

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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

Permalink

<https://escholarship.org/uc/item/2hh8b9t8>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

Authors

Lee, Yoon Kyung

Park, Yong-Ha

Hahn, Sowon

Publication Date

2023

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

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

Yoon Kyung Lee

Seoul National University, Seoul, Korea, Republic of

Yong-Ha Park

Seoul National University, Seoul, Korea, Republic of

Sowon Hahn

Seoul National University, Seoul, Korea, Republic of

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>.