

Can Computers Think: From Descartes to ChatGPT

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Abstract: We present discussion of philosophical and modern machine learning perspectives on knowledge discovery and machine intelligence. On a philosophical side, we discuss classical Mind-Body problem and its modern version known as the Turing test. This discussion helps to understand better conceptual vs. computational aspects of machine learning. Discussion of Machine Learning approaches will focus on Modern AI tools, such as Large Language Models (LLMs). LLMs are known for their remarkable capability to generate different types of synthesized 'knowledge', such as text documents, music, images etc. This talk will explore the difference between LLM and human capabilities for understanding abstract concepts and reasoning. We conclude with discussion on a possible impact of LLMs, such as ChatGPT, on higher education.