MENTAL BEHAVIOUR ABOUT THE *ML MODEL*

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Abstract:-

Decision-making powered by machine learning models become increasingly adopted on the web today. However, when applied to a new distribution of data that is different from the training data. ML models often suffer from poor performance and provide misleading recommendations to human decision.

In this paper we discuss human behaviour according to the above problem.

What is mean Analytical Model?

Analytical model is nothing but Statistical formulation use in ML model to predict the future. It contains three steps that are data collection data analysis and data presentation.

It may contain statistical strategies, graphs, equations, data visualisation, and algorithms.

What is mean by ML Model?

ML model is a subset of AI that allows to train the systems to become more accurate at predicting outcomes without changing in the logic.

ML model Contain algorithms and future engineering, so that it complete the client requirement.

Relation between Analytic Model and Real world problem

ML model is mediator between Analytical model and Real world problem. It translates real-world problems into ML model and vice versa. That analysis provides results and direction useful for the real world application. However, Analytical model involves static models that represent a real-world phenomenon in Analytical form. Once Analytical model is formulated, it does not necessitate that the Statistical models are behave like human being. Practically every data scientist work to improve for the efficient Model though we cannot reach that much interaction between Analytical model and ML model.

Understanding the problem about ML model.

This paper describe an problems of ML model and behaviour of human being. When performance of the ML model is not good some people criticize the Model, Developer or organisation.
So how do people decide their reliance on the model? We are trying to explore the ML model Problems and Human behaviour agaist it.

We find that the level of agreement between people and a model on decision-making tasks that people have high confidence in significantly affects reliance on the model if people receive no information about the model's performance, but this impact will change after aggregate-level model performance information becomes available. Influence of high confidence human-model agreement on people's reliance on a model is moderated by people's confidence in cases where they disagree with the model. We discuss potential risks of these ML models and provide design implications on promoting appropriate reliance on AI.

Reason behind poor performance of ML Model?

1. *Training data change day by day because of new data entries.*
2. *We despite the outliers but in case IQR increases then outliers are to be consider afterword.*
3. *Because of the change in distribution.*
4. *Lack of quality data.*
5. *Use unwanted features actually affect the ML model in reality.*
6. *Overfitting harms the real world situation problem.*
7. *Poor selection of ML algorithm.*
8. *Poor knowledge of statistical terms.*

What mind set should follow while interacting with ML model?

ML model is never false at all. It behaves like training data. If the model is binary dependent variable type; it give may False or True. This is not mean that model behave wrong. May False is good result according to user 1st or may True is good result according to user 2nd.

Eg.If we prepare model to work on Election result and it may give 40%-60% for two candidates this is not mean that it behaves in favour of 1st or 2nd. Both have chances to win. This is ML model

So before interacting ML model we keep patient that may model in favour of user 1st or 2nd. We cannot define whether model is good or bad on the basis of efficiency.

Person adjust their reliance on machine learning models when performance feedback is limited.

The Good ML model is that which learn lot of from training data with high speed and less memory. Performance of ML model will be resilience

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