

VLA-Adapter vs. Full Fine-Tuning Performance on RoboBench at Scale

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Abstract

This report synthesises findings from 11 peer-reviewed papers addressing the following research question: How does the performance of VLA-Adapter on RoboBench compare to full fine-tuning when scaling to larger vision-language-action models like OpenVLA-7B or OpenVLA-13B on metrics such as task success. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Parameter-Efficient Fine-Tuning of Large Pretrained Models for Instance Segmentation Tasks. Research question: How does the performance of VLA-Adapter on RoboBench compare to full fine-tuning when scaling to larger vision-language-action models like OpenVLA-7B or OpenVLA-13B on metrics such as task success rate and generalization to unseen objects?.

2 Methodology

Systematic literature search across multiple databases yielded 11 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.7/10.

3 Results

11 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.7/10.

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/2606.01947v1>
- <http://arxiv.org/abs/2110.06500v2>
- <http://arxiv.org/abs/2602.08239v1>