



Unione europea
Fondo sociale europeo



Regione Emilia-Romagna



ER
Educazione
Ricerca
Emilia-Romagna

DATA LAB

GUARDA AVANTI

Big Data, nuove competenze
per nuove professioni.



UNIMORE
UNIVERSITÀ DEGLI STUDI DI
MODENA E REGGIO EMILIA



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



Università
degli Studi
di Ferrara



UNIVERSITÀ
DI PARMA



POLITECNICO
MILANO 1863
POLIGLIU TERRITORIALE DI
PIACENZA



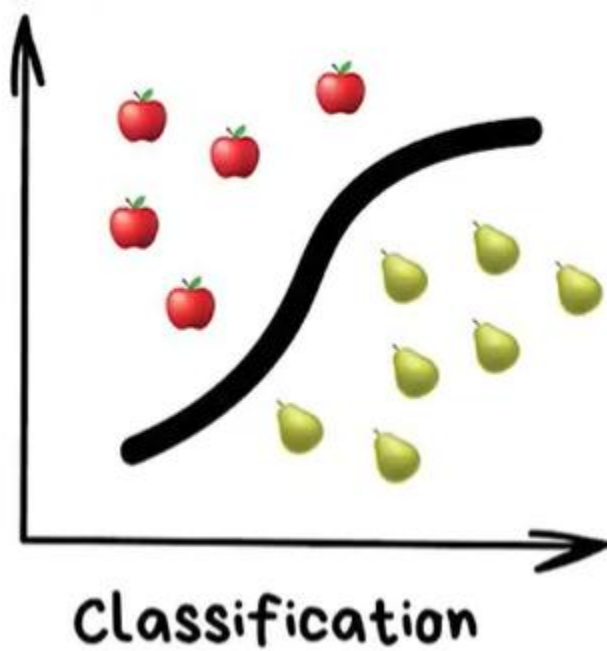
UNIVERSITÀ
CATTOLICA
del Sacro Cuore

"Anticipare la crescita con le nuove competenze sui Big Data - Edizione 3" Operazione Rif. PA 2021-16029/RER approvata con DGR
n° 927 del 21 giugno 2021 e co-finanziata dal Fondo Sociale Europeo PO 2014-2020 Regione Emilia-Romagna

