

Definition

Task-oriented Conversational Artificial Intelligence

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Task-oriented CAI is a type of conversational artificial intelligence (CAI) that aims to help users achieve specific goals or tasks through natural language interaction. Task-oriented CAI systems can be found in various domains, such as e-commerce, travel, banking, education, health care, and entertainment. Task-oriented CAI systems typically consist of four components: natural language understanding (NLU), dialogue management (DM), natural language generation (NLG), and task execution (TE). NLU is responsible for analyzing the user's input and extracting relevant information, such as intents and entities. DM is responsible for managing the dialogue state and deciding the next action to take, such as asking for more information, confirming the user's request, or executing the task. NLG is responsible for generating natural language responses that are appropriate and informative. TE is responsible for performing the actual task, such as booking a flight, ordering a pizza, or playing a game.

Declarations

Potential competing interests: No potential competing interests to declare.