Model Exploration Stack

What is the model prediction for the selected instance?

f(x)

AUC RMSE

How good is the model?

ROC curve
LIFT, Gain charts
Chapter 15

Which variables contribute to the selected prediction?

Break Down
SHAP, LIME
Chapters 6, 7, 8, 9

Which variables are important to the model?

Permutational
Variable Importance
Chapter 16

How does a variable affect the prediction?

Ceteris Paribus
Chapters 10, 11

How does a variable affect the average prediction?

Partial Dependence Profile
Accumulated Local Effects
Chapters 17, 18

Does the model fit well around the prediction?

Chapter 12

Does the model fit well in general?

Chapter 19

**PREDICTION LEVEL
LOCAL EXPLANATIONS**

**MODEL LEVEL
GLOBAL EXPLANATIONS**