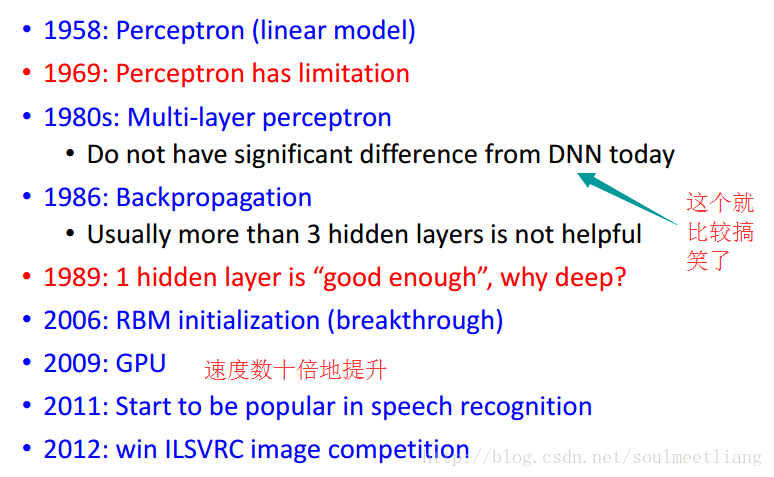
**七．[**[机器学习](http://lib.csdn.net/base/machinelearning)**入门] 李弘毅机器学习笔记-7 （Brief Introduction of Deep Learning；**[深度学习](http://lib.csdn.net/base/deeplearning)**简介）**

