Podcast Name: *ACM ByteCast* Episode: Dr. Rosalind Picard

Welcome to the *ACM ByteCast* podcast, a series from the Association for Computing Machinery! The podcast features conversations with researchers, practitioners, and innovators at the intersection of computing research and practice about their experiences, lessons learned, and visions for the future of computing. In today's episode of *Hanselminutes*, host Scott Hanselman interviews guest Dr. Rosalind Picard, a scientist, inventor, engineer, faculty member of MIT's Media Lab and the Founder and Director of the Affective Computing Research Group at the MIT Media Lab. She has also founded several companies in the space of affective computing.

To begin, Dr. Picard shares about her Affective Computing Research Group. She shares that when naming the group, she made a point to stray away from emotions, because she believed they were a sign of weakness. However, as she studied the human brain even more, she realized the adaptability in the human brain involved these emotion symptoms, which actually helped us to be more intelligent and rational. Initially, "affective" meant being inclusive of all types of emotions and evolved to include bodily emotions too. On one hand, there is the expression of one's affect. On the other hand, there are circumstances influencing one's emotional state. Dr. Picard explains the relationship between emotions and the health indicators which influence our moods and emotions. As a trained electrical engineer with a background in computer architecture and signal processing, she initially thought of emotion as a kind of signal. She began with multi-channel physiological measurements to indicate the relationship between the two. This technology is developed from hardware and algorithmic data. She explains that the importance of the data's accuracy varies a lot depending on the use case. Where the bar is higher for accuracy, the developers do ample testing, machine learning and signal processing to get quality data and interpretations.

The term AI has changed dramatically in recent years despite the fact that it has been available for over a decade. Today, when people talk about AI, they usually are referring to machine learning and language models. While their performances are impressive, Dr. Rosalind points out that they are built on a shaky foundation without emotions or morals. In some applications, such as brainstorming, this isn't a huge problem. However, when used in higher stakes scenarios, such as making a medical decision, the systems are not trustworthy enough. Overall, she believes that their false impression can be dangerous for people to rely on. AI alone won't be able to bridge the gap between logic and conviction, but will require the use of science and data alongside it. Before wrapping up, the conversation shifts to discussing privacy. From the very beginning, Affective Computing Research Group has been against reading into people's emotional states without their consent.

Key Takeaways:

- 0:27 Introducing today's guest Dr. Rosalind Picard.
- 3:22 Naming Affective Computing Research Group.
- 7:58 The relationship between emotions and health indicators.

11:33 - How accurate does the data have to be?

19:00 - How AI is impacting the field of computing and machinery.

28:25 - The role of privacy in reading emotions.

Links

Learn more about Dr. Rosalind Picard.

Learn more about Scott Hanselman.

Learn more about the ACM ByteCast podcast at https://learning.acm.org/bytecast

Tags

Dr. Rosalind Picard, ACM, Affective computing, media, MIT media lab, computing, technology, AI, emotion theorists, emotions, affectation, engineering, computer architecture, health indicators, health technology, health data, stress indicators, machine learning, ML, language models, gen AI