

# Adversarial Robustness of XSimGCL vs. Graph Contrastive Learning Methods on Yelp and Amazon

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## Abstract

This report synthesises findings from 7 peer-reviewed papers addressing the following research question: How does the adversarial robustness of XSimGCL compare to other graph contrastive learning methods when evaluated on the Yelp and Amazon review datasets using NDCG@10 and NDCG@20 as metrics. Contrastive learning (CL) has emerged as a powerful framework for learning representations of images and text in a self-supervised manner while enhancing model robustness against adversarial attacks. More recently, researchers have extended the principles of contrastive learning. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.0/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: On the Adversarial Robustness of Graph Contrastive Learning Methods. Research question: How does the adversarial robustness of XSimGCL compare to other graph contrastive learning methods when evaluated on the Yelp and Amazon review datasets using NDCG@10 and NDCG@20 as metrics?.

## 2 Methodology

Systematic literature search across multiple databases yielded 7 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.0/10.

### **3 Results**

7 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.0/10.

### **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/2206.07869v1>
- <http://arxiv.org/abs/2203.07969v1>
- <http://arxiv.org/abs/2311.17853v2>