

Semantic Search Method Impact on Blended RAG Robustness in Sub-10B Models

Assignee Research

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Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: How does the choice of semantic search method (e.g., Sentence-BERT, SimCSE) in Blended RAG affect the robustness of sub-10B parameter models across diverse domains, measured by exact match accuracy. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.3/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Health System Scale Semantic Search Across Unstructured Clinical Notes. Research question: How does the choice of semantic search method (e.g., Sentence-BERT, SimCSE) in Blended RAG affect the robustness of sub-10B parameter models across diverse domains, measured by exact match accuracy on the NaturalQuestions benchmark?.

2 Methodology

Systematic literature search across multiple databases yielded 12 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.3/10.

3 Results

12 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.3/10.

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/2404.07220v2>
- <http://arxiv.org/abs/2411.18583v1>
- <http://arxiv.org/abs/2604.25605v1>