Multilingual Natural Language Pretraining Enhances JaCoText Generalization Across Programming Languages

Assignee Research

June 7, 2026

Abstract

This report synthesises findings from 12 peer-reviewed papers addressing the following research question: To what extent does incorporating multilingual natural language descriptions in the pretraining data improve JaCoText's generalization across different programming languages, as measured by accuracy. 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: JaCoText: A Pretrained Model for Java Code-Text Generation. Research question: To what extent does incorporating multilingual natural language descriptions in the pretraining data improve JaCoText's generalization across different programming languages, as measured by accuracy on the MBPP benchmark for Python and Java?.

2 Methodology

Systematic literature search across multiple databases yielded 12 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

12 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/2505.18673v1
- http://arxiv.org/abs/2303.12869v1
- http://arxiv.org/abs/2306.06371v1