



Machine Learning

Dados

Processo contínuo

Medidas

Targets

Monitoramento

Features

Sinal

Relacionamentos

Padrões

Informações escondidas no dataset

Aprendizado

Conjunto de Regras - Humano x Máquina

Aprenda com os Dados:

- Aprender padrões
- Usar dados com input e a predição como output.

Técnicas

Aprendizado Supervisionado

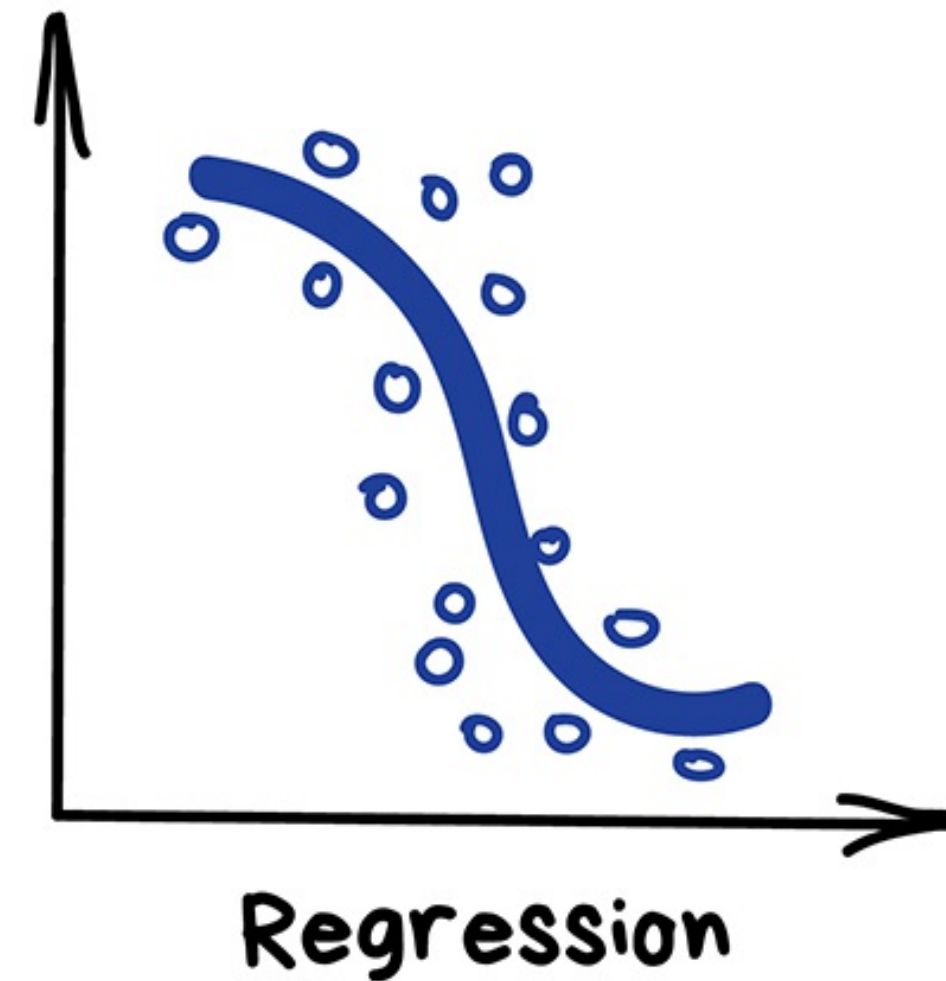
- Regressão
- Classificação

