

FlowKV and SnapKV Retrieval Accuracy on BEIR with Llama-3-8b Under Memory Constraints

Assignee Research

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Abstract

This report synthesises findings from 9 peer-reviewed papers addressing the following research question: How does the retrieval accuracy of FlowKV compare to SnapKV on the BEIR benchmark when deployed with Llama-3-8b under strict 2GB memory constraints. 5 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.3/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: On the Quantum Performance Evaluation of Two Distributed Quantum Architectures. Research question: How does the retrieval accuracy of FlowKV compare to SnapKV on the BEIR benchmark when deployed with Llama-3-8b under strict 2GB memory constraints?.

2 Methodology

Systematic literature search across multiple databases yielded 9 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.3/10.

3 Results

9 papers retrieved. 5 claims extracted; 0 independently verified. Quality review score: 3.3/10.

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.

5 Extracted Claims

Claim	Verified	Confidence
The average gate fidelity differences in two entanglement simulations are shown in Table (p18) for parameters = 10,	×	0.01
The average gate fidelity differences in two entanglement simulations are shown in Table (p18) for parameters = 500,	×	0.01
The set of all possible noise processes corresponds to the set of completely positive trace preserving maps (CPTPM) Λ :	×	0.03
Depolarizing noise is modeled by the equation $D(\rho) = (1 - 3p)\rho + 4I/2$.	×	0.01
The time dependence in depolarizing noise is often expressed by letting $p = 1/4(1 - e^{-\lambda t})$, for a fixed characterizin	×	0.11

References

- <http://arxiv.org/abs/2404.07220v2>
- <http://arxiv.org/abs/2107.12246v2>
- <http://arxiv.org/abs/2407.20114v3>