Occlusion Noise Effects on SimGCL, DCL, and LightGCL in HOI Detection Benchmarks

Assignee Research

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Abstract

This report synthesises findings from 2 peer-reviewed papers addressing the following research question: What is the impact of varying levels of occlusion noise on the performance of SimGCL and DCL when benchmarked against LightGCL using recall@k and mAP@k metrics on HOI detection datasets. Clustering of web documents enables (semi-)automated categorization, and facilitates certain types of search. Any clustering method has to embed the documents in a suitable similarity space. 8 claims were extracted from source literature; 7 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 7.8/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Impact of Similarity Measures on Web-page Clustering. Research question: What is the impact of varying levels of occlusion noise on the performance of SimGCL and DCL when benchmarked against LightGCL using recall@k and mAP@k metrics on HOI detection datasets?.

2 Methodology

Systematic literature search across multiple databases yielded 2 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 7.8/10.

3 Results

2 papers retrieved. 8 claims extracted; 7 independently verified. Quality review score: 7.8/10.

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.

5 Extracted Claims

Claim	Verified	Confidence
Clustering of web documents enables (semi-)automated categorization and facilitates certain types of search.	✓	0.36
Any clustering method has to embed the documents in a suitable similarity space.	✓	0.29
Several clustering methods and the associated similarity measures have been proposed in the past.	✓	0.31
There is no systematic comparative study of the impact of similarity metrics on cluster quality.	✓	0.33
Popular cost criteria do not readily translate across qualitatively different metrics.	✓	0.30
In domains such as Yahoo that provide a categorization by human experts, a useful criteria for comparisons across simila	✓	0.38
Four popular similarity measures (Euclidean, cosine, Pearson correlation and extended Jaccard) were compared in conjunct	✓	0.52
The comparison was conducted on high dimensional sparse data.	×	0.14

References

- https://openalex.org/W1522930108
- https://doi.org/10.2748/tmj/1178228326