

Shift Parallelism KV Cache Variance Mitigation in Multi-Turn Dialogue Reasoning

Assignee Research

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Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: What is the impact of KV cache variance mitigation techniques in Shift Parallelism on multi-turn dialogue reasoning accuracy compared to standard tensor parallelism. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 4.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: FlowKV: Enhancing Multi-Turn Conversational Coherence in LLMs via Isolated Key-Value Cache Management. Research question: What is the impact of KV cache variance mitigation techniques in Shift Parallelism on multi-turn dialogue reasoning accuracy compared to standard tensor parallelism?.

2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 4.2/10.

3 Results

4 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 4.2/10.

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.

References

- <http://arxiv.org/abs/2605.09649v1>
- <http://arxiv.org/abs/2604.24971v1>
- <http://arxiv.org/abs/2505.15347v2>