

Feature Dimensionality Effects on Contrastive Pretraining in Foundation Models for Tabular Data

Assignee Research

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Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: How does varying the feature dimensionality in synthetic tabular datasets impact the contrastive pretraining convergence speed and final accuracy of foundation models. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: A Survey on Self-Supervised Learning for Non-Sequential Tabular Data. Research question: How does varying the feature dimensionality in synthetic tabular datasets impact the contrastive pretraining convergence speed and final accuracy of foundation models?.

2 Methodology

Systematic literature search across multiple databases yielded 15 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.7/10.

3 Results

15 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.7/10.

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/2507.07829v1>
- <http://arxiv.org/abs/2512.03307v1>
- <http://arxiv.org/abs/2402.01204v4>