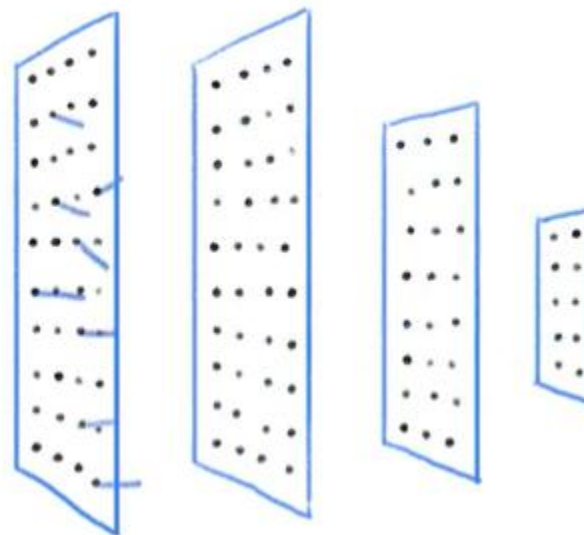
Deep Learning



OVERFITTING



CAT
(LABELED
PHOTOS)
DOG



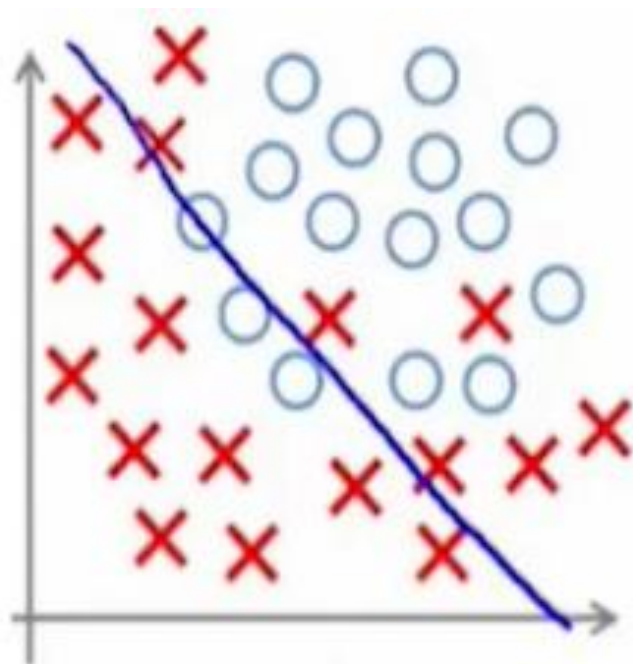
OUTPUT



NOT SURE IF 99% ACCURACY

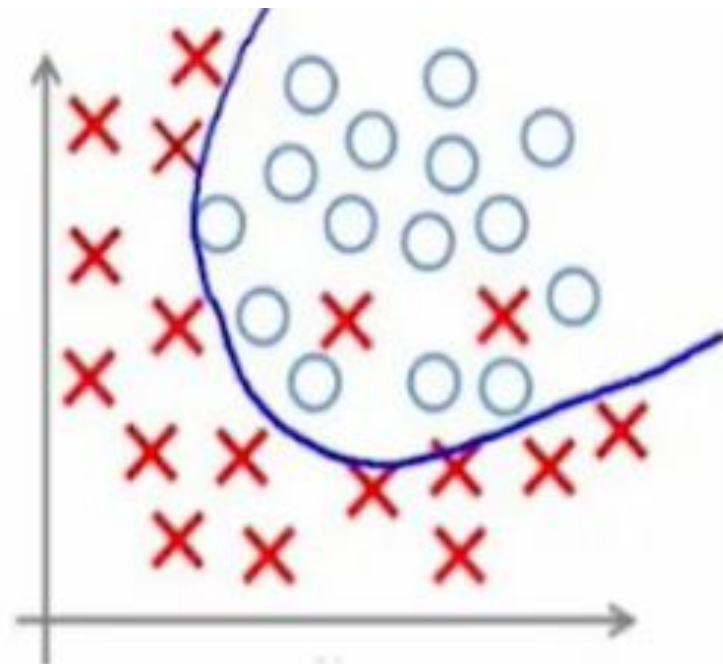


OR OVERFITTING

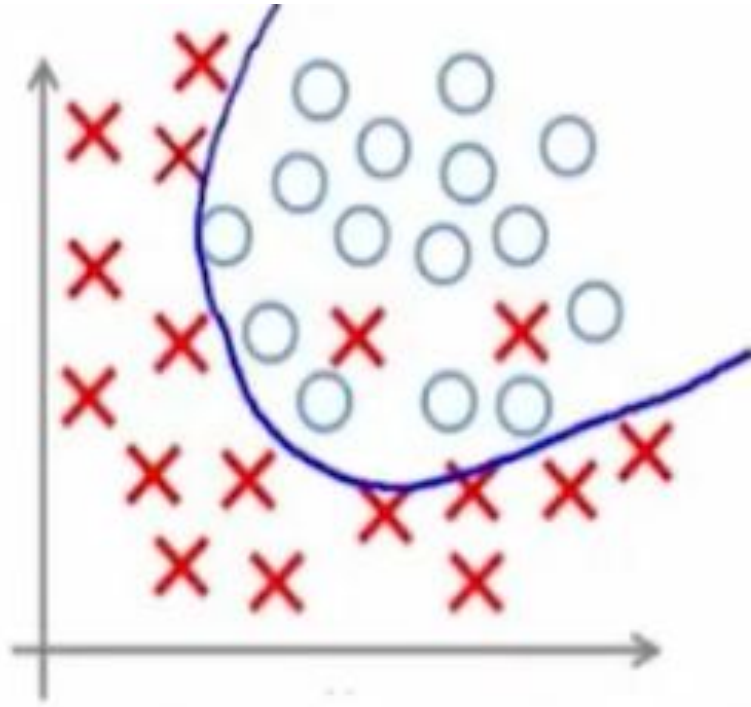