Aprendizado Não Supervisionado

- Redução de dimensionalidade
- Clusterização - agrupamento

Supervisionado

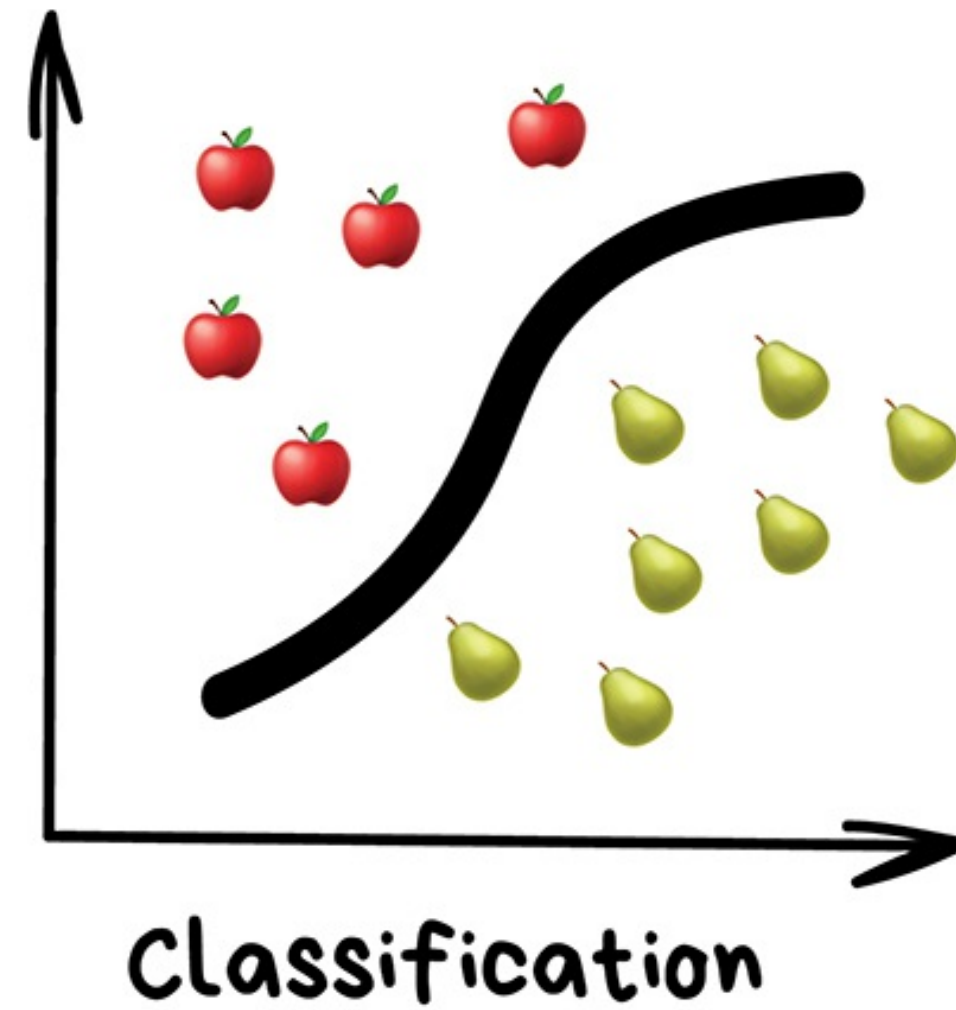
- Regressão



https://vas3k.com/blog/machine_learning/

