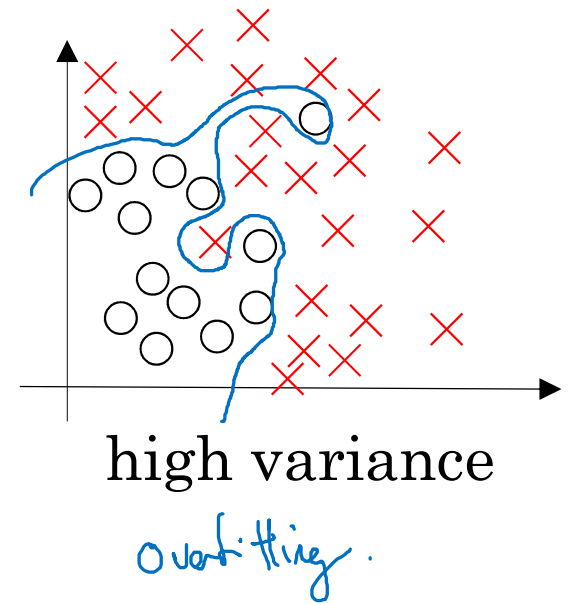deeplearning.ai

Comparing to human-level performance

Avoidable bias

Bias and Variance

high bias

underfitting

"just right"

high variance

overfitting.

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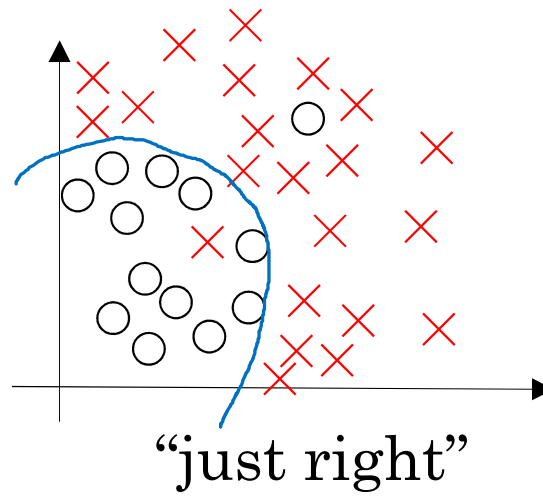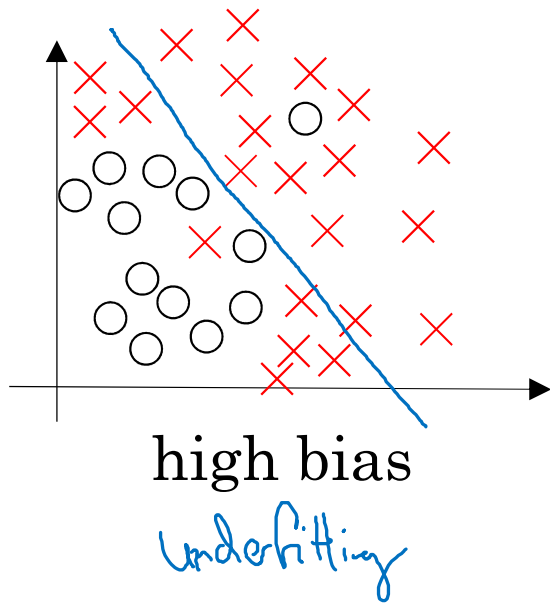
Bias and Variance

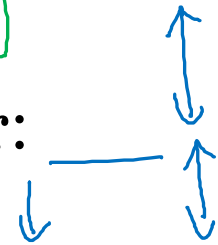Cat classification

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

Training set error:

Dev set error:

high variance   high bias   high bias   low bias
                                      high variance   low variance

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Cat classification example

Humans ($\tilde{=}$ Bayes)

Training error   8%   8 %

Dev error   10%   10 %

7%   2%

0.5%   Avoidable bias

2%   Variance   Variance

2%

Focus on bias   Focus on variance

Human-level error as a proxy for Bayes error.

Andrew Ng