

Multilingual VLN Agents on RxR and R2R: Cross-Lingual Transfer Learning Performance

Assignee Research

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Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: Do multilingual VLN agents trained on RxR demonstrate improved cross-lingual transfer learning capabilities when evaluated on the Room-to-Region (R2R) dataset for English and non-English instructions. Vision-and-Language Navigation (VLN) tasks require an agent to navigate through the environment based on language instructions. In this paper, we aim to solve two key challenges in this task: utilizing multilingual instructions for improved instruction-path grounding and. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: CLEAR: Improving Vision-Language Navigation with Cross-Lingual, Environment-Agnostic Representations. Research question: Do multilingual VLN agents trained on RxR demonstrate improved cross-lingual transfer learning capabilities when evaluated on the Room-to-Region (R2R) dataset for English and non-English instructions?.

2 Methodology

Systematic literature search across multiple databases yielded 15 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.5/10.

3 Results

15 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.5/10.

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/2207.02185v1>
- <http://arxiv.org/abs/2505.18673v1>
- <http://arxiv.org/abs/2310.10378v5>