deeplearning.ai

Comparing to human-level performance

Understanding human-level performance

Human-level error as a proxy for Bayes error

Medical image classification example:

Suppose:

(a) Typical human ..... 3 % error

(b) Typical doctor ..... 1 % error

(c) Experienced doctor ..... 0.7 % error

(d) Team of experienced doctors .. 0.5 % error

Bayes error $\leq$ 0.5%

What is "human-level" error?

Error analysis example

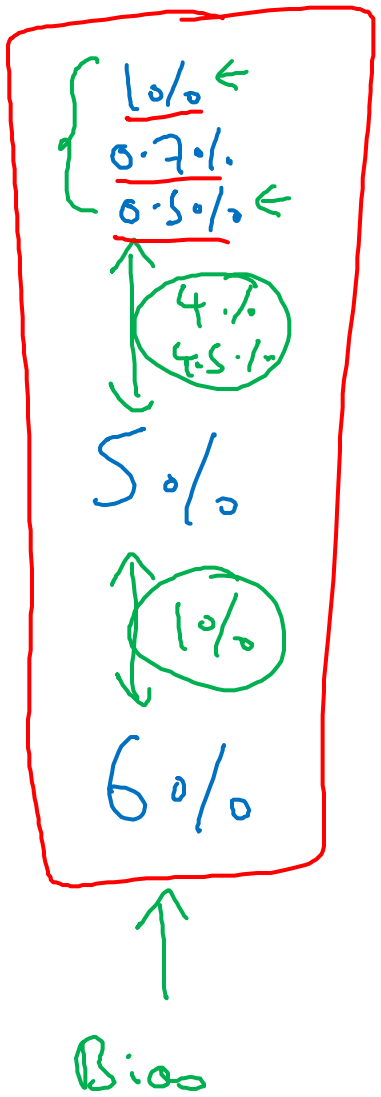
Human (proxy for Bayes error)

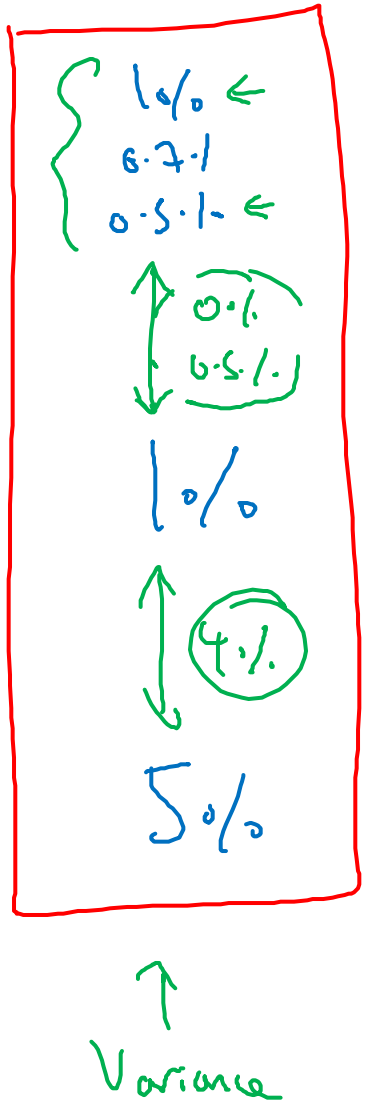
Avoidable bias

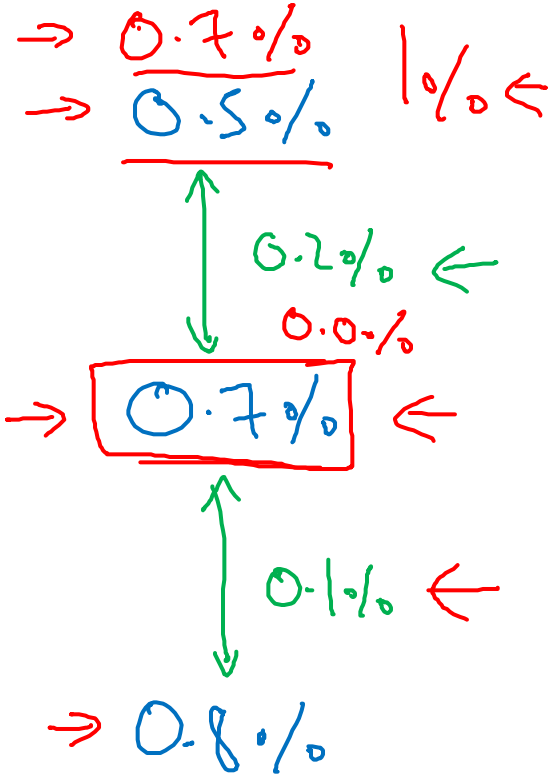
Training error

Variance

Dev error







Summary of bias/variance with human-level performance

Human-level error

(proxy for Bayes error)

Training error

Dev error

"Avoidable bias"

"Variance"