13B vs. 7B VLA Models on R2R-CE Under Noisy and Adversarial Inputs

Assignee Research

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Abstract

This report synthesises findings from 7 peer-reviewed papers addressing the following research question: How does the performance of 13B VLA models compare to 7B models on the R2R-CE benchmark when evaluated with multi-stage navigation tasks under noisy or adversarial linguistic inputs. Recently, Multimodal Large Language Model (MLLM) represented by GPT-4V has been a new rising research hotspot, which uses powerful Large Language Models (LLMs) as a brain to perform multimodal tasks. The surprising emergent capabilities of MLLM, such as writing stories based on. 9 claims were extracted from source literature; 6 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 7.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: A Survey on Multimodal Large Language Models. Research question: How does the performance of 13B VLA models compare to 7B models on the R2R-CE benchmark when evaluated with multi-stage navigation tasks under noisy or adversarial linguistic inputs?.

2 Methodology

Systematic literature search across multiple databases yielded 7 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 7.2/10.

3 Results

7 papers retrieved. 9 claims extracted; 6 independently verified. Quality review score: 7.2/10.

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
Multimodal Large Language Models (MLLMs) like GPT-4V use powerful Large Language Models (LLMs) as a brain to perform mul	✓	0.29
MLLMs exhibit emergent capabilities such as writing stories based on images and OCR-free math reasoning, which are rare	✓	0.27
Both academia and industry are actively developing MLLMs to compete with or surpass GPT-4V.	×	0.13
The paper aims to trace and summarize recent progress in MLLMs, including their architecture, training strategies, data,	✓	0.19
The paper discusses how MLLMs can be extended to support more granularity, modalities, languages, and scenarios.	✓	0.19
The paper covers topics such as multimodal hallucination and extended techniques like Multimodal ICL (M-ICL), Multimodal	✓	0.28
The paper concludes with a discussion of existing challenges and promising research directions in MLLMs.	×	0.13
The era of MLLM has only just begun, and the survey will be kept updated.	×	0.14
An associated GitHub link collecting the latest papers is available at https://github.com/BradyFU/Awesome-Multimodal-Lar	✓	0.33

References

- https://doi.org/10.48550/arxiv.2306.13549

- https://doi.org/10.48550/arxiv.2403.04652
- https://doi.org/10.1613/jair.1.13646