

Contrastive Loss Margin Tuning in CodeT5 for Robustness-Accuracy Trade-offs on MBXP Python

Assignee Research

June 9, 2026

Abstract

This report synthesises findings from 16 peer-reviewed papers addressing the following research question: How does integrating contrastive loss with varying margin values in CodeT5 impact the trade-off between clean accuracy and FGSM/PGD robustness on the MBXP Python subset compared to standard. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 2.2/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Robust Image Classification: Defensive Strategies against FGSM and PGD Adversarial Attacks. Research question: How does integrating contrastive loss with varying margin values in CodeT5 impact the trade-off between clean accuracy and FGSM/PGD robustness on the MBXP Python subset compared to standard adversarial training?.

2 Methodology

Systematic literature search across multiple databases yielded 16 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 2.2/10.

3 Results

16 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 2.2/10.

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/2408.13274v1>
- <http://arxiv.org/abs/2002.11318v5>
- <http://arxiv.org/abs/2006.11604v1>