



interpretability cheat-sheet



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

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