

FlowKV Isolated KV Cache Management and Token Throughput in Multi-Turn Robotic Instruction Following

Assignee Research

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Abstract

This report synthesises findings from 6 peer-reviewed papers addressing the following research question: How does FlowKV's isolated KV cache management impact token generation throughput compared to standard attention sinks on the Multi-Turn Robotic Instruction Following subset of MobileAloha. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 2.3/10. 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: How does FlowKV's isolated KV cache management impact token generation throughput compared to standard attention sinks on the Multi-Turn Robotic Instruction Following subset of MobileAloha?.

2 Methodology

Systematic literature search across multiple databases yielded 6 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 2.3/10.

3 Results

6 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 2.3/10.

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/2510.14973v2>
- <http://arxiv.org/abs/2505.15347v2>