Exploring Emotions through Painting, Photography and Expressive Writing

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PaintMyEmotions is an interactive self-reflection instrument that lets individuals express and monitor their affective states in a fun and engaging way. It also works as a multimodal data-collection platform that will allow us to explore the intersection between emotions, artistic expression and technology, and to obtain a richer picture of the complex and elusive constructs we call emotions.

Key Research Topics: Affective Computing, Digital Health, Human-Computer Interaction, Personal Informatics, Positive Computing.



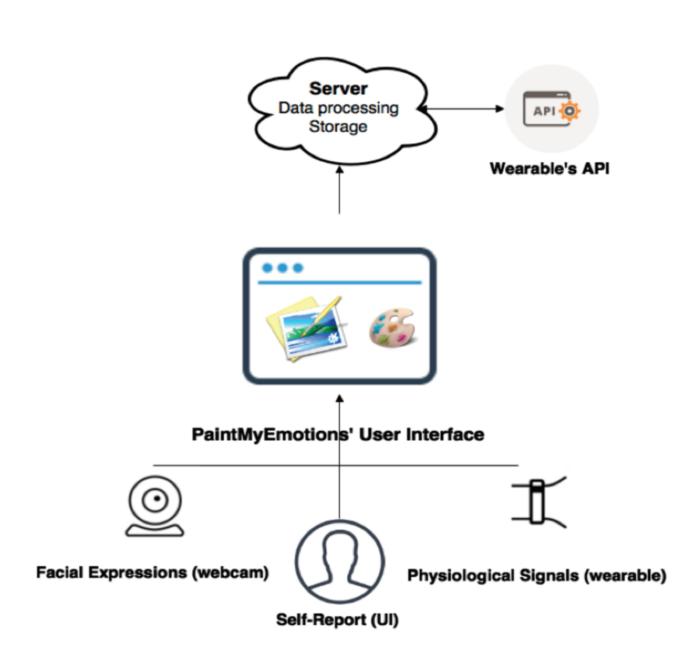
Human beings have always strived to know more about themselves in order to improve. Nowadays, ubiquitous Personal Informatics systems allow people to constantly collect data regarding their habits, behaviors, moods, thoughts, and so on. Through self-assessment and pervasive technologies such as smartphones and sensor-clad wearables, PaintMyEmotions is able to collect data that can be related to affective states.



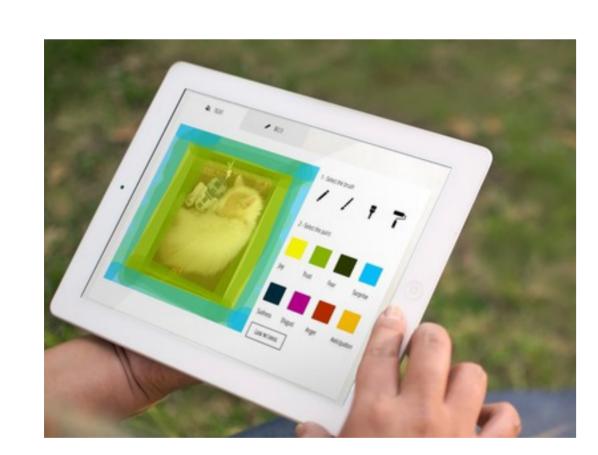
PaintMyEmotions' user interface has been designed to foster an immersive digital experience of self-exploration and artistic expression, where users can check in with themselves and express their thoughts and feelings.



In order to collect the data we will run a crowdsourced large-scale longitudinal study, where ecologically valid data regarding affect and well-being will be collected remotely through the PaintMyEmotions platform.



PaintMyEmotions' system architecture.



Photography and Painting

Users choose a photograph and use it as a canvas where they have the freedom to express their feelings. They can paint with the "primary colors of emotion" available in the color palette, based on Plutchik's wheel of emotions (1).



The collected data will be used in research and to create personalized interventions and data visualizations, such as the "Emotional Painting" - a conceptual and artistic visualization that conveys information to the users regarding their emotional patterns.



Expressive Writing

Users can further explore their emotions in a journal entry. Expressive Writing has been proved to enhance and develop emotional insight (2).



- Design and develop an engaging and easy-touse tool where users can creatively assess and monitor their affective states, and receive personalized interventions to optimize their mental health and well-being;
- Use pervasive technologies to collect data relevant to natural affective states and find data patterns to inform affect detection and classification research.

References: (1) Robert Plutchik. 1900. Plutchik - Nature of Emotions 2001; (2) James W. Pennebaker and Janel D. Seagal. 1999. Forming a story: The health benefits of narrative. Journal of Clinical Psychology 55, 10: 1243–1254.

