



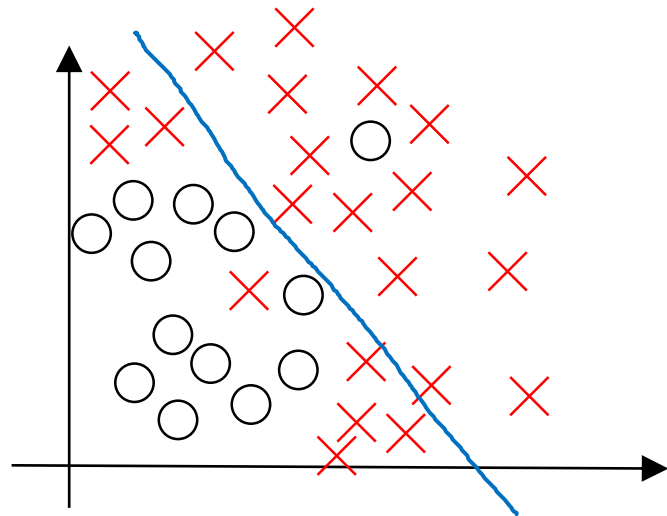
deeplearning.ai

# Comparing to human-level performance

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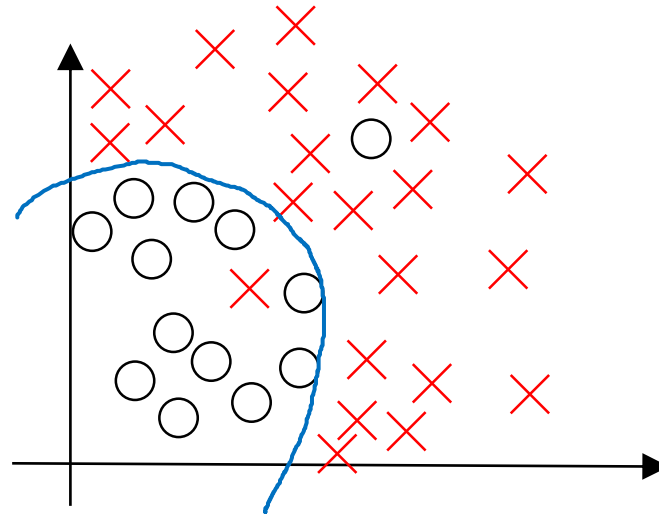
**Avoidable bias**

# Bias and Variance

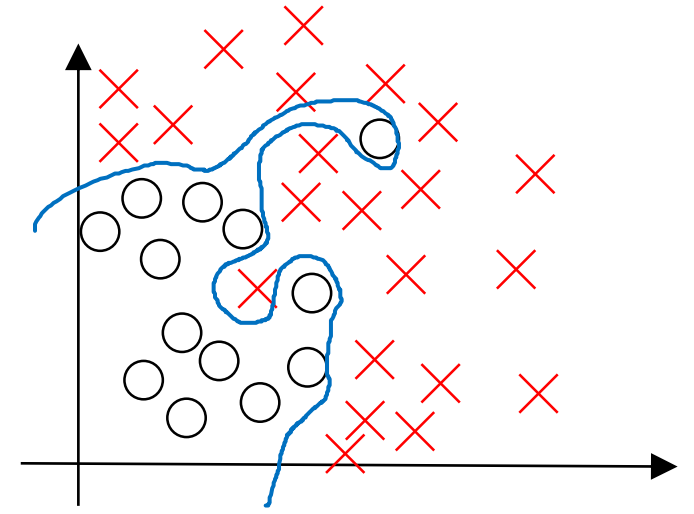


high bias

*underfitting*



“just right”



high variance

*overfitting*

# Bias and Variance

Cat classification



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

Training set error:

Dev set error:

High Bias

High Variance

By comparing these two gaps here

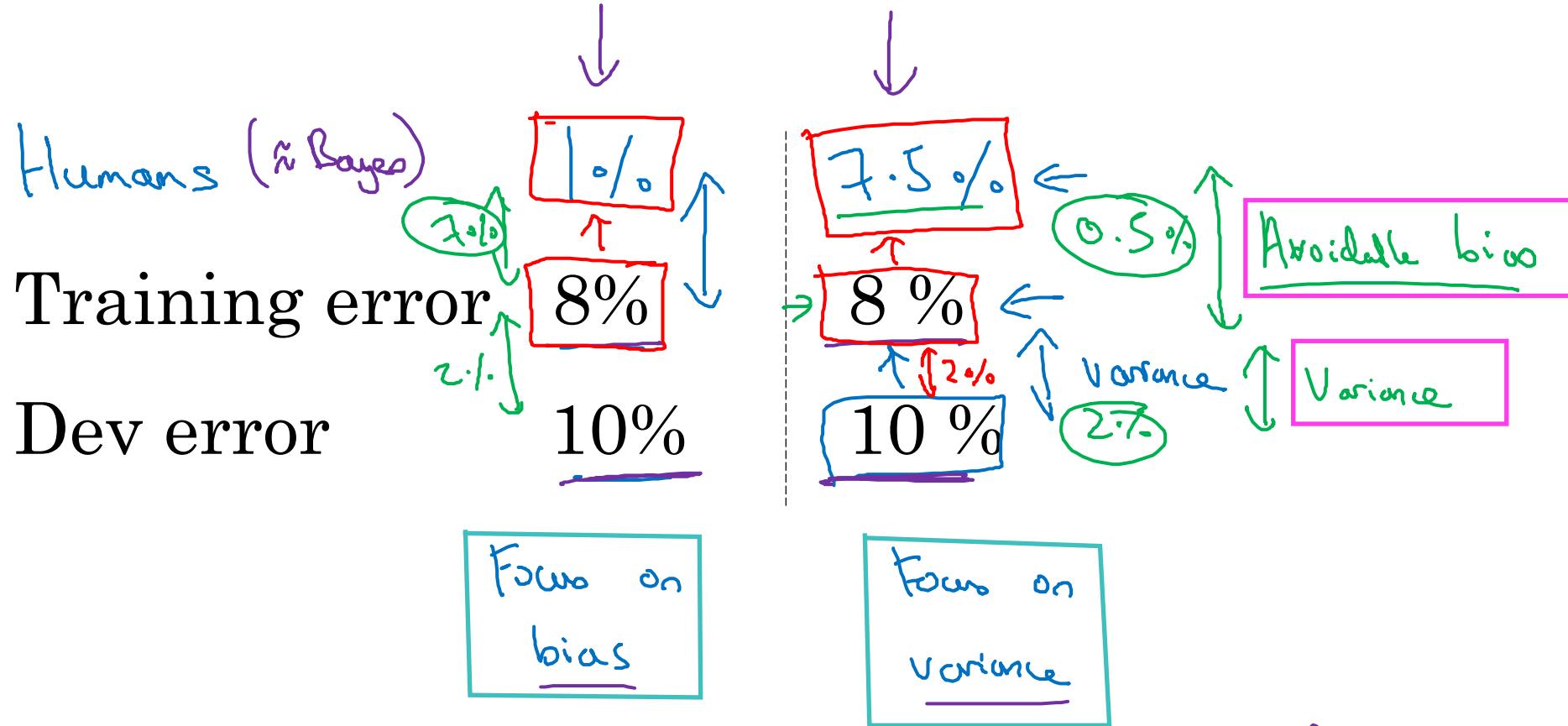
high variance

high bias

high bias  
high variance

low bias  
low variance

# Cat classification example



Human-level error as a proxy for Bayes error.

Human-level error as a proxy for Bayes Error.