

Growth Bound Matrix Regularization and Dropout in S4 Model Robustness to Synonym Attacks

Assignee Research

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Abstract

This report synthesises findings from 13 peer-reviewed papers addressing the following research question: How does the Growth Bound Matrix regularization affect the robustness of S4 models to synonym substitution attacks on the MNLI benchmark compared to standard dropout techniques. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Bridging Robustness and Generalization Against Word Substitution Attacks in NLP via the Growth Bound Matrix Approach. Research question: How does the Growth Bound Matrix regularization affect the robustness of S4 models to synonym substitution attacks on the MNLI benchmark compared to standard dropout techniques?.

2 Methodology

Systematic literature search across multiple databases yielded 13 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.2/10.

3 Results

13 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.2/10.

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/2507.10330v1>
- <http://arxiv.org/abs/2407.15549v3>
- <http://arxiv.org/abs/2106.01065v2>