Code Llama Variants with Extended Context Windows under Syntax Perturbations in API Generation

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Abstract

This report synthesises findings from 10 peer-reviewed papers addressing the following research question: How robust are Code Llama variants with expanded context windows to syntax perturbations in cross-library API generation, as measured by pass@1 on BigCodeBench. Statistical language modeling and translation with transformers have found many successful applications in program understanding and generation tasks, setting high benchmarks for tools in modern software development environments. The finite context window of these neural models. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 5.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Long-Range Modeling of Source Code Files with eWASH: Extended Window Access by Syntax Hierarchy. Research question: How robust are Code Llama variants with expanded context windows to syntax perturbations in cross-library API generation, as measured by pass@1 on BigCodeBench?.

2 Methodology

Systematic literature search across multiple databases yielded 10 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 5.5/10.

3 Results

10 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 5.5/10.

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/2509.25716v1
- http://arxiv.org/abs/2212.10264v1
- http://arxiv.org/abs/2109.08780v1