

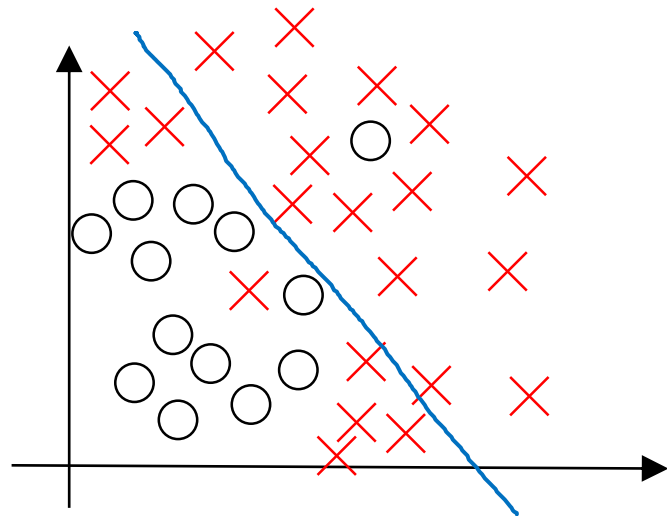


deeplearning.ai

Comparing to human-
level performance

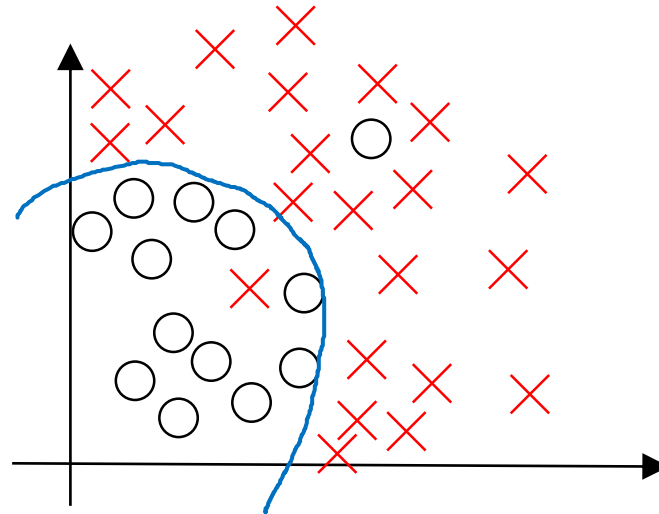
Avoidable bias

Bias and Variance

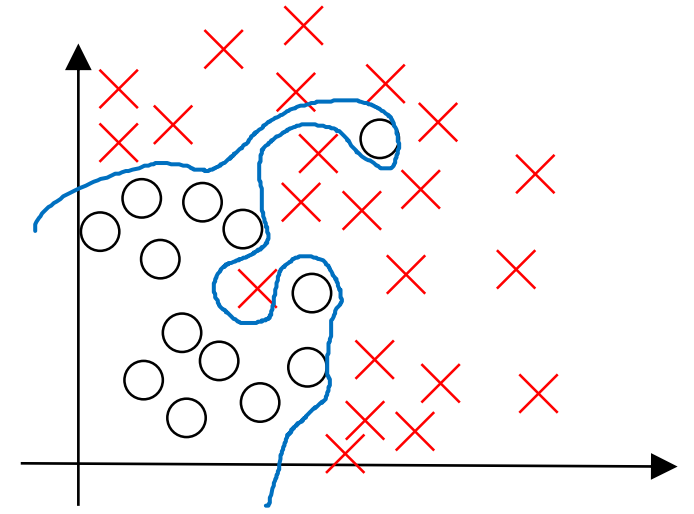


high bias

underfitting



“just right”



high variance

overfitting

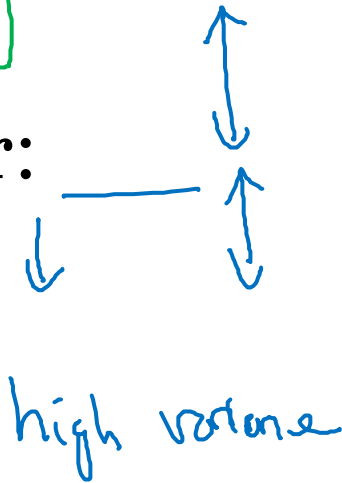
Bias and Variance

Cat classification

Human-level $\approx 0\%$...

