Reading Assignment 4

COMP 550, Fall 2023

Due date: Dec 1, 2023 9:00pm

Read the following paper and write a critical summary of it:

Wei et al., 2022. Chain-of-Thought Prompting Elicits Reasoning in Large Language Models. *Proc.* 36th NeurIPS.

Your summary should include a description of the paper's contents, its strengths and limitations, and any points that you did not understand. Since this paper discusses techniques that are not covered in the lectures, I expect that there will be concepts that you do not understand! Do not worry, and document this in your write-up.

Also, discuss the following issues in your writeup:

- 1. What kinds of tasks do you expect the Chain-of-Thought approach to work well at? To not work well at?
- 2. This method works well only at larger model sizes. Why do you think this is the case?
- 3. The name of this approach may suggest that large language models are capable of "thinking" in some sense, though the authors do not take a strong explicit stance on this. To what extent do you think that this stance would be justified?

Your summary should be **at most 1 page**. It will be graded on the basis of its coverage, linguistic quality, and clarity of argumentation.

Resources

Jason Eisner's guide to reading papers: https://www.cs.jhu.edu/~jason/advice/how-to-read-a-paper.html