Case 4: I Know How You Feel

Teachers may have a new tool to improve their teaching—and to control their classrooms. Stoneware, a unit of Lenovo, offers a classroom management package that videos students' facial expressions. These videos are interpreted by emotional analytics software that allows teachers to monitor in real time students' reactions to what is happening in the classroom and indicates whether students are paying attention.

Facial-emotion analytics software that is akin to facial recognition software is being developed by a variety of companies for a variety of purposes. An important player, Emotient, whose software is used in Stoneware's classroom product, has also analyzed customer reactions to products for companies like Honda and Procter & Gamble. Another company, Affectiva, has used its version of emotion-detection software to test consumer reactions to ads for companies including Unilever and Coca Cola. In addition to these uses, retailers use the software to scan customers' faces as they enter and leave stores or look at various displays. Software from yet another company, Eyeris, is being used in interrogation by federal law-enforcement agencies. Developers hope to partner with social media to show emotions during video chat. Potential medical uses include identifying patients' levels of pain.

Paul Ekman, an eighty-year-old psychologist and pioneer in facial-emotion analysis, has created an atlas of over 5,000 movements of facial muscles. This information is used in developing software algorithms for identifying emotions. He agreed to be an advisor to the Emotient board, but he later threatened to resign when he realized the ethical implications of how the results of his lifetime of research could be used. Dr. Ekman foresaw the software being used to analyze crowds, monitor workers, trip up wayward spouses, or check out job applicants. He worries that
the technology could be used without people's consent and could be subject to misinterpretation. Initially, Dr. Ekman's atlas of facial expressions was used by humans—psychologists and military and law enforcement—to detect lies. As applications expanded to the use of hidden cameras and software-driven interpretation, new ethical concerns have arisen. Privacy advocates worry about use of these artificial intelligence methods on people without their consent and
about the development of databases of facial expressions and associated emotions, especially when tied to specific individuals. Others insist that the software interpretations are not reliable because they have not been independently tested.

In an interesting side note, Apple bought Emotient in 2016. This purchase continues a trend by companies like Google and Facebook of quietly acquiring artificial intelligence startups. Apple declined to say what it will do with the Emotient capabilities.

Case from the 2017 International Ethics Bowl on February 26, 2017 in Dallas Texas