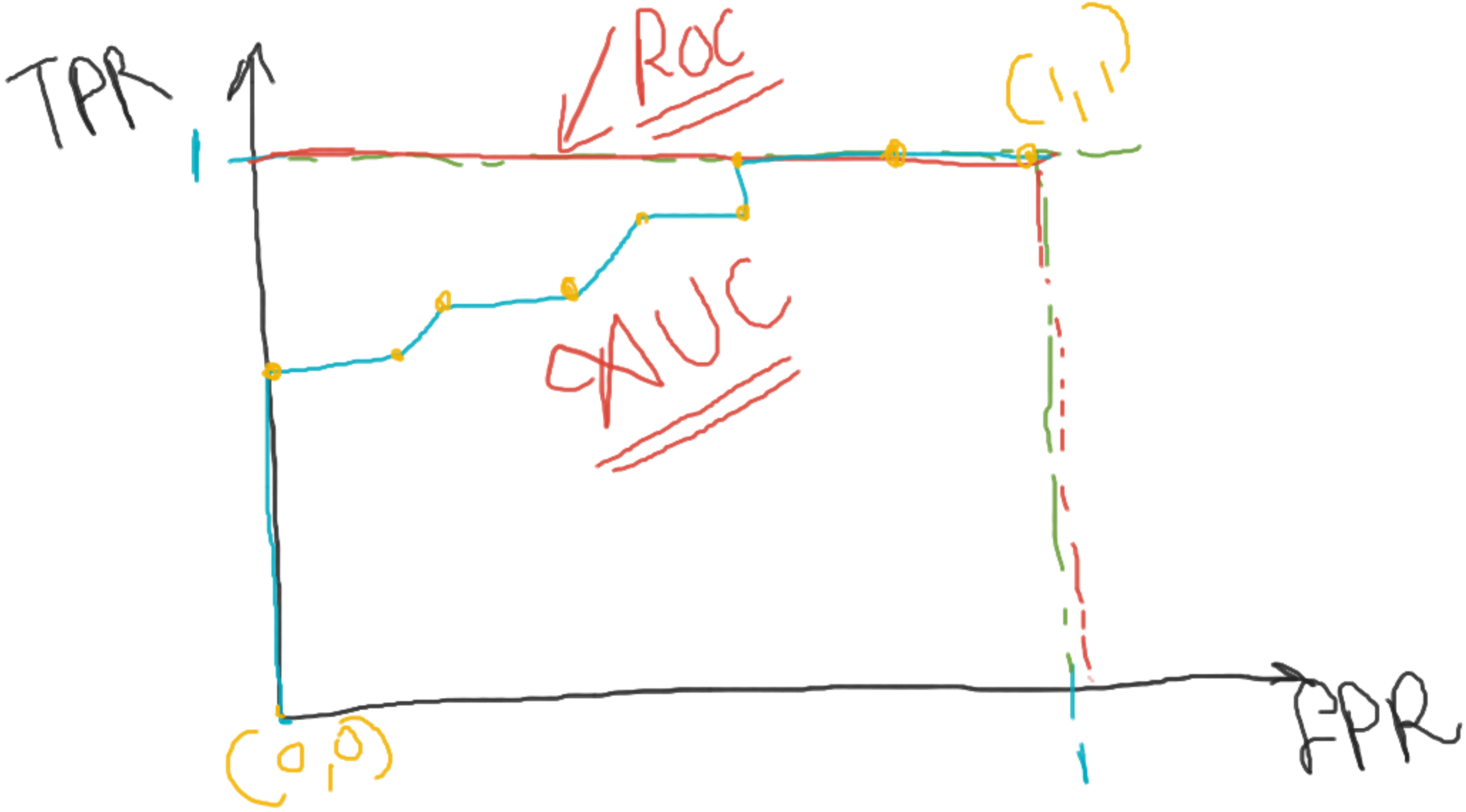
