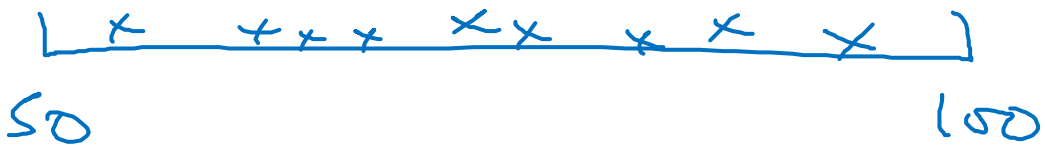
deeplearning.ai

Hyperparameter tuning

Using an appropriate scale to pick hyperparameters

Picking hyperparameters at random

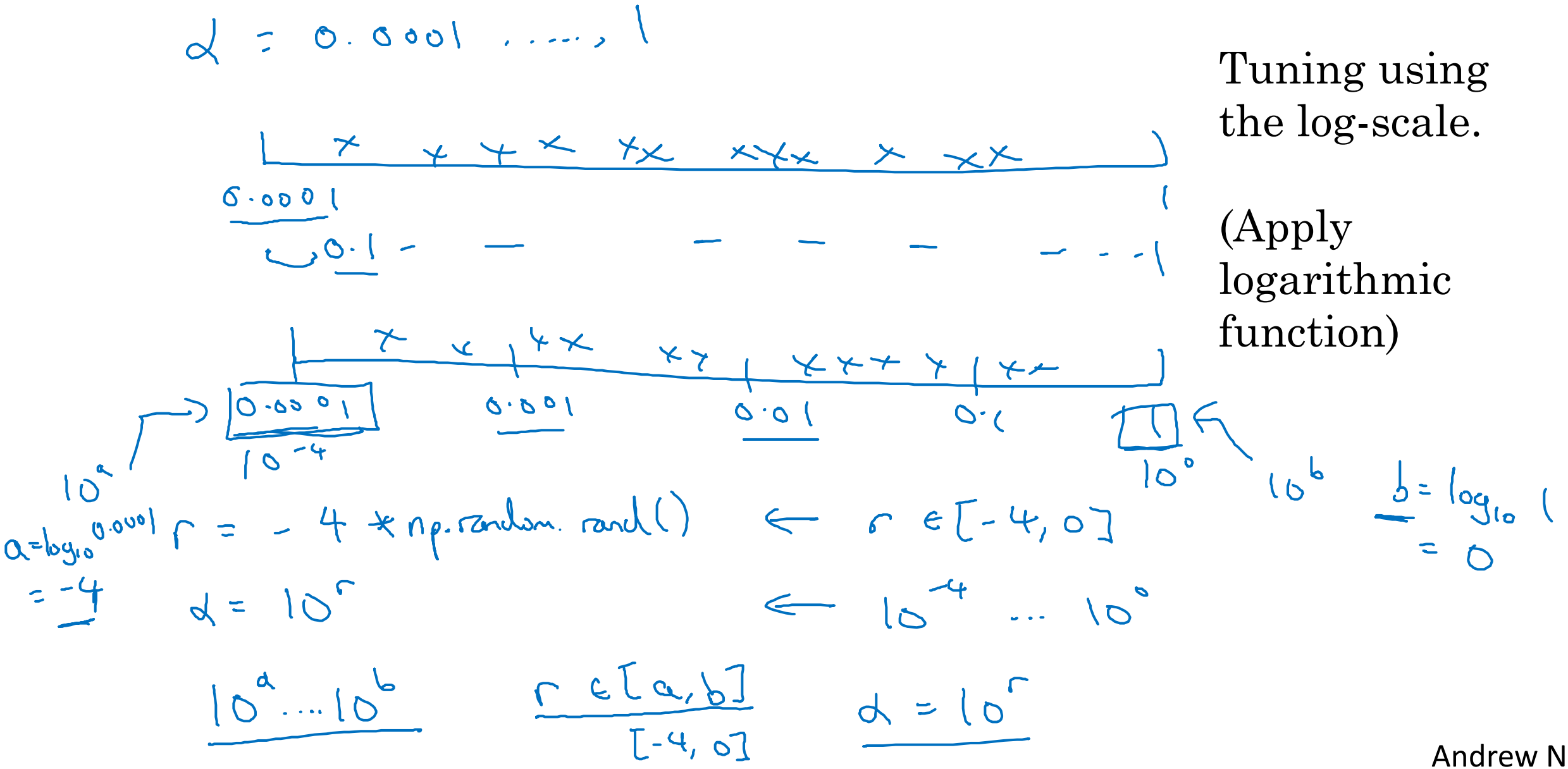
→ $n^{[l]} = 50, \ldots, 100$



→ #layers L: 2 – 4

2, 3, 4

Appropriate scale for hyperparameters



Tuning using the log-scale.

(Apply logarithmic function)

Andrew Ng

Hyperparameters for exponentially weighted averages

$\beta = 0.9 \quad \ldots \quad 0.999$

$10 \qquad\qquad 1000$

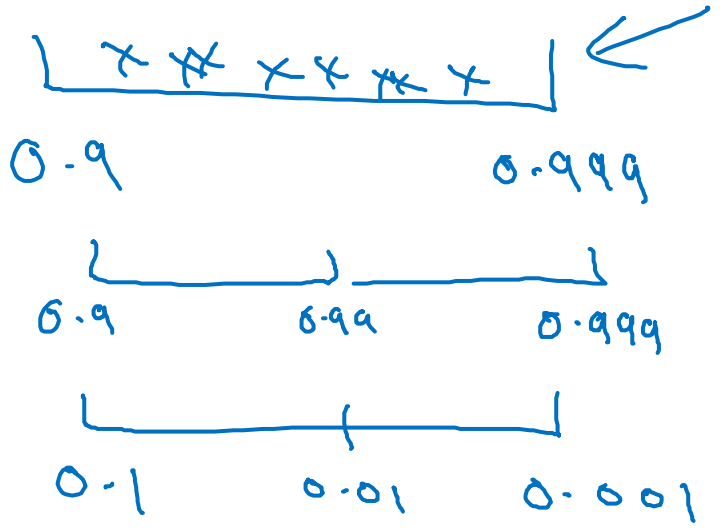
$1-\beta = 0.1 \quad \ldots \quad 0.001$

$\beta: 0.900 \rightarrow 0.9005$ } ~ 10

$\beta: 0.999 \rightarrow 0.9995$

$\sim 1000 \qquad \sim 2000$

$\frac{1}{1-\beta}$



$10^{-1} \qquad\qquad 10^{-3}$

$r \in [-3, -1]$

$1-\beta = 10^{r}$

$\beta = 1 - 10^{r}$