

DeepSeek R1 Inference Latency Scaling with Code Structural Complexity in Vulnerability Scanning

Assignee Research

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Abstract

This report synthesises findings from 9 peer-reviewed papers addressing the following research question: How does the inference latency of Deepseek R1 scale relative to code structural complexity during vulnerability scanning on the Big-Vul benchmark. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 4.3/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: LLMs in Code Vulnerability Analysis: A Proof of Concept. Research question: How does the inference latency of Deepseek R1 scale relative to code structural complexity during vulnerability scanning on the Big-Vul benchmark?.

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 4.3/10.

3 Results

9 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 4.3/10.

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/2102.07660v2>
- <http://arxiv.org/abs/2601.22069v2>
- <http://arxiv.org/abs/2601.08691v1>