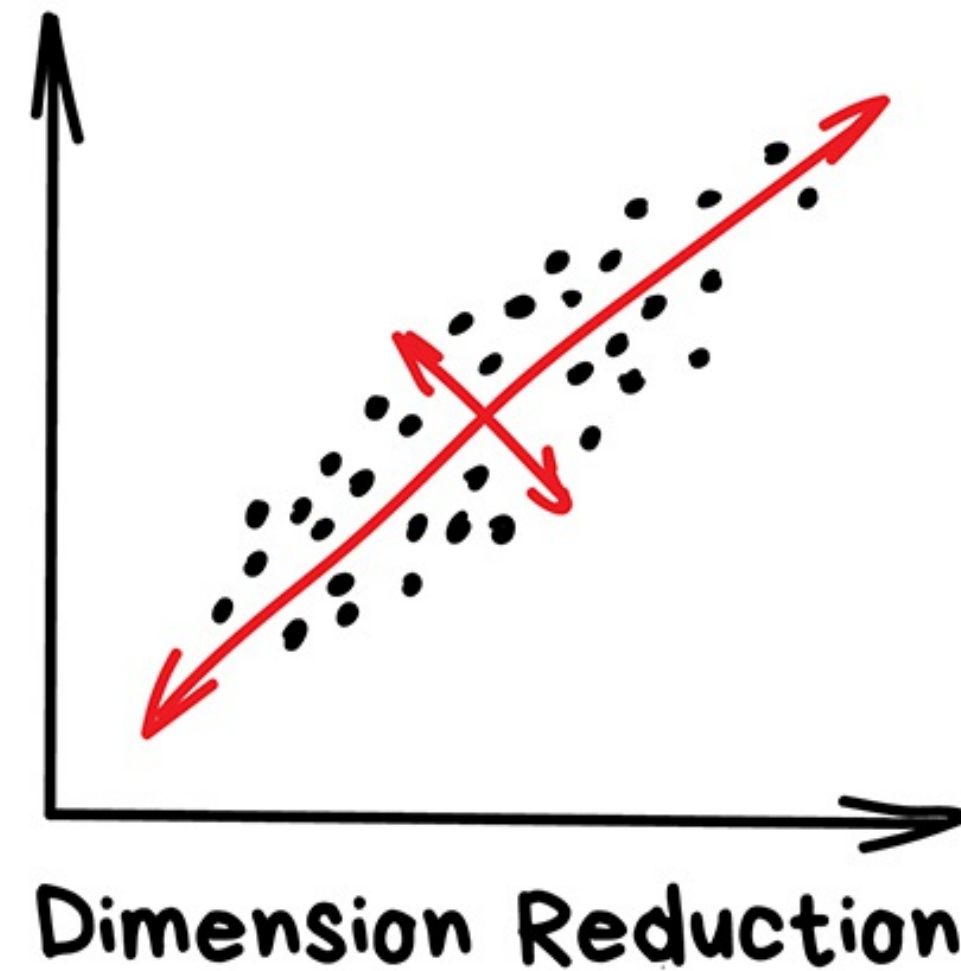
Supervisionado

- Classificação



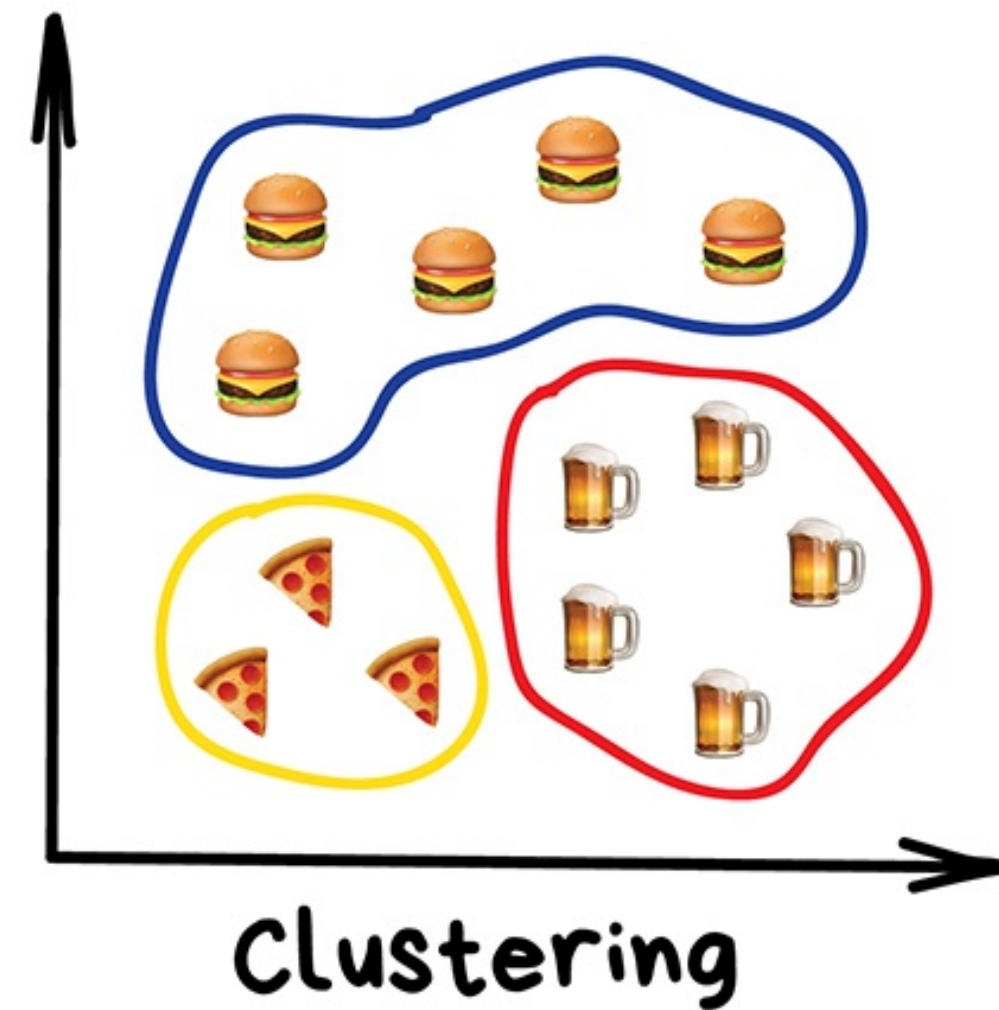
Não Supervisionado

- Redução de Dimensionalidade



Não Supervisionado

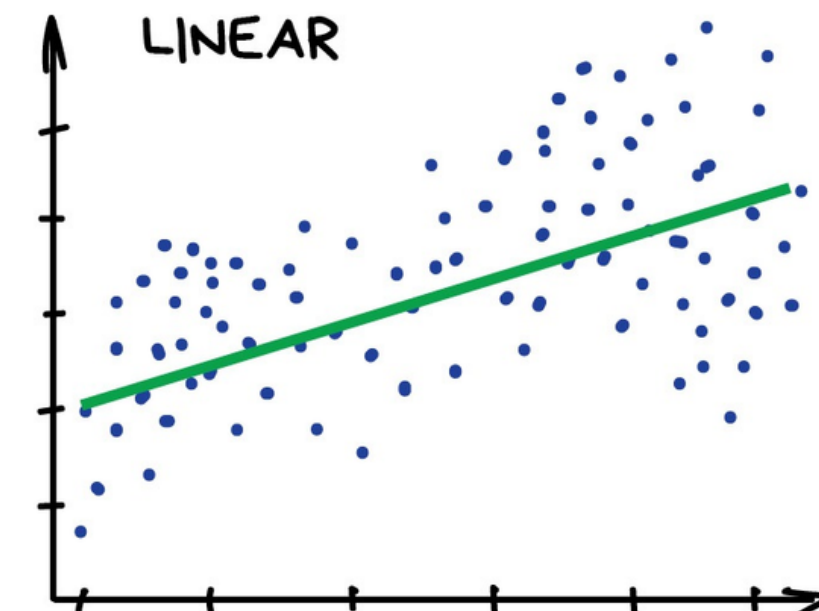
