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.

The current article outlines a study on the causality in machine learning, which is an important and relevant topic in institutionalization of ML models.

However; for any study to be useful for research communities, the author should provide sufficient details on the study by using which the readers can validate/replicate the study to some degree. Unfortunately, the details on the study are spare and not suffice for the article to be useful. The authors should provide details on

i. Specific details of the 10-15 data sets which were used in the study. Also the author should specify how many datasets were actually used whether 10 or 15 or some other number.
ii. Some details of specific values of metric (causality graphs, precision, recall, and F1-score,..etc) used to judge the causality algorithms for 5-6 datasets used in study.
iii. All the statements made in “Key results and findings” should be backed-up with data. For example for one statement like “Score-based algorithms like LiNGAM and CAM showed robust performance across both simulated and real-world datasets” (Show results of data to back-up this statement)
iv. The author provide more details on current study i.e. comparing different causality algorithms and can shorten details on future study i.e. how to incorporate casualty for generalization of ML model

In addition to this couple of minor modifications are also required

a. Abstract should be made streamlined and easy to understand for user
b. Few recent references need to be added
c. Introduction should be made informative and authors should add few characteristics for each type of causality algorithms