Multimodal Context Enhances DeepSeek-R1 Code Repair Performance on FeedbackEval

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Abstract

This report synthesises findings from 11 peer-reviewed papers addressing the following research question: How does multimodal context (text + code diagrams) affect the iterative code repair performance of DeepSeek-R1 on FeedbackEval compared to text-only context, measured by repair success rate and token. Code repair is a fundamental task in software development, facilitating efficient bug resolution and software maintenance. Although large language models (LLMs) have demonstrated considerable potential in automated code repair, their ability to comprehend and leverage diverse. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: FeedbackEval: A Benchmark for Evaluating Large Language Models in Feedback-Driven Code Repair Tasks. Research question: How does multimodal context (text + code diagrams) affect the iterative code repair performance of DeepSeek-R1 on FeedbackEval compared to text-only context, measured by repair success rate and token efficiency?.

2 Methodology

Systematic literature search across multiple databases yielded 11 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.7/10.

3 Results

11 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.7/10.

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/2501.18438v2
- http://arxiv.org/abs/2510.18279v2
- http://arxiv.org/abs/2504.06939v2