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It's Just "Emotions" Has Taken Over...



t is believed that the main difference between a machine and the human operating it is the latter's sense of feeling, pervasiveness and ability to understand rather than to process. Often we may be amused by the smartphone's speech recognition ability (For example, we said: "Define perception" and the phone comes up with "Are you asking about "The Fine Person"?") or get frustrated by it (we said: "Call Billy White, not Lily is white!"). As much as technol-

ogy has tried to emulate humans, there is still so much to be done before it can even come anywhere close to the complexities of the human; emotions and affect are examples of the gravity of this gap. To date, the high complexities of the human mind and emotions continue to baffle researchers and scientists alike.

Affective computing is a recent phenomenon popularized by MIT's Professor Rosalind Picard. It has led the way for us at the IEEE to develop systems that possess the capabilities to recognise, interpret, process and simulate human emotions. These systems can then be incorporated into machines that enable interaction with human subjects for various purposes including psychological analysis and educational assistance. Can you imagine a future filled with smart phones or even smart cars that can sense and detect our moods by the tone of our voice or body gestures such that music and/or encouraging quotes that cheer us up can be automatically selected and recommended? How about having computers that are capable of recognizing students' state of mind through their body gestures and as such adapt accordingly to enhance the learning experience? Or pushing further, how about affective marketing where an online shopping experience is modulated based on your emotions detected from your facial features? This is certainly part of what research in affective computing aspires towards achieving—thus making life more fulfilling for everyone!



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