- Clusterização



Métodos Lineares

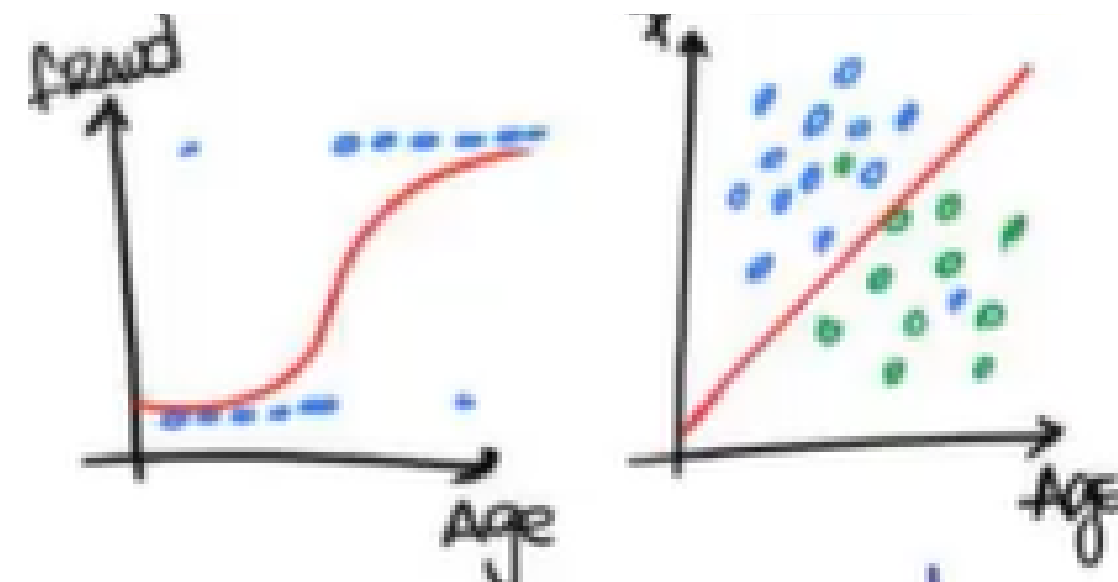
Problemas de Regressão:

- Regressão Linear

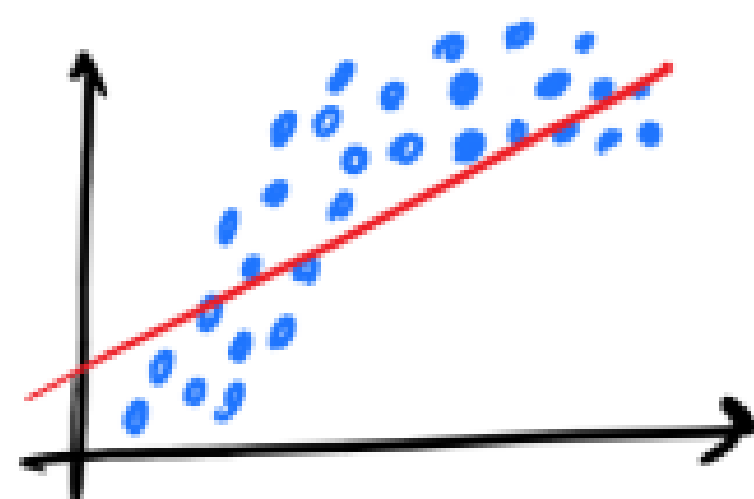


Problemas de classificação:

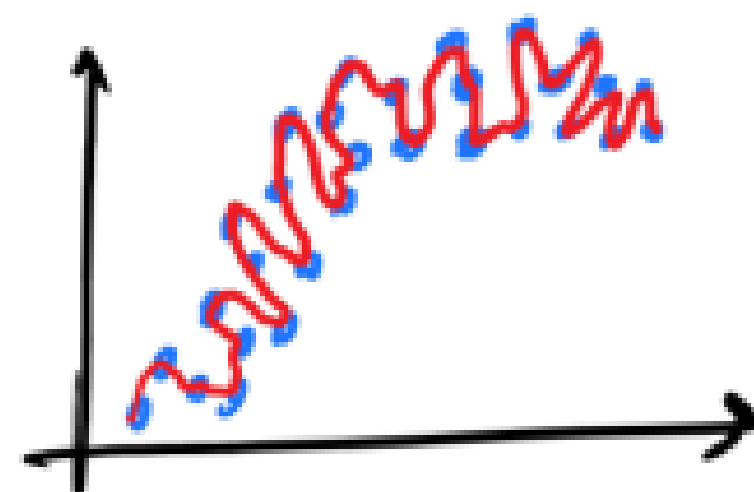
- Regressão Logística



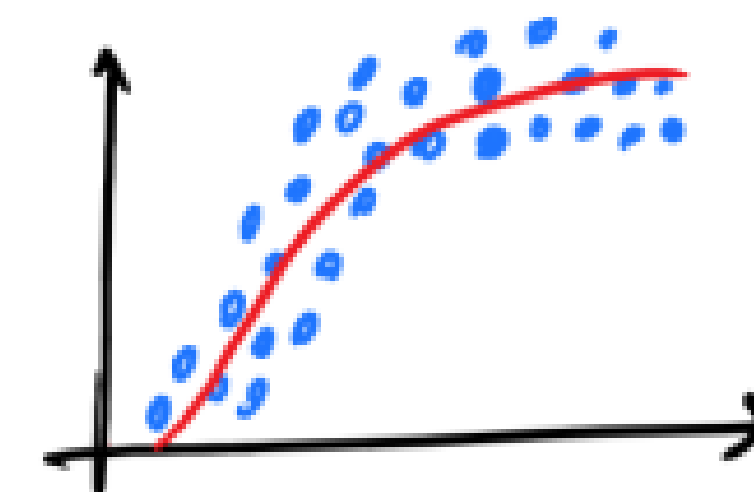
Bias e Variância - TradeOff



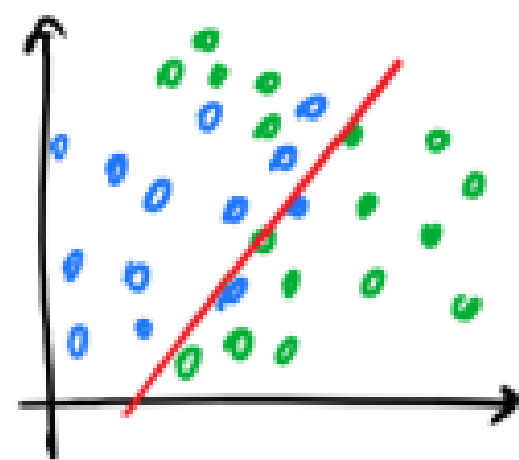
: under fitting