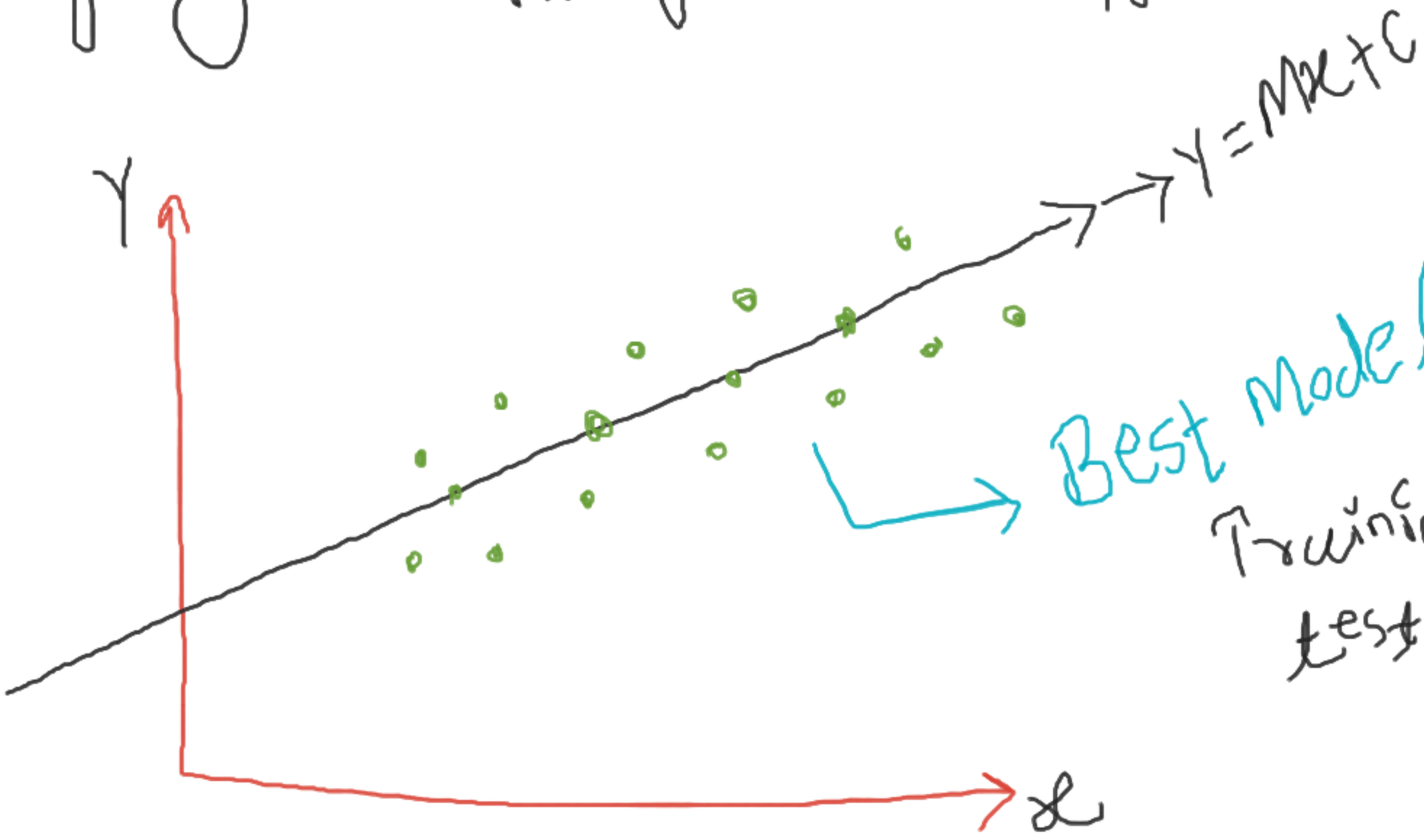
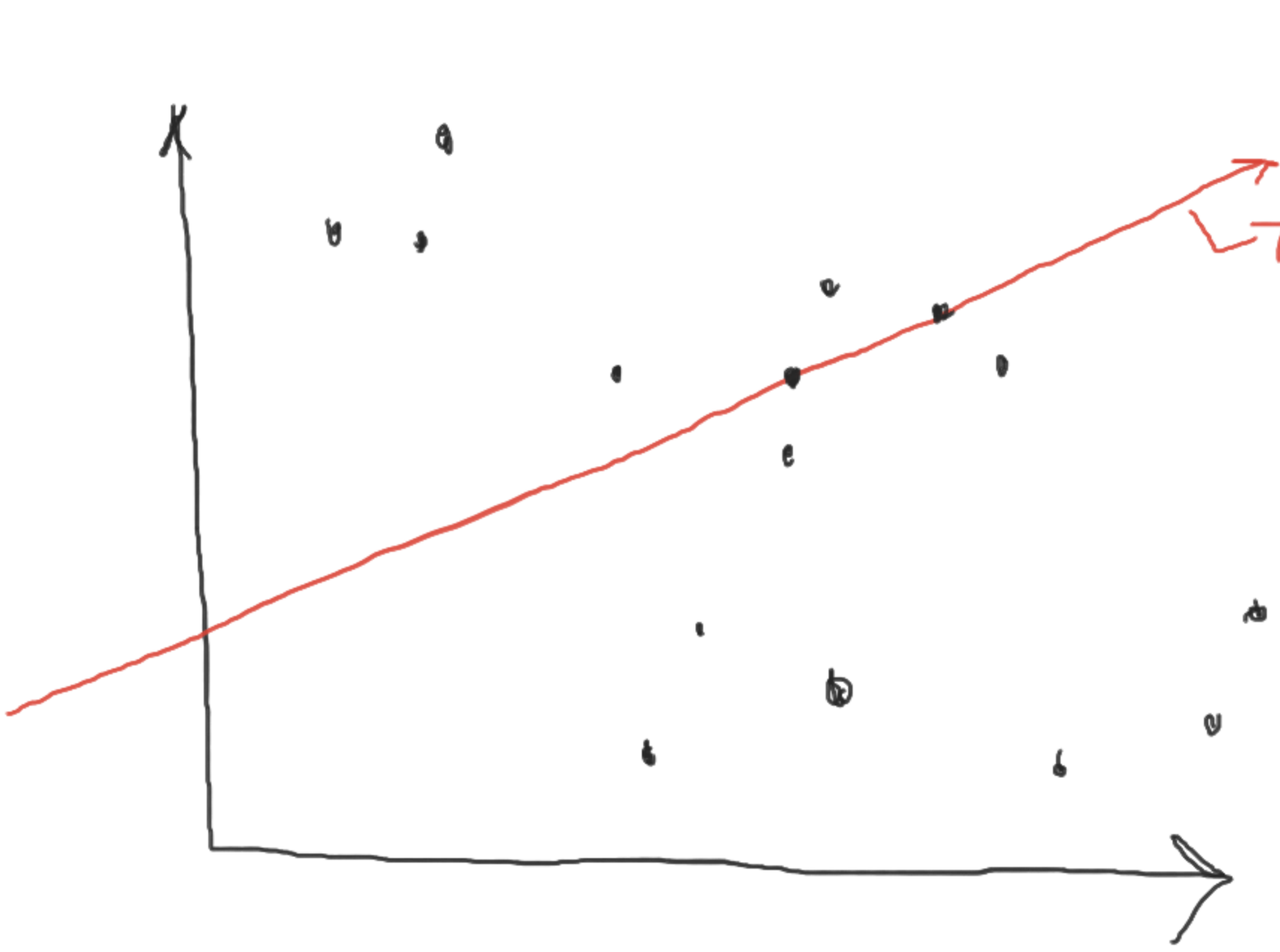
ROC = Receiver operating curve

