Towards Accounting for the Human in Emotion Recognition Technologies

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Challenge:

- Privacy and emotion are related concepts (e.g., emotions are often deemed private)
- Emotion artificial intelligence (AI) *promises* to detect, recognize, and infer emotions from diverse data sources.
- There are concerns about emotion AI's scientific validity, bias, and accuracy.
- Emotion AI's development and use in diverse sectors continues to grow.
- It is important to examine emotion AI's social, privacy, and ethical implications by centering impacted humans and values.

Solution:

- Investigate model subjects' attitudes towards emotion AI using interviews
- Discover values embedded in emotion AI development through analyzing relevant patents and vendors/services

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Scientific Impact:

- Identifies privacy concerns related to emotions and emotion AI, allowing diverse stakeholders to assess and address emotion AI's privacy risks/harms and other implications
- Shows how model subjects see accurate inferences as uncomfortable and as threatening their agency, pointing to privacy and ambiguity as desired design principles
- Identifies folk theories about accuracy and meaningful transparency in emotion recognition
- Identifies model subjects' attitudes towards emotion AI-based wellbeing interventions on social media and factors upon which these attitudes depend
- Identifies the landscape of emotion AI in high stakes contexts (workplace, healthcare) and emotion AI's claimed benefits to diverse stakeholders
- Identifies values embedded in emotion AI use in hiring processes

Broader Impact and Broader Participation:

- Emotion AI developers can use these findings to reflect on the societal implications of emotion AI
- Regulating bodies and policy makers can use this work's outcomes to inform emotion AI's ethical permissibility and more broadly technological innovation
- This work has challenged students to think deeply about ethics, privacy, social responsibility, and technology in teaching (e.g., PI's doctoral seminar) and research