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Prompt engineering techniques to enhance Large Language Models' performance in introductory physics

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Prompt engineering has increasingly garnered attention with the widespread use of AI-based chatbots over the past year. The formulation of prompts highly impacts the output of chatbots, which rely on Large Language Models and thus generate text that is a statistically good fit with both its training data and the users' prompt. Through examples from introductory physics, this study shows how selected prompt techniques can enhance the performance of chatbots like ChatGPT. In our investigation, we observed that upon using two specific prompt engineering techniques, the chatbot's responses improved both in the rate of correctness and quality of the argumentation.

How would you like to present your contribution?

Live in Kraków (time slot to be allotted based on the programme)

Target education level

University

Category

Formal Education

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