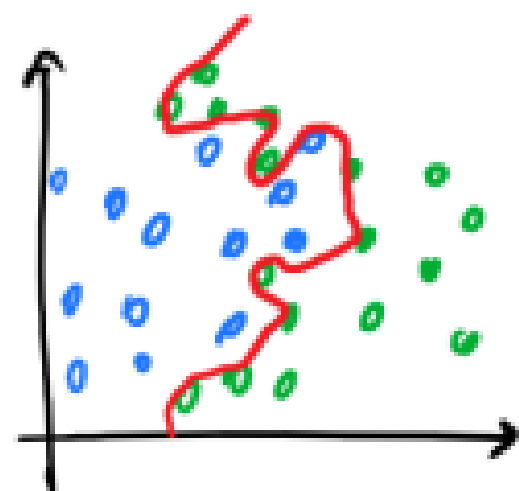
: overfitting



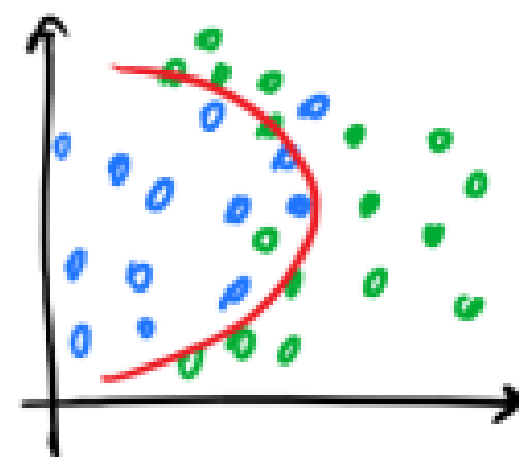
: generalization



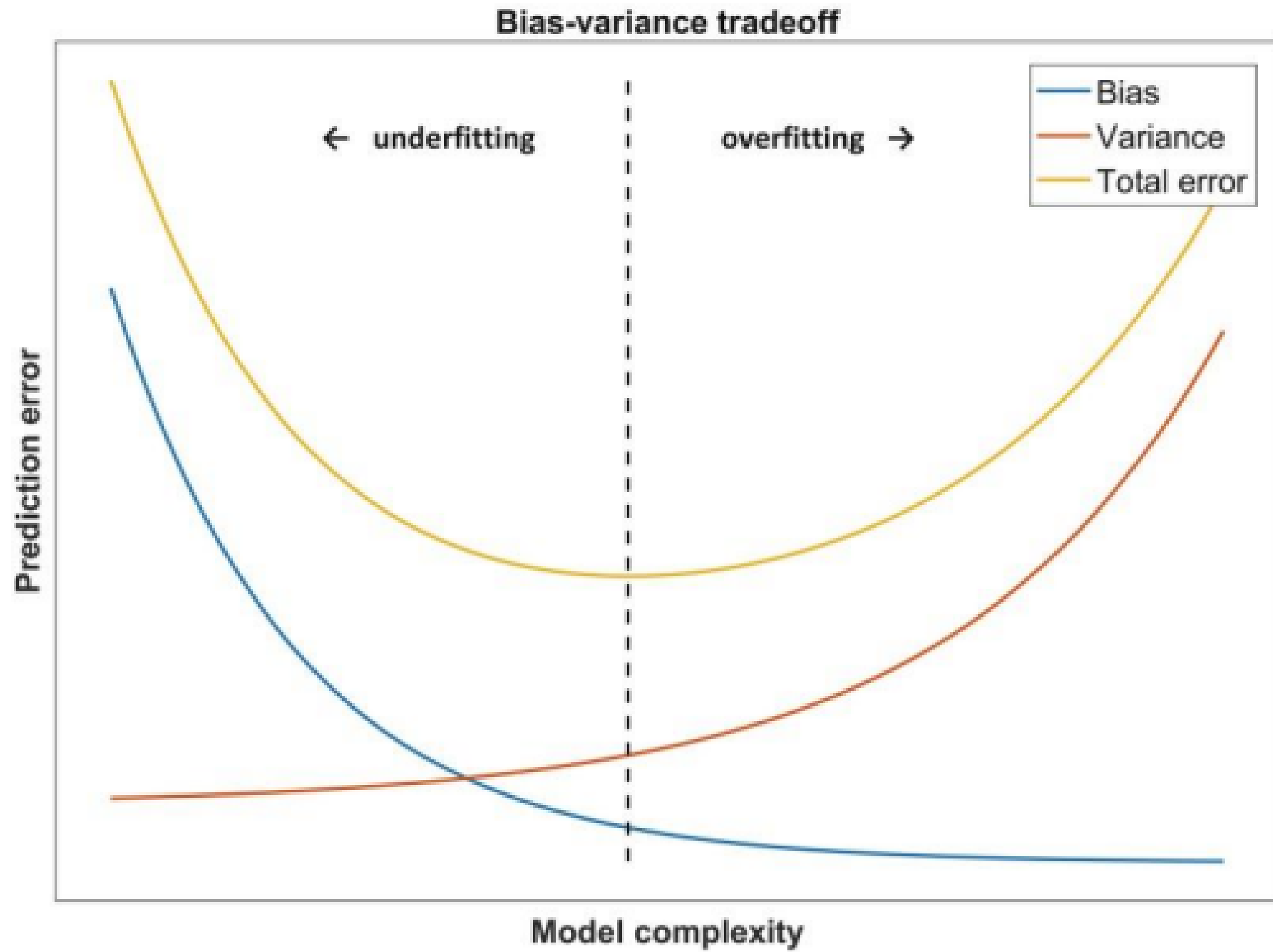
: under fitting