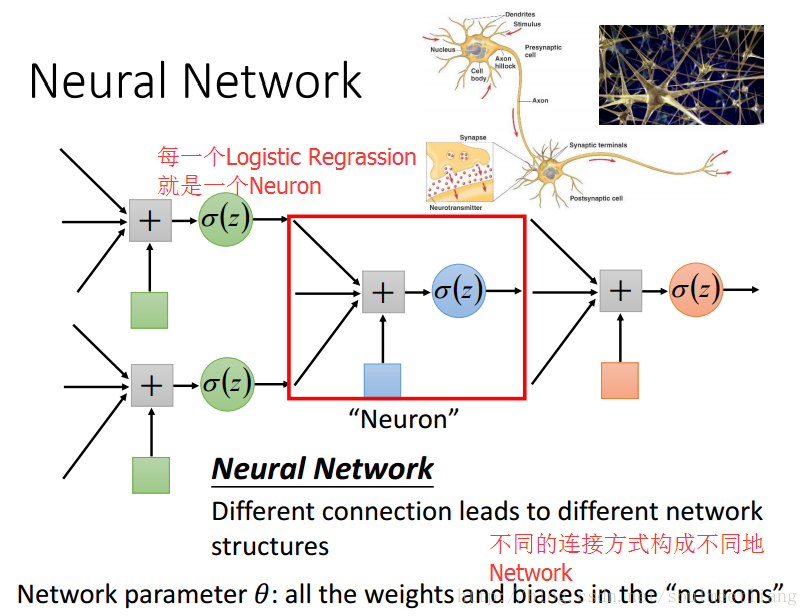
# Ups and downs of Deep Learning



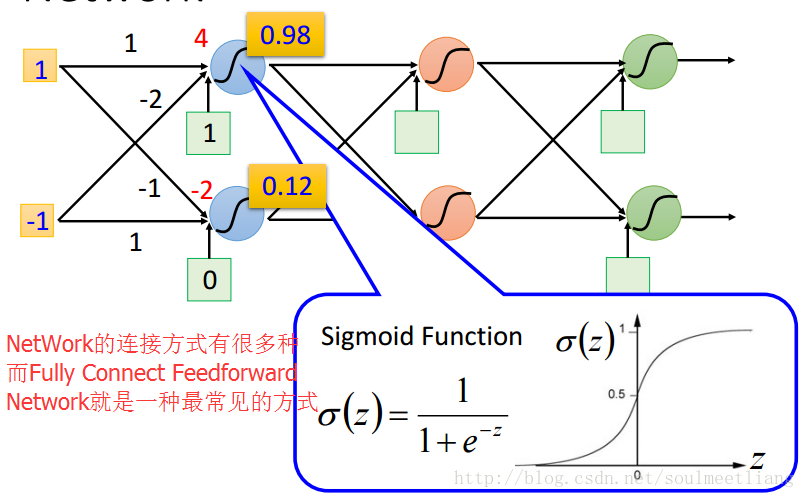
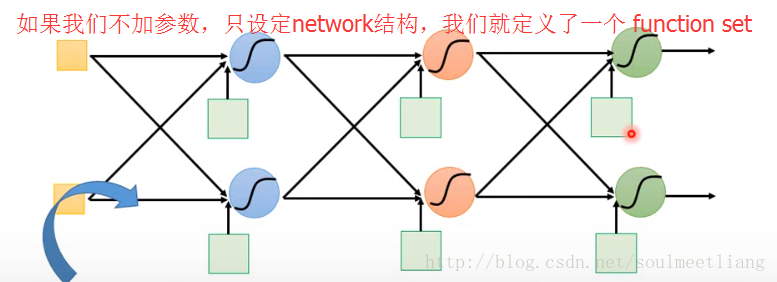
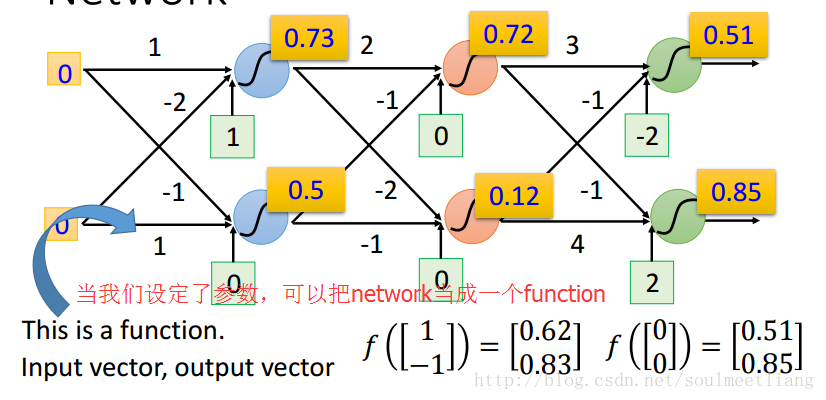
