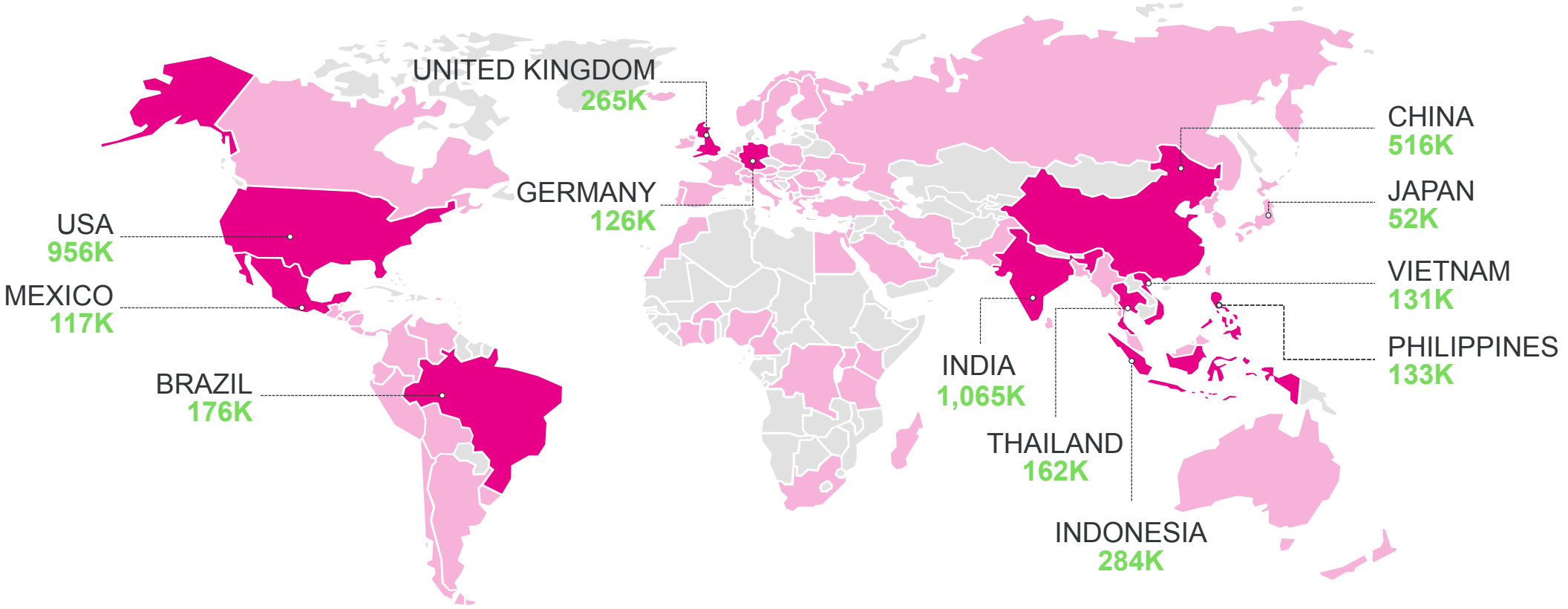
Emotion from Speech



World's largest **emotion data repository**

87 countries, 6M faces analyzed, 2B facial frames
Includes people emoting on device, mobile phone and while driving