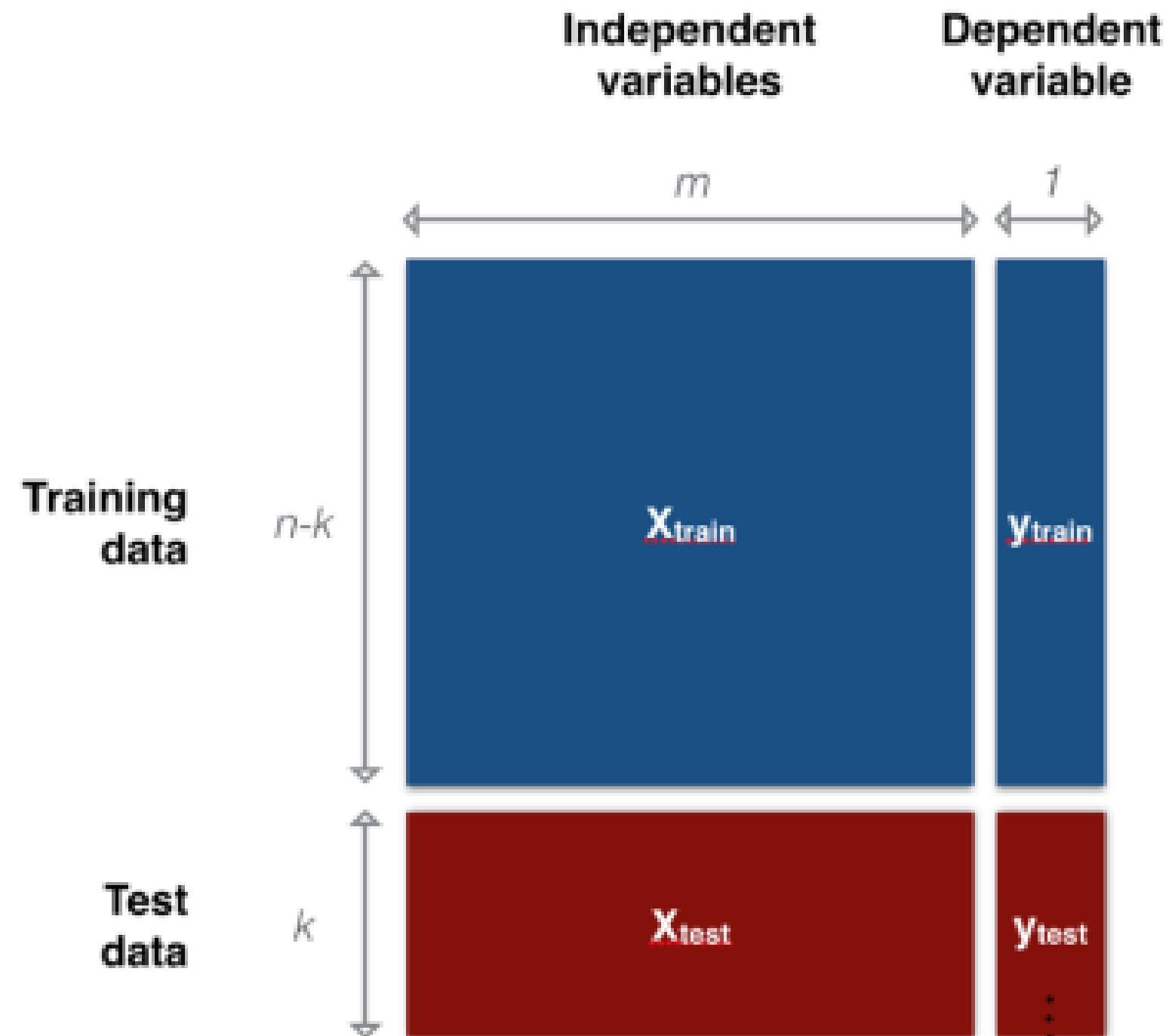


: overfitting



: generalization





Validation Techniques

Train Test Split

Time Split

Cross Validation

..... Calculate evaluation measures
(ex: MSE)

