Your Prompt Is My Command: On Assessing the Human-Centred Generality of Multimodal Models (Abstract Reprint)

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Abstract Reprint. This is an abstract reprint of a journal article by Schellaert, Martínez-Plumed, Vold, Burden, Casares, Loe, Reichart, hÉigeartaigh, Korhonen, and Hernández-Orallo (2023).

Abstract

Even with obvious deficiencies, large prompt-commanded multimodal models are proving to be flexible cognitive tools representing an unprecedented generality. But the directness, diversity, and degree of user interaction create a distinctive "human-centred generality" (HCG), rather than a fully autonomous one. HCG implies that —for a specific user— a system is only as general as it is effective for the user's relevant tasks and their prevalent ways of prompting. A human-centred evaluation of general-purpose AI systems therefore needs to reflect the personal nature of interaction, tasks and cognition. We argue that the best way to understand these systems is as highly-coupled cognitive extenders, and to analyse the bidirectional cognitive adaptations between them and humans. In this paper, we give a formulation of HCG, as well as a high-level overview of the elements and trade-offs involved in the prompting process. We end the paper by outlining some essential research questions and suggestions for improving evaluation practices, which we envision as characteristic for the evaluation of general artificial intelligence in the future.

References

Schellaert, W.; Martínez-Plumed, F.; Vold, K.; Burden, J.; Casares, P. A. M.; Loe, B. S.; Reichart, R.; hÉigeartaigh, S. Ó.; Korhonen, A.; and Hernández-Orallo, J. 2023. Your Prompt is My Command: On Assessing the Human-Centred Generality of Multimodal Models. *Journal of Artificial Intelligence Research*, 77: 377–394.