

TLI Fine-Tuning Enhances Robustness in Low-Resource Language Tasks Under Distribution Shifts

Assignee Research

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Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: Does TLI fine-tuning improve robustness in low-resource language tasks under distribution shifts, as measured by accuracy degradation on adversarial or domain-shifted XTREME-R subsets (e.g., Swahili). 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: MELABenchv1: Benchmarking Large Language Models against Smaller Fine-Tuned Models for Low-Resource Maltese NLP. Research question: Does TLI fine-tuning improve robustness in low-resource language tasks under distribution shifts, as measured by accuracy degradation on adversarial or domain-shifted XTREME-R subsets (e.g., Swahili legal vs. conversational text)?.

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 3.8/10.

3 Results

12 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.8/10.

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.

References

- <http://arxiv.org/abs/2501.05260v1>
- <http://arxiv.org/abs/2506.04385v2>
- <http://arxiv.org/abs/2412.10008v1>