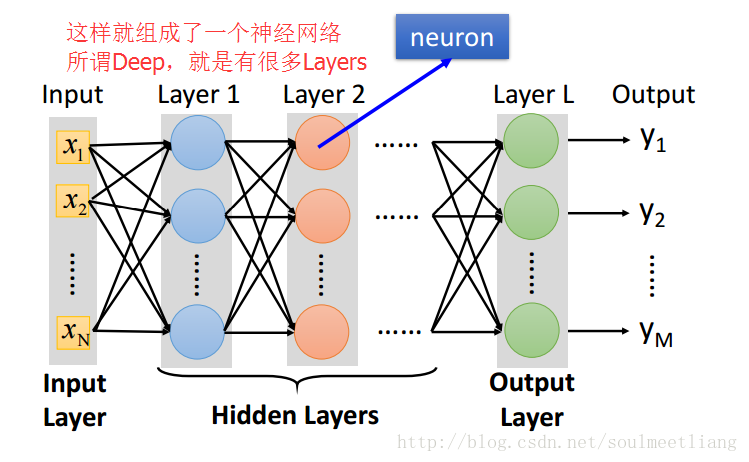
# Three Steps for Deep Learning



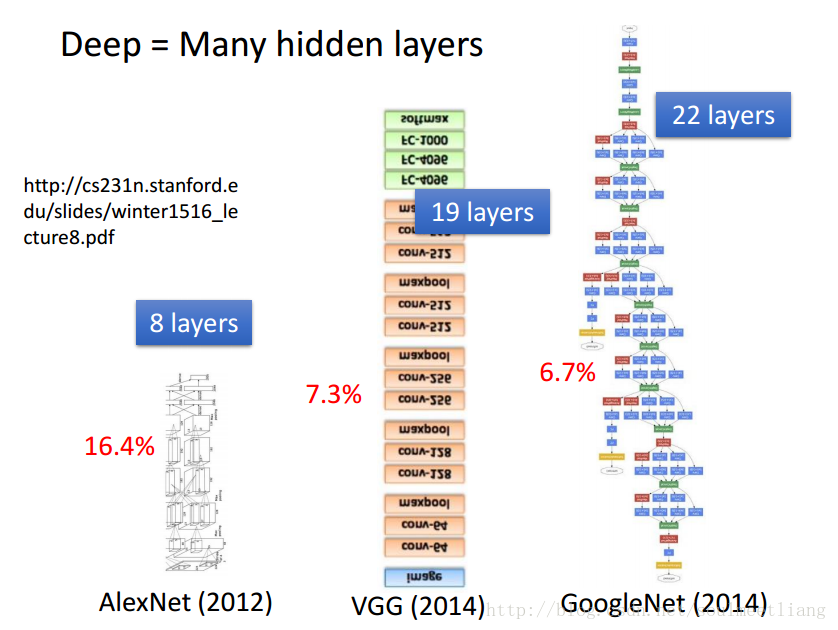
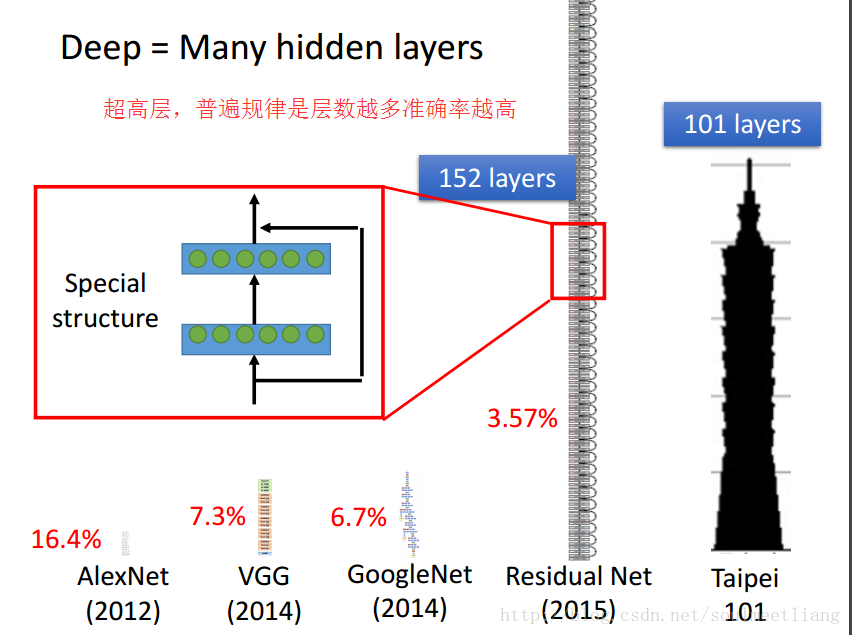
