

Dynamic Query Expansion Effects on Sparse Retriever Robustness in Multi-Hop QA

Assignee Research

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Abstract

This report synthesises findings from 13 peer-reviewed papers addressing the following research question: What is the impact of dynamic query expansion techniques on the robustness of sparse retrievers in RAG systems when handling out-of-domain questions in multi-hop QA benchmarks like HotPotQA. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.7/10. 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 impact of dynamic query expansion techniques on the robustness of sparse retrievers in RAG systems when handling out-of-domain questions in multi-hop QA benchmarks like HotPotQA?.

2 Methodology

Systematic literature search across multiple databases yielded 13 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.7/10.

3 Results

13 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.7/10.

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/2210.02627v1>
- <http://arxiv.org/abs/2404.14464v1>
- <http://arxiv.org/abs/2408.04259v2>