Structural Causal Model Integration Reduces Overfitting in Small-Validation Tabular Foundation Models

Assignee Research

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Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: To what extent does integrating structural causal models into fine-tuning reduce overfitting in tabular foundation models when validation sets are smaller than 5% of the training data. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Which practical interventions does the do-operator refer to in causal inference? Illustration on the example of obesity and cancer. Research question: To what extent does integrating structural causal models into fine-tuning reduce overfitting in tabular foundation models when validation sets are smaller than 5% of the training data?.

2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.5/10.

3 Results

4 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.5/10.

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/2206.01802v2
- http://arxiv.org/abs/2102.10440v5
- http://arxiv.org/abs/1901.00772v1