Training set error:

Dev set error:

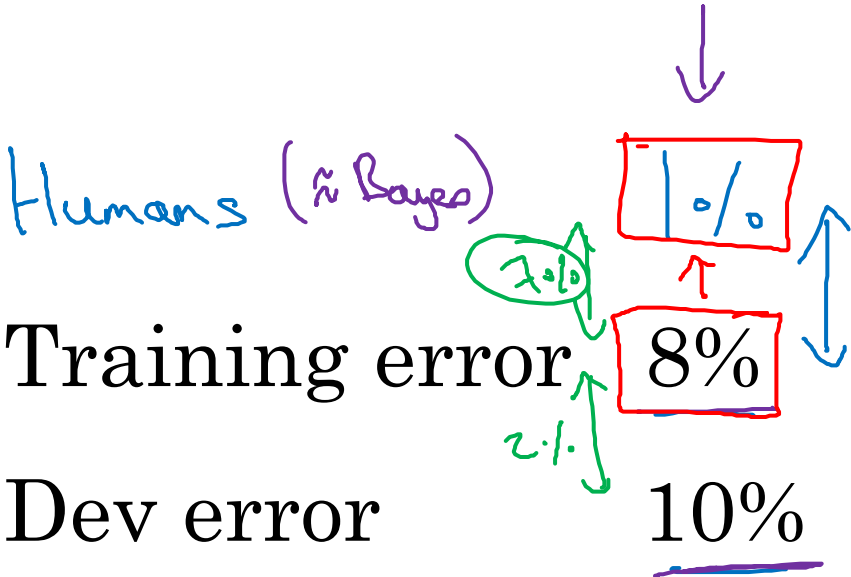


high bias

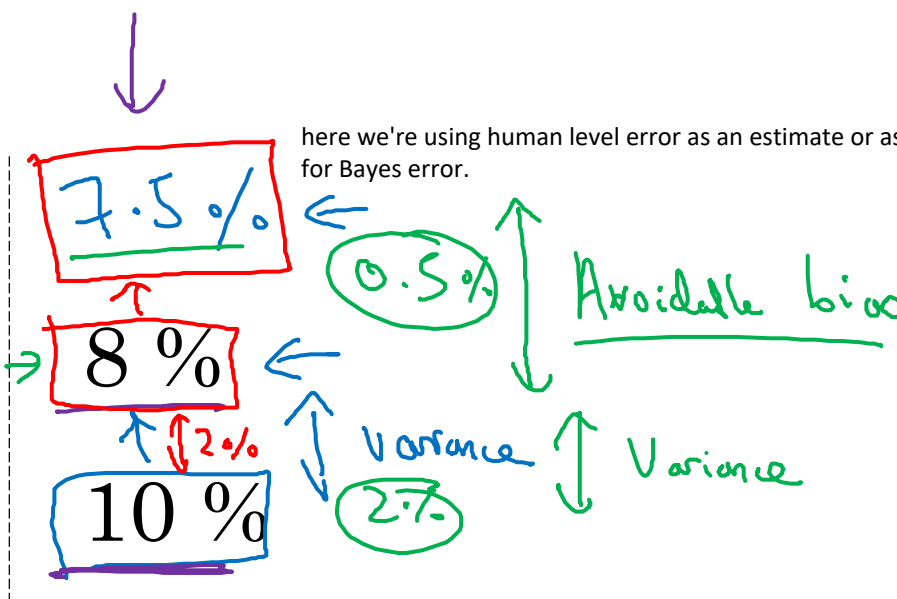
high bias
high variance

low bias
low variance

Cat classification example



Focus on bias



Avoidable bias

The term avoidable bias acknowledge that there's some bias or some minimum level of error that you just can not get below.

You can't actually do better than Bayes error unless you're overfitting.

Focus on variance

Human-level error as a proxy for Bayes error.