**Step 1: Neural Network**



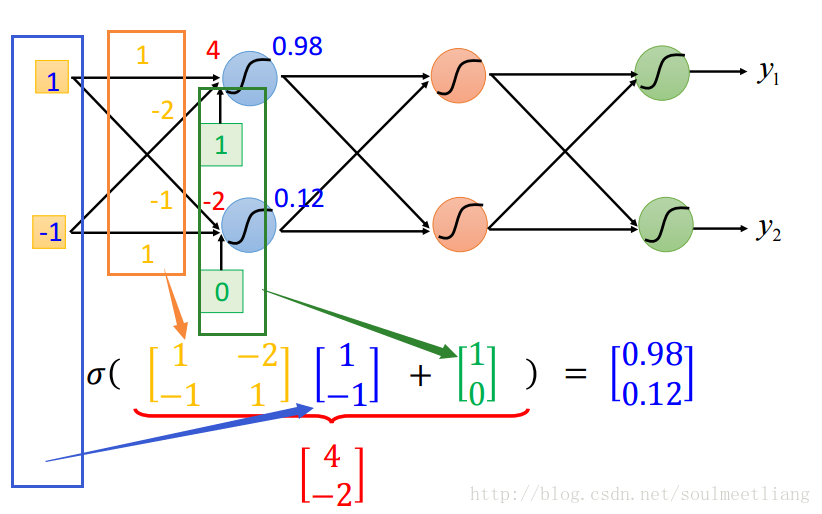
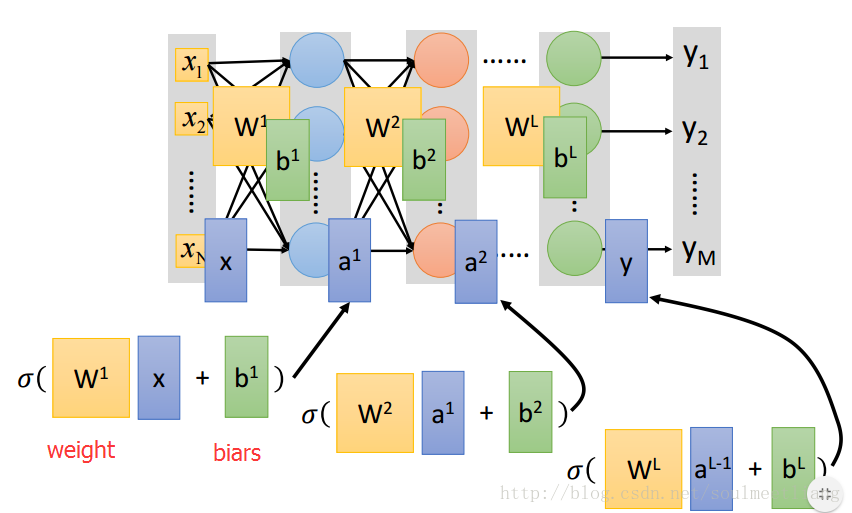
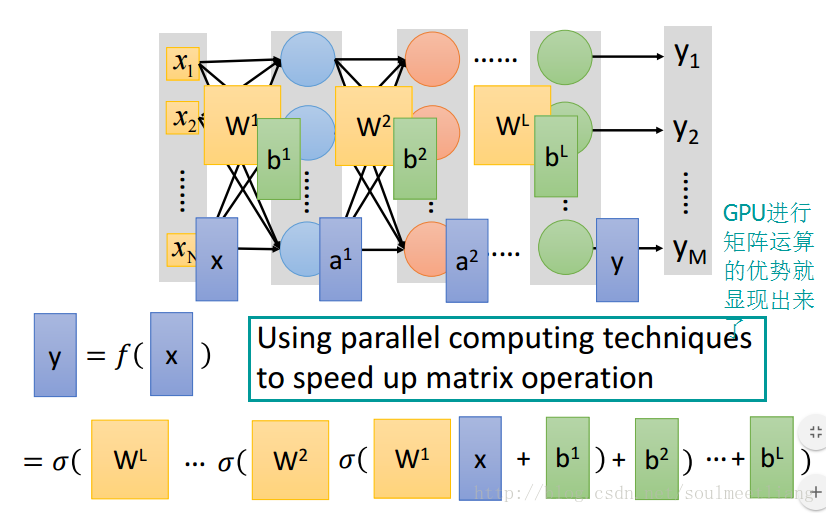
Fully Connect Feedforward Network

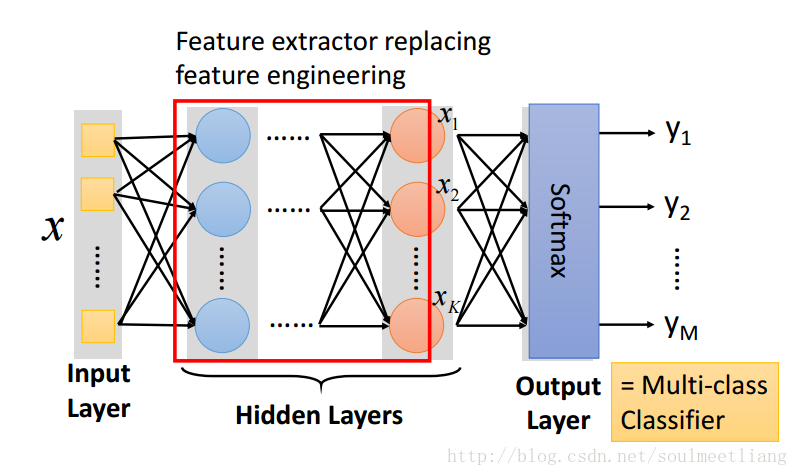
