Unsupervised Multilingual Learning for Cross-Lingual ASR Generalization on XLS-R

Assignee Research

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Abstract

This report synthesises findings from 5 peer-reviewed papers addressing the following research question: To what extent does UML improve cross-lingual generalization in multilingual ASR when tested on unseen languages from the XLS-R benchmark, and how does this compare to the performance of. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 5.3/10. 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: To what extent does UML improve cross-lingual generalization in multilingual ASR when tested on unseen languages from the XLS-R benchmark, and how does this compare to the performance of language-agnostic grapheme-based models?.

2 Methodology

Systematic literature search across multiple databases yielded 5 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 5.3/10.

3 Results

5 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 5.3/10.

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/2310.10378v5
- http://arxiv.org/abs/2505.18673v1
- http://arxiv.org/abs/2105.14779v2