

Scaling Effects on Multilingual Model Robustness Against Adversarial Perturbations

Assignee Research

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Abstract

This report synthesises findings from 11 peer-reviewed papers addressing the following research question: What is the impact of model size scaling on the robustness of multilingual models against adversarial cross-lingual perturbations in the MLQA benchmark when measured with MA-DPR and cosine similarity. Multilingual large-scale Pretrained Language Models (PLMs) have been shown to store considerable amounts of factual knowledge, but large variations are observed across languages. With the ultimate goal of ensuring that users with different language backgrounds obtain consistent. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 7.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Cross-Lingual Consistency of Factual Knowledge in Multilingual Language Models. Research question: What is the impact of model size scaling on the robustness of multilingual models against adversarial cross-lingual perturbations in the MLQA benchmark when measured with MA-DPR and cosine similarity scores?.

2 Methodology

Systematic literature search across multiple databases yielded 11 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 7.5/10.

3 Results

11 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 7.5/10.

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/2505.18673v1>
- <http://arxiv.org/abs/1910.07475v3>
- <http://arxiv.org/abs/2310.10378v5>