

Tree of Reviews Computational Overhead vs Linear Chain Retrieval at Scale

Assignee Research

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Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: What is the computational overhead of the Tree of Reviews framework relative to linear chain retrieval methods when scaled to 1000+ context documents on the WebQuestionsSP benchmark. Multi-hop question answering is a knowledge-intensive complex problem. Large Language Models (LLMs) use their Chain of Thoughts (CoT) capability to reason complex problems step by step, and retrieval-augmentation can effectively alleviate factual errors caused by outdated and. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Tree of Reviews: A Tree-based Dynamic Iterative Retrieval Framework for Multi-hop Question Answering. Research question: What is the computational overhead of the Tree of Reviews framework relative to linear chain retrieval methods when scaled to 1000+ context documents on the WebQuestionsSP benchmark?.

2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.7/10.

3 Results

4 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.7/10.

4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

References

- <http://arxiv.org/abs/2404.14464v1>
- <http://arxiv.org/abs/1710.05833v2>
- <http://arxiv.org/abs/2102.13455v1>