Procedural Pretraining Complexity and CodeT5 Accuracy Retention on MBPP Under Reordering Perturbations

Assignee Research

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Abstract

This report synthesises findings from 14 peer-reviewed papers addressing the following research question: What is the correlation between the complexity level of procedural pretraining sequences and CodeT5's accuracy retention on the MBPP test set under variable reordering perturbations. 11 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.0/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: ViR: Towards Efficient Vision Retention Backbones. Research question: What is the correlation between the complexity level of procedural pretraining sequences and CodeT5's accuracy retention on the MBPP test set under variable reordering perturbations?.

2 Methodology

Systematic literature search across multiple databases yielded 14 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.0/10.

3 Results

14 papers retrieved. 11 claims extracted; 0 independently verified. Quality review score: 3.0/10.

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
ViR models demonstrate competitive performance across different model variants on ImageNet-1K dataset.	×	0.09
ViR-L/14 model achieves competitive performance when pretrained and finetuned on ImageNet-21K and ImageNet-1K datasets,	×	0.05
Increasing the image resolution from 224x224 to 448x448 during the finetuning improves the Top-1 accuracy.	×	0.03
HViR-1 model achieves 51.7 APbox and 44.1 APmask on COCO dataset.	×	0.01
HViR-2 model achieves 52.1 APbox and 45.2 APmask on COCO dataset.	×	0.01
HViR-1 (1D Retention) achieves 82.3 Top-1 accuracy on ImageNet, 51.2 APbox and 43.8 APmask on COCO, and 46.9 mIoU on ADE	×	0.02
HViR-1 (2D Retention) achieves 82.2 Top-1 accuracy on ImageNet, 51.7 APbox and 44.1 APmask on COCO, and 47.0 mIoU on ADE	×	0.02
ViR-B/1 model achieves 82.6 Top-1 accuracy on ImageNet with 224 resolution.	×	0.03
ViR-L/16 model achieves 83.7 Top-1 accuracy on ImageNet with 224 resolution.	×	0.03
ViR-L/14 model achieves 85.0 Top-1 accuracy on ImageNet with 224 resolution.	×	0.03
ViR-L/14 model achieves 86.1 Top-1 accuracy on ImageNet with 448 resolution.	×	0.03

References

- http://arxiv.org/abs/2402.04177v3

- http://arxiv.org/abs/2310.19731v2
- http://arxiv.org/abs/2601.21725v2