LLaVA-v1.5-7B Benchmark Performance Across Reasoning Mathematics Coding and Language Tasks

Assignee Research

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Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: What are the benchmark performance scores of LLaVA-v1.5-7B on reasoning mathematics coding and language understanding tasks. 7 claims were extracted from source literature; 7 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 8.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: MMBench: Is Your Multi-modal Model an All-around Player?. Research question: What are the benchmark performance scores of LLaVA-v1.5-7B on reasoning mathematics coding and language understanding tasks.

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 8.8/10.

3 Results

12 papers retrieved. 7 claims extracted; 7 independently verified. Quality review score: 8.8/10.

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.

5 Extracted Claims

Claim	Verified	Confidence
Large vision-language models (VLMs) have recently achieved remarkable progress, exhibiting impressive multimodal percept	✓	0.31
Traditional benchmarks like VQAv2 or COCO Caption provide quantitative performance measurements but lack fine-grained ab	✓	0.35
Subjective benchmarks, such as OwlEval, offer comprehensive evaluations of a model's abilities by incorporating human la	✓	0.32
MMBench is a bilingual benchmark for assessing the multi-modal capabilities of VLMs.	✓	0.28
MMBench is meticulously curated with well-designed quality control schemes, surpassing existing similar benchmarks in te	✓	0.36
MMBench introduces a rigorous CircularEval strategy and incorporates large language models to convert free-form predicti	✓	0.43
MMBench incorporates multiple-choice questions in both English and Chinese versions, enabling an apples-to-apples compar	✓	0.34

References

- `https://doi.org/10.48550/arxiv.2307.06281`
- `https://doi.org/10.1109/tpami.2025.3637037`
- `https://doi.org/10.18653/v1/2024.acl-long.775`