Under-fitting

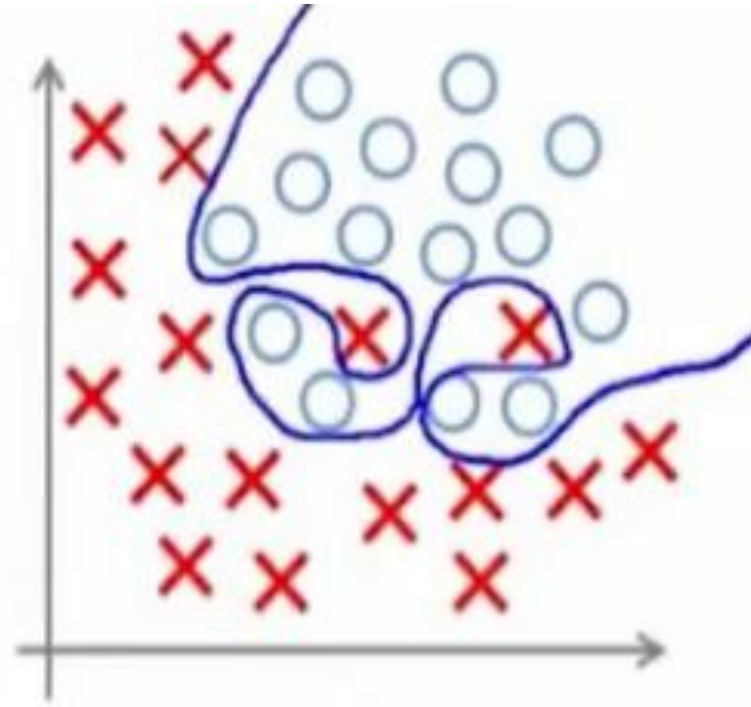
(too simple to
explain the
variance)



Appropriate-fitting



Appropriate-fitting

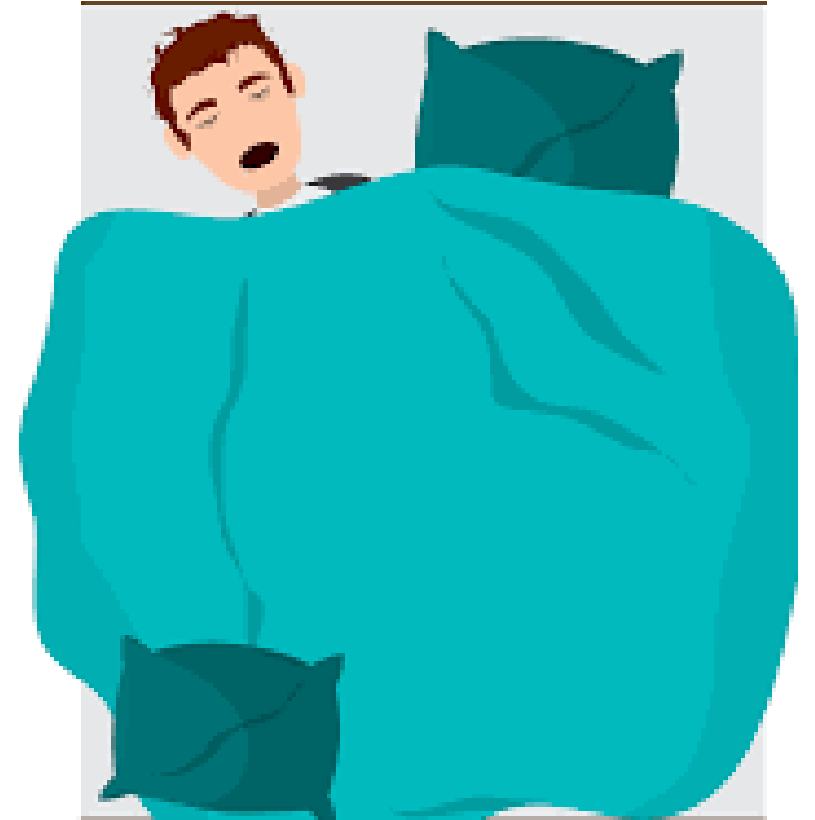


Over-fitting

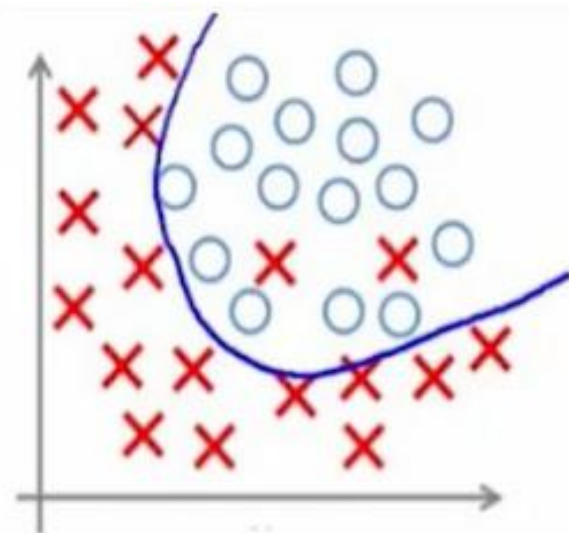
(forcefitting -- too good to be true)



