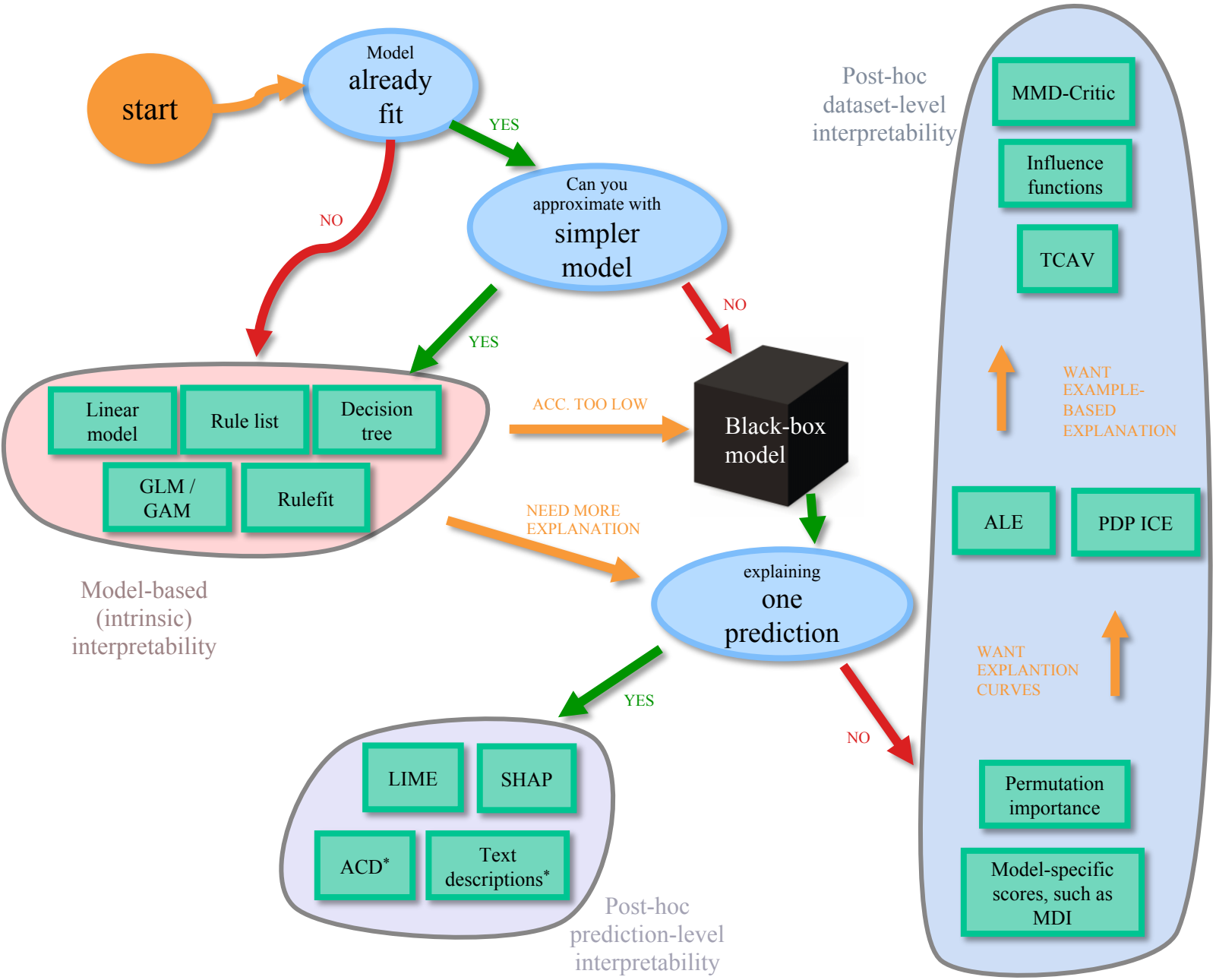

* Denotes that a method only works on certain models (e.g. only neural networks)

interpretability cheat-sheet

View on github

Based on this interpretability review and the sklearn cheat-sheet.
More in this book + these slides.

Summaries and links to code

RuleFit – automatically add features extracted from a small tree to a linear model

LIME – linearly approximate a model at a point

SHAP – find relative contributions of features to a prediction

ACD – hierarchical feature importances for a DNN prediction

Text – DNN generates text to explain a DNN's prediction (sometimes not faithful)

Permutation importance – permute a feature and see how it affects the model

ALE – perturb feature value of nearby points and see how outputs change

PDP ICE – vary feature value of all points and see how outputs change

TCAV – see if representations of certain points learned by DNNs are linearly separable

Influence functions – find points which highly influence a learned model

MMD-CRITIC – find a few points which summarize classes