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A Portrait of Emotion: Empowering Self-Expression through AI-Generated Art

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Abstract

We investigated the potential and limitations of generative artificial intelligence (AI) in reflecting the authors' cognitive processes through creative expression. The focus is on the AI-generated artwork's ability to understand human intent (alignment) and visually represent emotions based on criteria such as creativity, aesthetic, novelty, amusement, and depth. Results show a preference for images based on the descriptions of the authors' emotions over the main events. We also found that images that overrepresent specific elements or stereotypes negatively impact AI alignment. Our findings suggest that AI could facilitate creativity and the self-expression of emotions. Our research framework with generative AIs can help design AI-based interventions in related fields (e.g., mental health education, therapy, and counseling). The full version of the paper can be found at <https://arxiv.org/abs/2304.13324>.