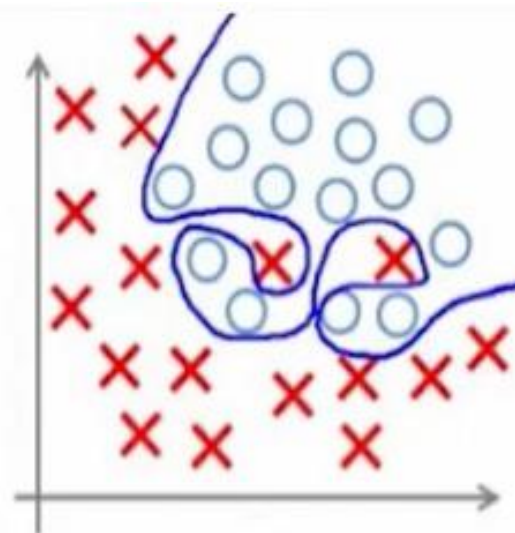
MODEL



DATA

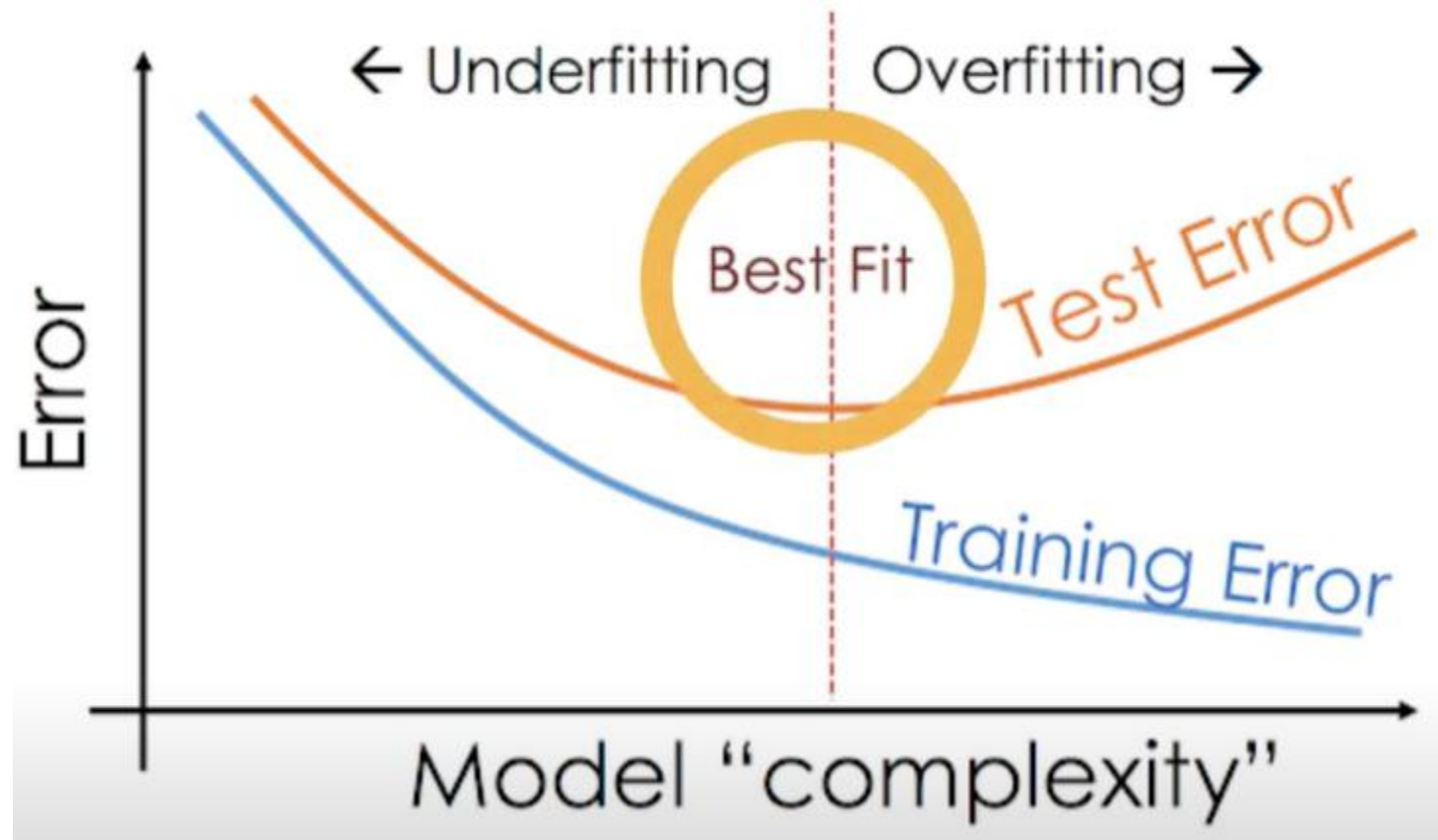


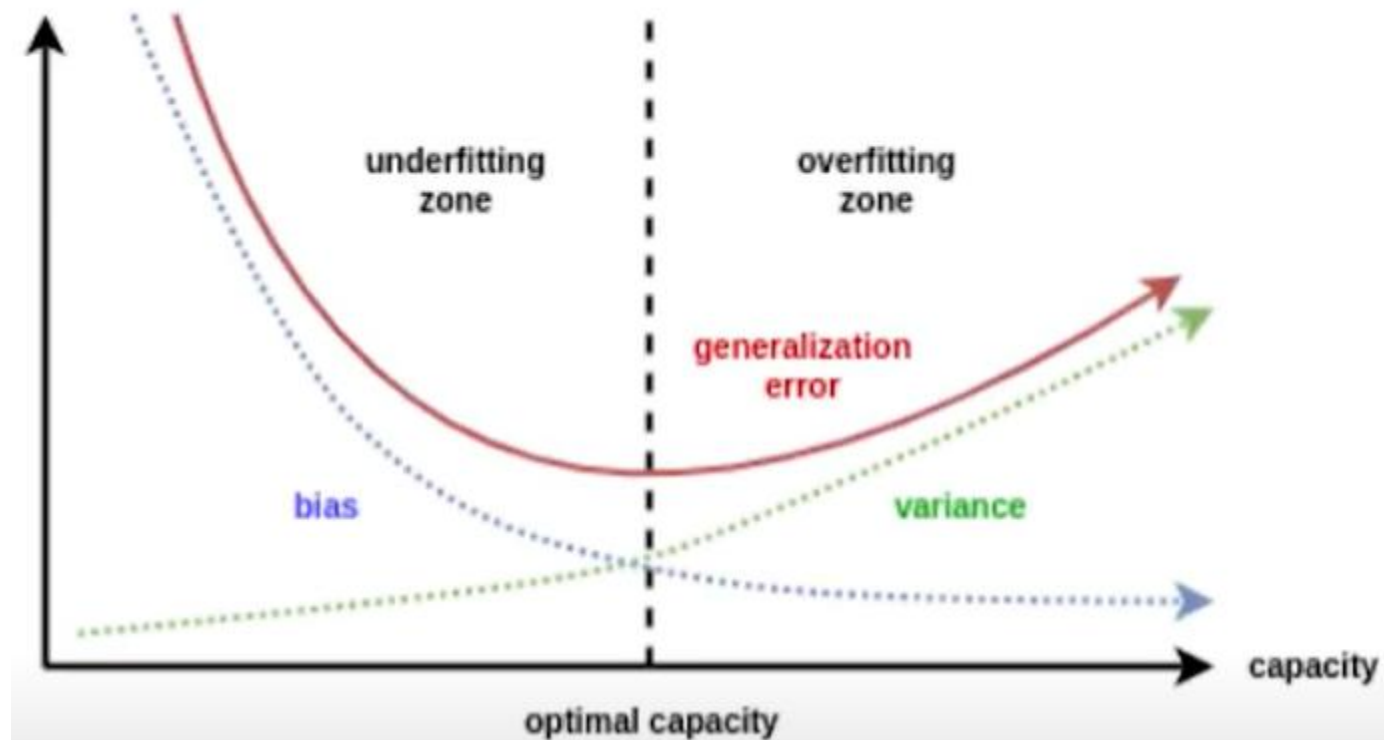
