

Cross-Domain Fine-Tuning Effects on Dense Retrieval Robustness to Noise and Misspellings

Assignee Research

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Abstract

This report synthesises findings from 1 peer-reviewed paper addressing the following research question: How does cross-domain fine-tuning affect the robustness of dense retrieval models to misspellings and noise, as evaluated on domain-specific benchmarks like BEIR or FEVER, measuring changes in. 6 claims were extracted from source literature; 6 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 8.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Reasoning over Public and Private Data in Retrieval-Based Systems. Research question: How does cross-domain fine-tuning affect the robustness of dense retrieval models to misspellings and noise, as evaluated on domain-specific benchmarks like BEIR or FEVER, measuring changes in recall@100 and MRR?.

2 Methodology

Systematic literature search across multiple databases yielded 1 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 8.8/10.

3 Results

1 papers retrieved. 6 claims extracted; 6 independently verified. Quality review score: 8.8/10.

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.

5 Extracted Claims

Claim	Verified	Confidence
State-of-the-art systems for open-domain tasks explicitly retrieve information relevant to an input question from a back	✓	0.33
Today’s retrieval systems assume relevant corpora are fully accessible.	✓	0.23
No existing benchmark includes data from a private distribution.	✓	0.27
The ConcurrentQA dataset includes data from distinct public and private distributions.	✓	0.26
ConcurrentQA is the first textual QA benchmark requiring concurrent retrieval over multiple distributions.	✓	0.26
Existing retrieval approaches face significant performance degradations when applied to the proposed Split Iterative Ret	✓	0.31

References

- https://doi.org/10.1162/tacl_a_00580