'Theory of mind': Why artificial intelligence needs to understand how we think

What AI needs, [said Dr. Jun Wang at University College London] is a type of deep communication skill that stems from a critical human cognitive ability: theory of mind.

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By allowing us to roughly grasp other peoples' minds, theory of mind is essential for human cognition and social interactions. It's behind our ability to communicate effectively and collaborate towards common goals. It's even the driving force behind false beliefs—ideas that people form even though they deviate from the objective truth.

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To Dr. Alan [Winston], a professor in robotic ethics at the University of West England, theory of mind is the secret sauce that will eventually let AI "understand" the needs of people, things, and other robots.

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In a paper published early this year, Winston showed a prototype robot that could in fact achieve this goal. By anticipating the behavior of others around it, a robot successfully navigated a corridor without collisions. This isn't anything new—in fact, the "mindful" robot took over 50 percent longer to complete its journey than without the simulation.

But to Winston, the study is a proof-of-concept that his internal simulation works: [it's] "a powerful and interesting starting point in the development of artificial theory of mind," he concluded.

Read full, original post: Thinking Like a Human: What It Means to Give AI a Theory of Mind