Review of: "Causality in Machine Learning: Innovating Model Generalization through Inference of Causal Relationships from Observational Data"

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Potential competing interests: No potential competing interests to declare.

This paper investigates various techniques, including constraint-based, score-based, and neural structure learning algorithms, to infer directed causal graphs from diverse datasets. The authors claim that the inferred causal graphs provide explanatory power and invariance, offering domain-general insights that go beyond statistical correlations alone.

However, the concerns for this paper are as follows:

- The paper lacks a clear motivation and research gap. The authors do not justify why their study is important, and how it contributes to the existing literature. They should cite recent papers that are relevant to their topic and show how their work differs from or improves upon them.
- In addition, the paper is poorly written, and the analysis of the algorithms used in the benchmarks leaves room for one to question if the authors knew what they were doing. They claim they used 10-15 datasets which could not be sighted in the writeup apart from institutions names. The names of the datasets should be mentioned to avoid any ambiguity.
- Authors also failed to show the effects of the causal discovery algorithms listed. This paper could benefit a new writeup.