

CSIS3764

DATA SCIENCE

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Learning Curves

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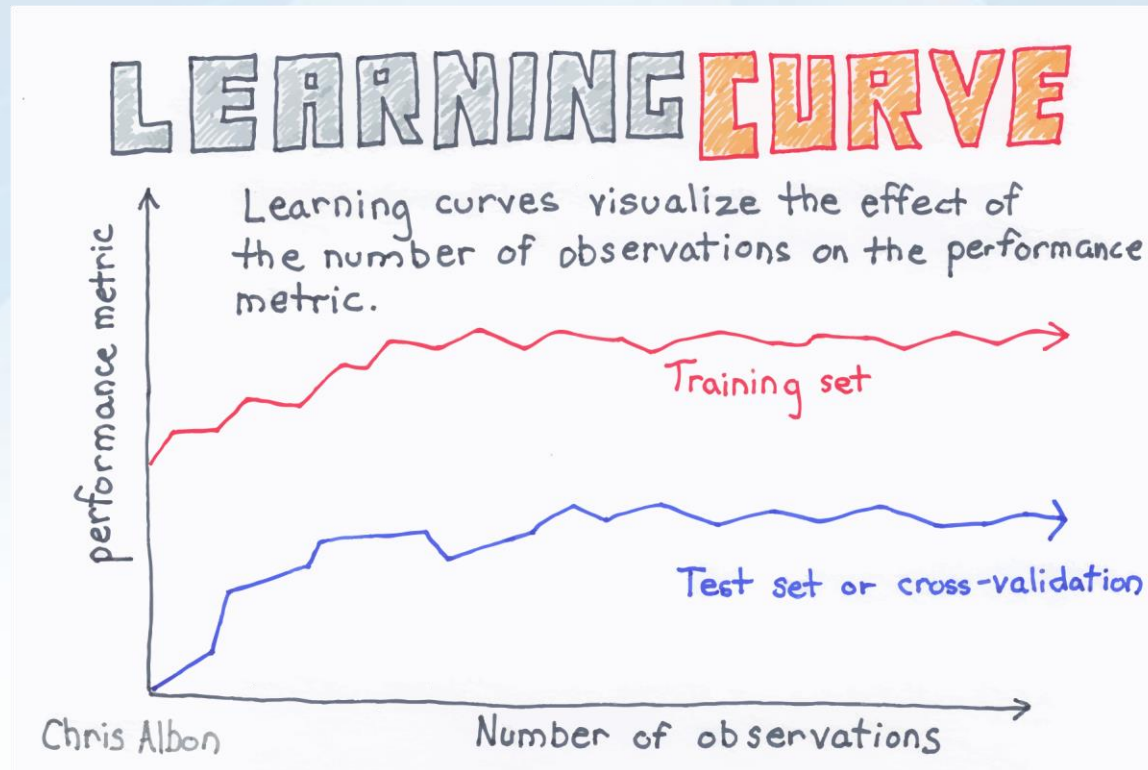


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WHAT IS A LEARNING CURVE?

- Plot of a model's performance



https://chrisalbon.com/machine_learning/model_evaluation/plot_the_learning_curve/



LEARNING CURVE METRICS

- Risk / Cost / Loss / Accuracy

vs.

Size / Number of Observations of Training Set and Test Set



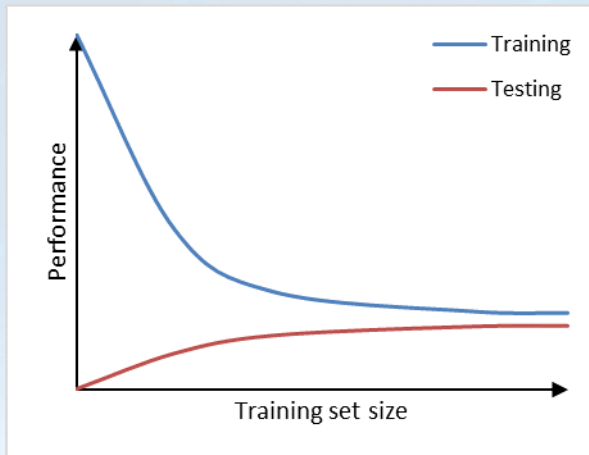
PURPOSE OF LEARNING CURVES

- Helps to diagnose
 - Underfitting / High bias
 - Overfitting / High variance

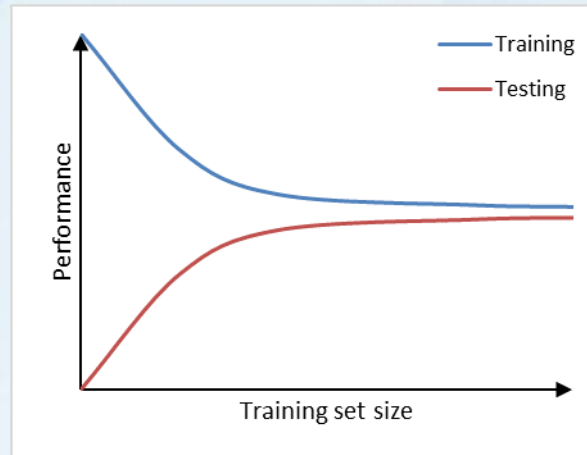
PURPOSE OF LEARNING CURVES



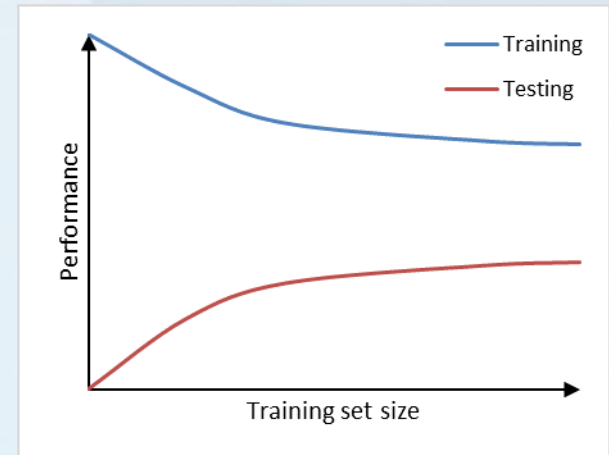
High Bias



Ideal



High Variance



PURPOSE OF LEARNING CURVES

