Synthetic Video Features vs. Fine-Tuned Models for Gesture Recognition Accuracy

Assignee Research

June 7, 2026

Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: How does the performance of k-nearest neighbors classification with synthetic video features compare to fine-tuning the same pre-trained models on real gesture datasets in terms of accuracy 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 3.5/10. 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: How does the performance of k-nearest neighbors classification with synthetic video features compare to fine-tuning the same pre-trained models on real gesture datasets in terms of accuracy and generalization?.

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 3.5/10.

3 Results

12 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.5/10.

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/2404.17929v1
- http://arxiv.org/abs/2410.02152v1
- http://arxiv.org/abs/2604.14953v1