AUC = Area under the curve



1] Overfitting & Underfitting :-





→ training = 72%

testing = 40%

1] Underfitting :-

i] training Acc = low

ii] testing Acc = low

Underfitting concern/ model

i] training
Accuracy: 75%

ii] Testing Acc: 65%

i] TA = 68%
ii] Test A = 61%

Underfitting

11] overfitting :-

1] Training Accuracy = High

2] Testing Accuracy = Low

1] Training Acc = 85 %

2] Testing Acc = 75%
71%
70%

I] Bias & Variance :-

→ Training Error.

I] High training Accuracy = Low Bias

II] Low training Accuracy = High Bias

- training Acc :- 95%, low Bias
training Acc :- 75% or 70%, High Bias } Both Accuracy

11] Variance :-

i] Training Acc = High

ii] Testing Accuracy = High

= Low Variance

i] Training Acc = 90%

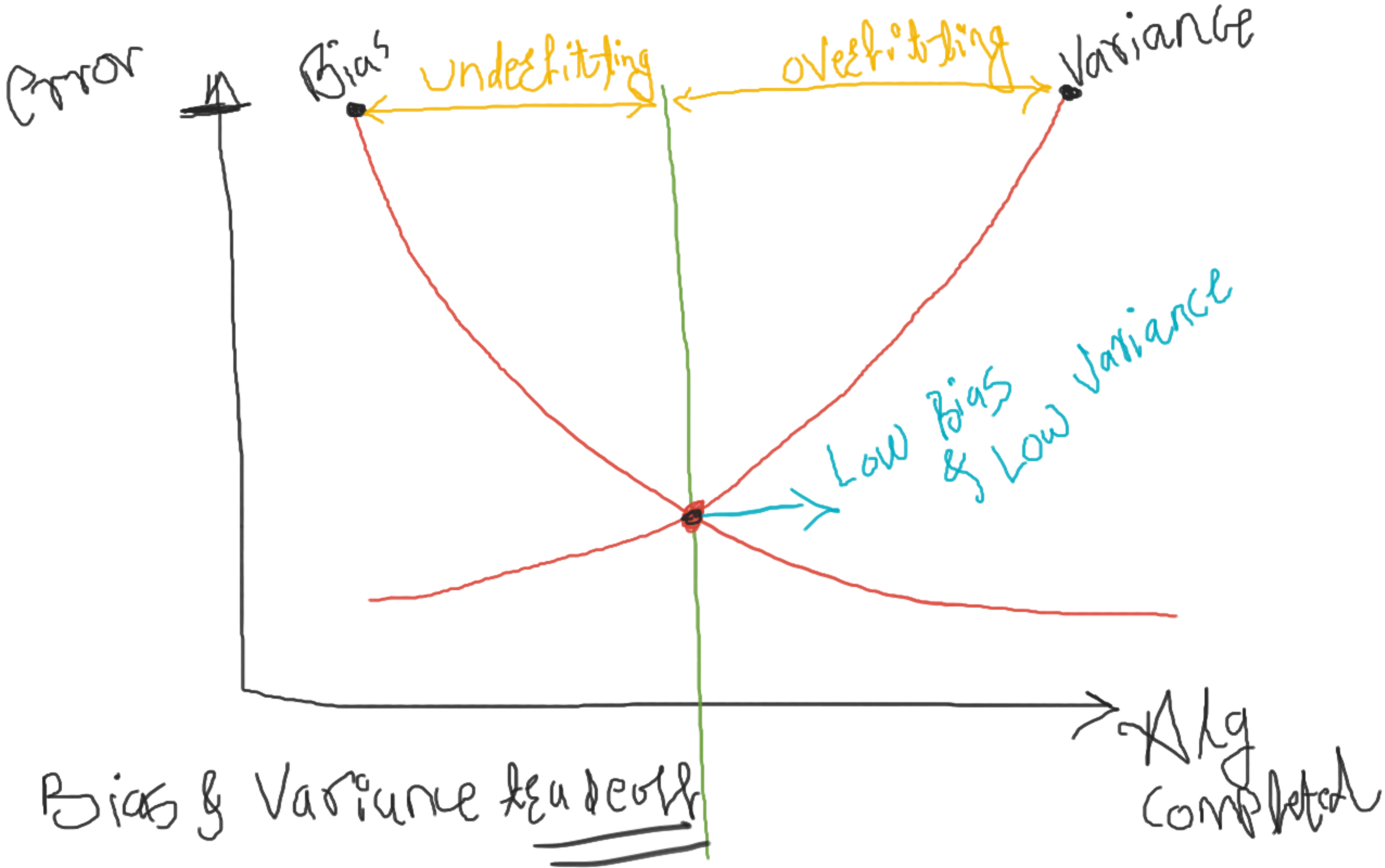
testing Acc = 86%

Training data Accuracy = High >> 90%.

Testing data Accuracy = Low >> 78%.

= High Variance

Low Bias & low Variance = Best model / master model



Bias & Variance tradeoff

1) CV :- Cross Validation

CV = 5, CV = 10

= 1000