Tree of Reviews vs. Chain-Based Retrieval Accuracy on Noisy SQuAD Variants with Sentence-T5 and MPNet Embeddings

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Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: How does Tree of Reviews retrieval accuracy compare to chain-based retrieval on noisy SQuAD variants when using Sentence-T5 versus MPNet embeddings for Llama-3-8B-128K. 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to reason complex problems step by step, and retrieval-augmentation can effectively alleviate factual errors caused by outdated and. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents.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 5.5/10. 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: How does Tree of Reviews retrieval accuracy compare to chain-based retrieval on noisy SQuAD variants when using Sentence-T5 versus MPNet embeddings for Llama-3-8B-128K.

2 Methodology

Systematic literature search across multiple databases yielded 15 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 5.5/10.

3 Results

15 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 5.5/10.

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/2504.01346v4
- http://arxiv.org/abs/2404.14464v1
- http://arxiv.org/abs/2404.07220v2