

Behind the scene: Hi-TOM! But what, how and why?



Speaker:

Yinghui HE
Shanghai Jiao Tong University

Time:

14:00-15:00 p.m., July 24, 2024 (Beijing Time)

Location:

Room 324,
JI Long Bin Building

Abstract

- 🗑️ Where is the milk?
- 🧠 Where does Anne think the milk is?
- à Where does Sally think Anne thinks the milk is?
- ‡ Where does Alex think Sally thinks Anne thinks the milk is?

Theory of Mind (ToM) is the ability to reason about one's own and others' mental states. ToM plays a critical role in the development of intelligence, language understanding, and cognitive processes. While previous work has primarily focused on first and second-order ToM, we explore higher-order ToM, which involves recursive reasoning on individuals' mental states in complex scenarios.

The authors introduce Hi-ToM, a Higher Order Theory of Mind benchmark. Experimental evaluation using various Large Language Models (LLMs) indicates a decline in performance on higher-order ToM tasks, demonstrating the limitations of current LLMs. The work gives a thorough analysis of different failure cases of LLMs, and insightful thoughts on the implications on the future of NLP. But

Biography

Yinghui just received B.S. from the University of Michigan with a major in Computer Science and a minor in Mathematics. She also majoring in Electrical and Computer Science at Shanghai Jiao Tong University. She's currently working in the Language and Information Technologies (LIT) group supervised by Prof. Rada Mihalcea.



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