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A.) models which have a high complexity have a longh variance. if we have less data for training the model is most likely to overfit the data and perform hooron the test data. this is because of the limited data the model gets suited to replicate the patterns in a small sample which may not exist in much larger samples hence if we increase the Bize of our training data it is guaranteed that the test error or the validation error will reduce.

suppose we have a dataset with N=5 Points initially

best boit model with L complexed by

if we increase the training data it becomes very difficult for the model to fit all the dat points hunce the training error will increase if souble data ?

high variance fo(x) = 00+0,x---+0x care @ smalle data set saule mige of entite parti de la contrata del la contrata de la contrata del la contrata de la contrata del la contrata de la as we increase the data set size Morani trainer des propos minimos sistemas in comment was just consider the religion of the grand The reserve the service of the servi 4 mentions The morre without item and the second of the second o it be comes howder for the model

to fit the additional noisy data

hence the training error I -> the cross validation error will btill be going down. -> the training error plateaus due to the fact that even if we increase the training about a mise the model court give a much better fit.