Checklist for AI-Machine Learning Software Development and Review

Data Preparation and Normalization

Requirement

Yes/

Has the data been collected, processed, and cleaned?

Are there any missing or irrelevant values in the data?

Have outliers been managed in the data?

Is the data normalized (if necessary) to ensure fairness and accuracy?

Is the mean and standard deviation of candidate features calculated for normalization?

Data Allocation

Requirement

Yes/No

Are there three separate data sets: training, validation, and test? Are these data sets independent and representative of the entire dataset? Is the test data set used only during inference model verification? Are the training and validation data sets used during model training?

Machine Learning Techniques

Requirement

Yes/ No

Is the machine learning technique supervised, unsupervised, or reinforcement learning?

Is the supervised learning strategy using labeled data sets?

Is the unsupervised learning strategy without labeled data sets?

Is the reinforcement learning strategy using an environment and rewards/penalties?

Model Training and Verification

Requirement

Yes/No

Has the model been trained on the training data set?

Has the model been validated on the validation data set?

Has the model been tested on the test data set?

Is the inference model verified using the test data set?

Note: This checklist is generated based on the provided text and may not cover all possible requirements or scenarios. It's intended to be a starting point for AI-machine learning software development and review.

No