Top Countries for Emotion Data

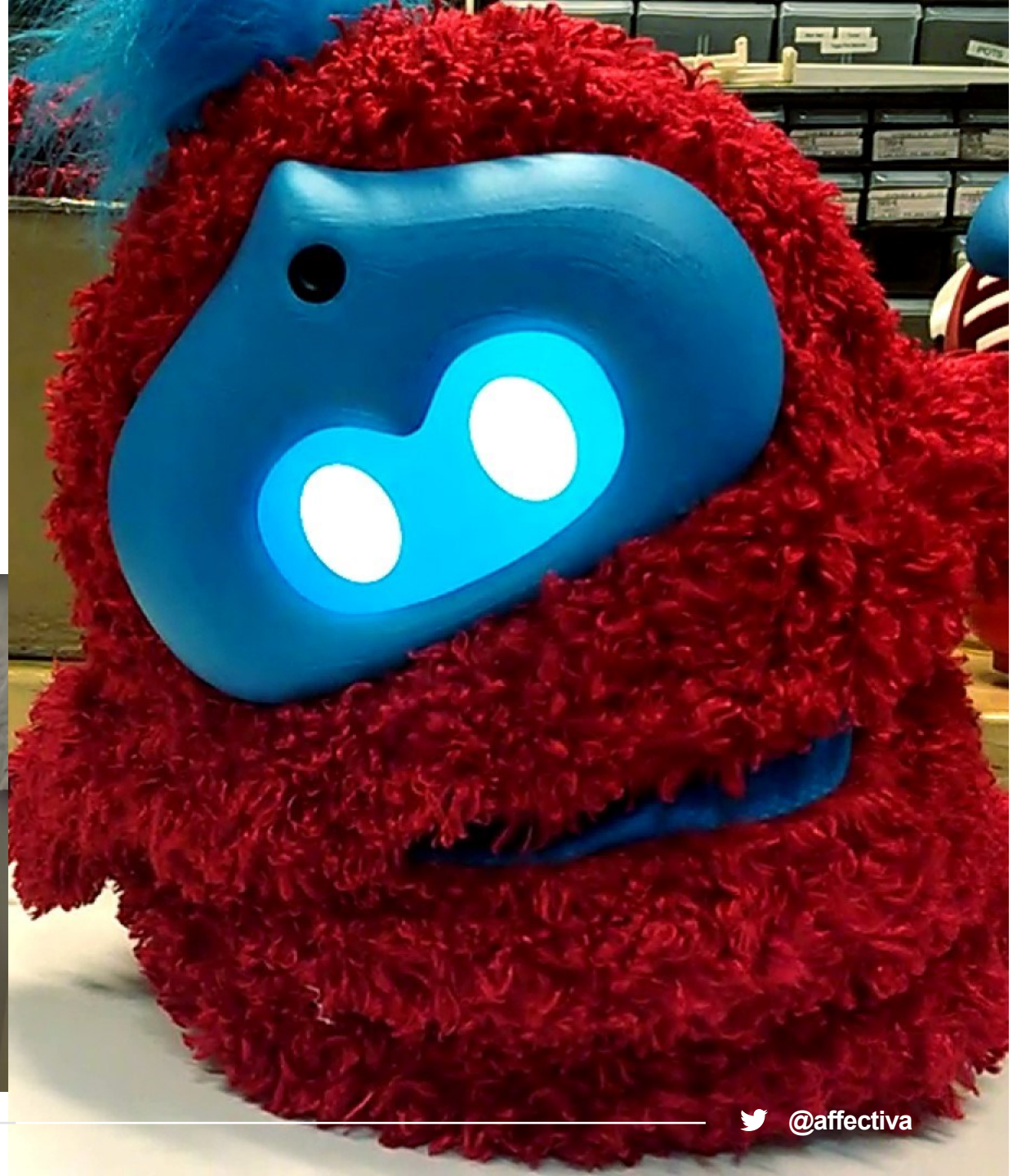


Emotion AI – Possible Markets

Tega learning companion for kids

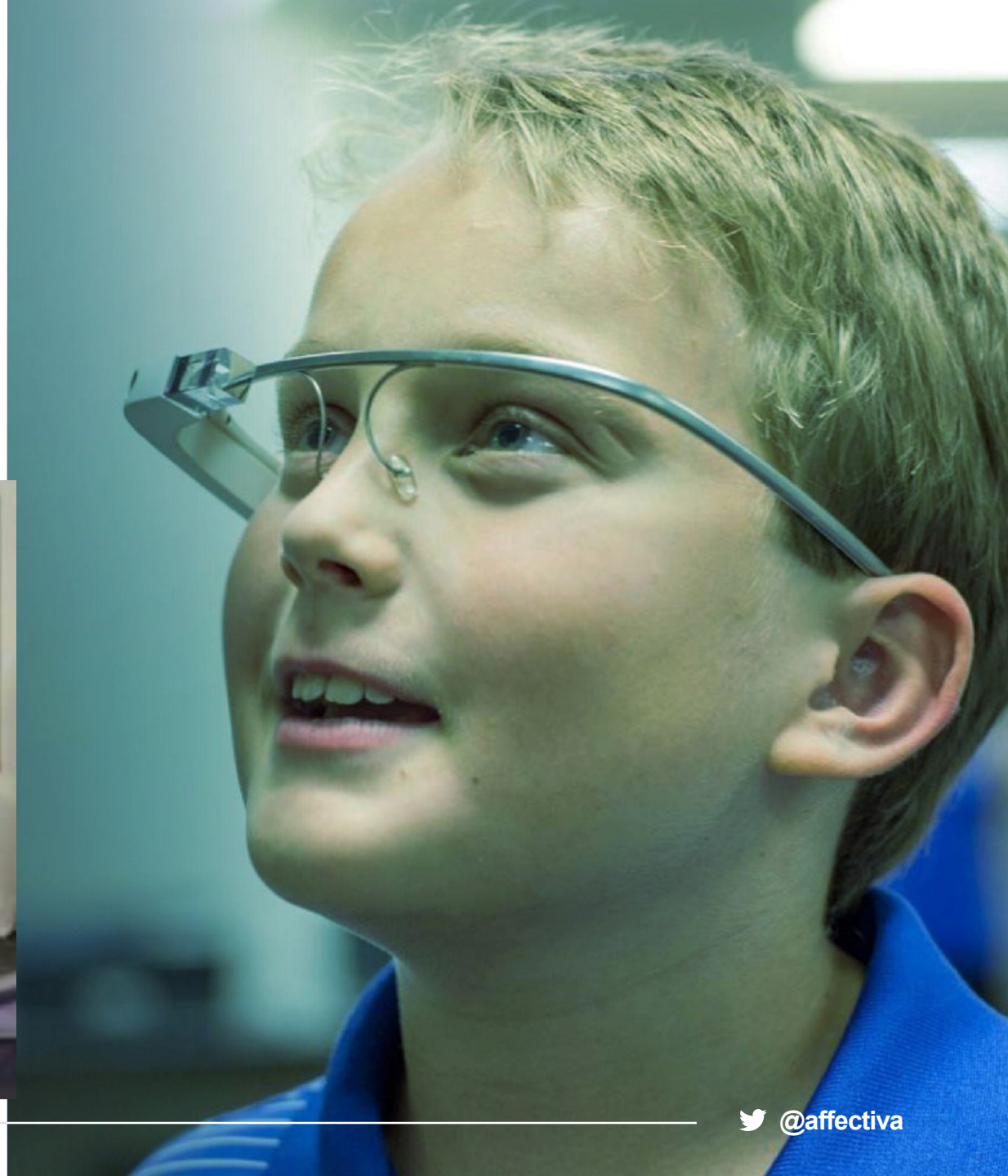
mit media lab

Tega helped Children to learn more words in shorter duration



Health and Wellbeing

Brain Power: helping individuals on **the autism spectrum**



The merger of IQ & EQ in tech is inevitable

Learn more
www.affectiva.com