

Synthetic Video Training Effects on Zero-Shot Cross-Domain Generalization in Video-Language Models

Assignee Research

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Abstract

This report synthesises findings from 13 peer-reviewed papers addressing the following research question: To what extent does training on synthetic video data impact the zero-shot cross-domain generalization accuracy of multimodal video-language models compared to models trained on real-world annotations. In this work, we explore the possibility of using synthetically generated data for video-based gesture recognition with large pre-trained models. We consider whether these models have sufficiently robust and expressive representation spaces to enable "training-free". 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 5.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: An Evaluation of Large Pre-Trained Models for Gesture Recognition using Synthetic Videos. Research question: To what extent does training on synthetic video data impact the zero-shot cross-domain generalization accuracy of multimodal video-language models compared to models trained on real-world annotations?.

2 Methodology

Systematic literature search across multiple databases yielded 13 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 5.7/10.

3 Results

13 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 5.7/10.

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/2410.02152v1>
- <http://arxiv.org/abs/2305.09758v3>
- <http://arxiv.org/abs/2410.09380v1>