

# Retrieval-Augmented Llama3-70B vs. Claude 3 Opus on CodeXGLUE Security Benchmarks

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## Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: How does the retrieval-augmented performance of Llama3-70B on the CodeXGLUE security subset compare to other state-of-the-art LLMs like Claude 3 Opus when evaluated on precision, recall, and F1-score. Anomaly detection is a widely explored domain in machine learning. Many models are proposed in the literature, and compared through different metrics measured on various datasets. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Anomaly Detection: How to Artificially Increase your F1-Score with a Biased Evaluation Protocol. Research question: How does the retrieval-augmented performance of Llama3-70B on the CodeXGLUE security subset compare to other state-of-the-art LLMs like Claude 3 Opus when evaluated on precision, recall, and F1-score metrics?.

## 2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.2/10.

## 3 Results

4 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.2/10.

## 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/2605.12335v1>
- <http://arxiv.org/abs/1409.2261v1>
- <http://arxiv.org/abs/2106.16020v1>