Appropriate-fitting



Over-fitting

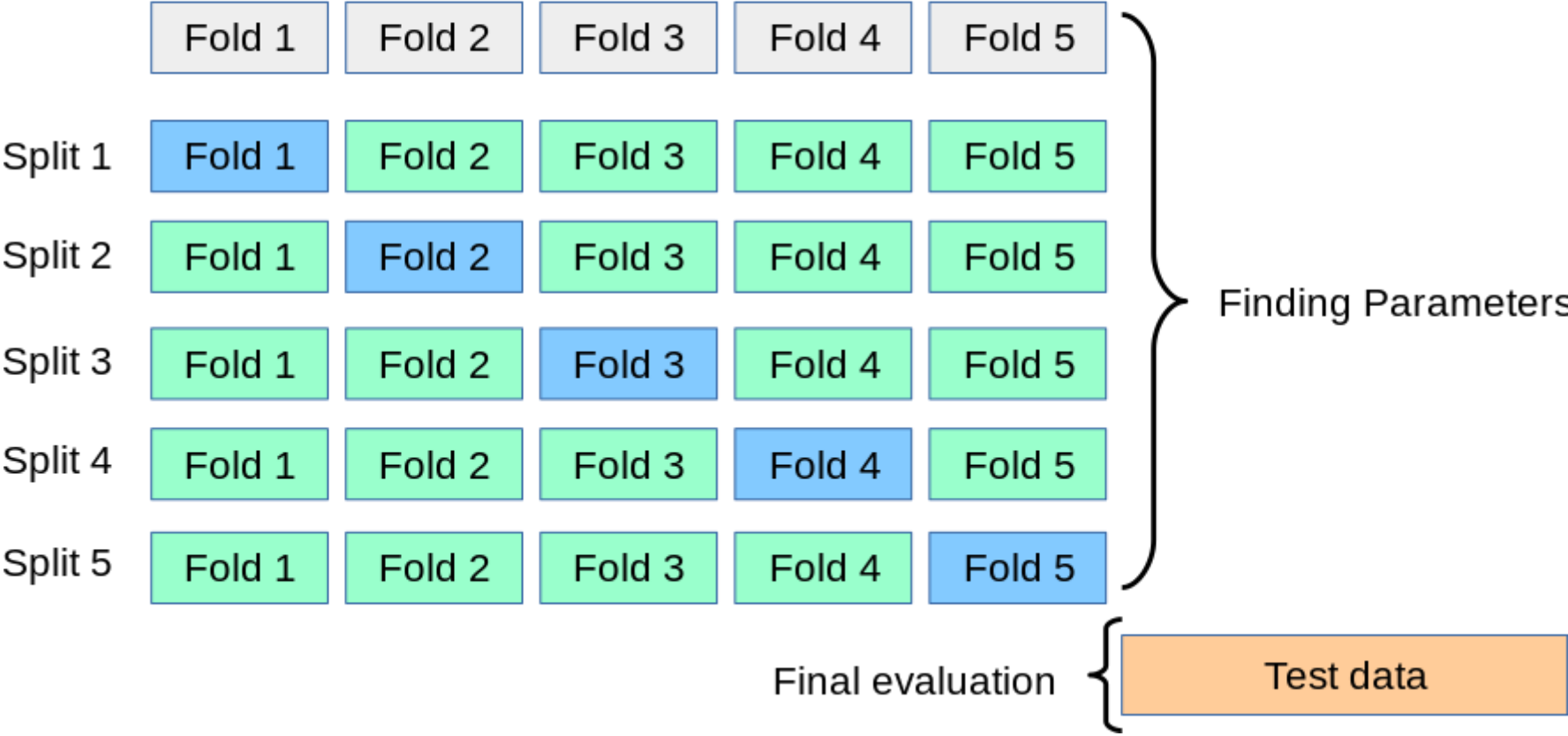
(forcefitting – too good to be true)





All Data

Training data Test data



Model Performance on Training Data



Model Performance on Test Data

