

Constitutional AI Training Impact on Sparse MoE Code Synthesis Under Adversarial Prompts

Assignee Research

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Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: What is the effect of Constitutional AI training on the pass@1 scores of sparse MoE models when evaluated against adversarial prompts in code synthesis tasks. Mixture-of-Experts (MoE) networks promise favorable accuracy-compute trade-offs, yet practical vision deployments are hindered by expert collapse and limited end-to-end efficiency gains. We study when sparse top- k routing with hard capacity constraints helps in vision. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.0/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: When Does Sparse MoE Help in Vision? The Role of Backbone Compute Leverage in Sparse Routing. Research question: What is the effect of Constitutional AI training on the pass@1 scores of sparse MoE models when evaluated against adversarial prompts in code synthesis tasks?.

2 Methodology

Systematic literature search across multiple databases yielded 15 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

15 papers retrieved. 0 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.

References

- <http://arxiv.org/abs/2505.20225v1>
- <http://arxiv.org/abs/2605.15484v1>
- <http://arxiv.org/abs/2603.11114v1>