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Ambiguity-Identification Prompting for Large Language Model to Better Understand Complex Legal Texts

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Abstract : Tailoring Large Language Models (LLMs) to perform legal reasoning has been a popular trend in the study of AI and law. Researchers have mainly employed two methods to unlock the potential of LLMs, namely by finetuning the LLMs to expand their knowledge of law and by restructuring the prompts (In-Context Learning) to optimize the LLMs' understanding of the legal questions. Although claiming the finetuning and renovated prompting can make LLMs more competent in legal reasoning, most state-of-the-art studies show quite limited improvements of practicability. In this paper, drawing on the study of the complexity and low interpretability of legal texts, we propose a prompting strategy based on the Chain of Thought (CoT) method. Instead of merely instructing the LLM to reason "step by step", the prompting strategy requires the tested LLM to identify the ambiguity in the questions as the first step and then allows the LLM to generate corresponding answers in line with different understandings of the identified terms as the following step. The proposed prompting strategy attempts to encourage LLMs to "interpret" the given text from various aspects. Experiments that require the LLMs to answer "case analysis" questions of bar examination with general LLMs such as GPT 4 and legal LLMs such as LawGPT show that the prompting strategy can improve LLMs' ability to better understand complex legal texts.

Keywords : ambiguity-identification, prompt, large language model, legal text understanding
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