Multimodal Fusion in Bayesian Neural Networks for Robust Tabular Prediction Under Distribution Shift

Assignee Research

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Abstract

This report synthesises findings from 16 peer-reviewed papers addressing the following research question: How does the integration of multimodal fusion techniques in Bayesian neural networks improve predictive accuracy on tabular datasets with distribution shift compared to deep ensemble methods. 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 Out-of-Distribution Coverage of Combining Split Conformal Prediction and Bayesian Deep Learning. Research question: How does the integration of multimodal fusion techniques in Bayesian neural networks improve predictive accuracy on tabular datasets with distribution shift compared to deep ensemble methods?.

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 3.0/10.

3 Results

16 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/2311.12688v2
- http://arxiv.org/abs/2206.02435v2
- http://arxiv.org/abs/1811.10041v1