

Multimodal Pre-Trained Models for Synthetic Video K-NN Classification in Gesture Recognition

Assignee Research

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Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: What is the impact of using multimodal pre-trained models (e.g., CLIP, ALIGN) for feature extraction in synthetic video-based k-nearest neighbors classification compared to video-only models, and how. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.3/10. 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: What is the impact of using multimodal pre-trained models (e.g., CLIP, ALIGN) for feature extraction in synthetic video-based k-nearest neighbors classification compared to video-only models, and how does this affect the accuracy gap when fine-tuning on real gesture datasets?.

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 3.3/10.

3 Results

12 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.3/10.

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/2410.02152v1>
- <http://arxiv.org/abs/2408.03097v1>
- <http://arxiv.org/abs/2508.18953v1>