Deep = Many hidden layers

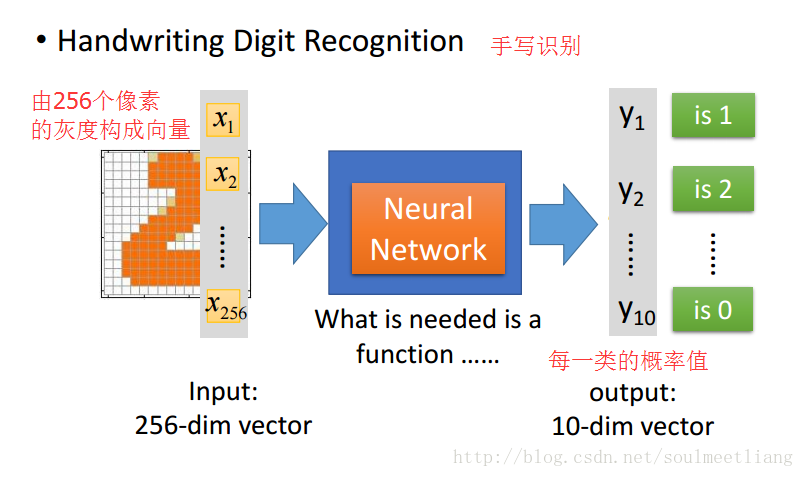
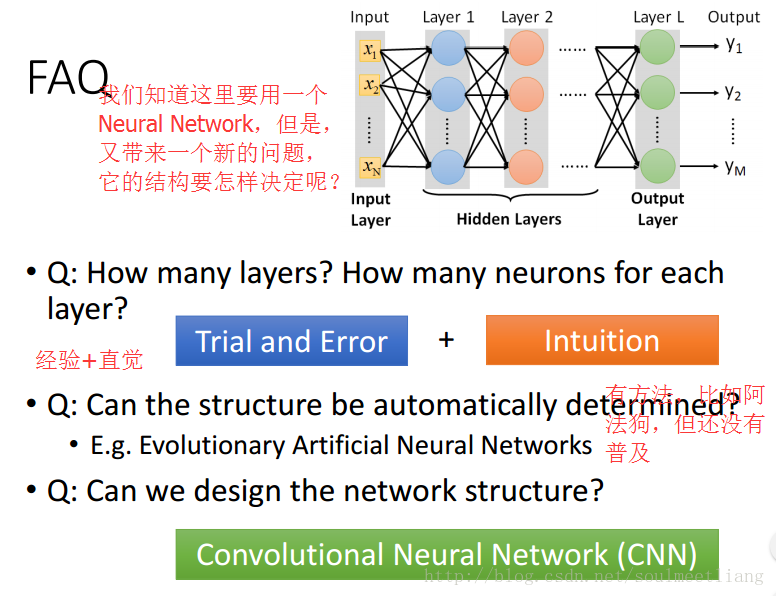
Matrix Operation

Output Layer

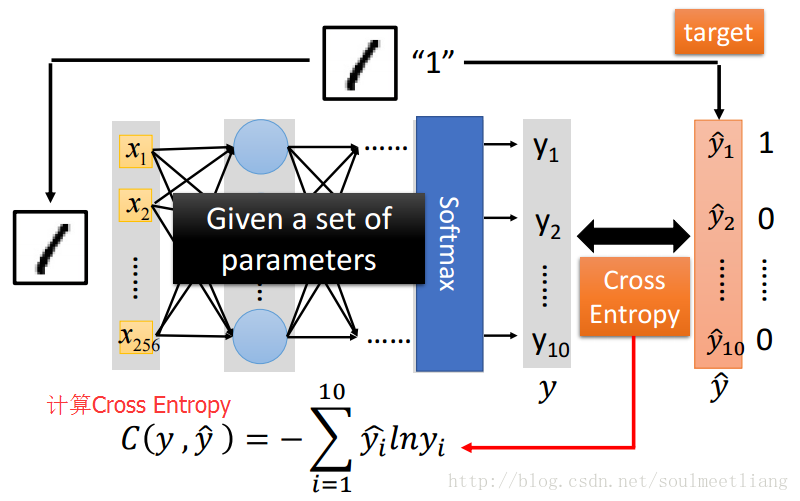
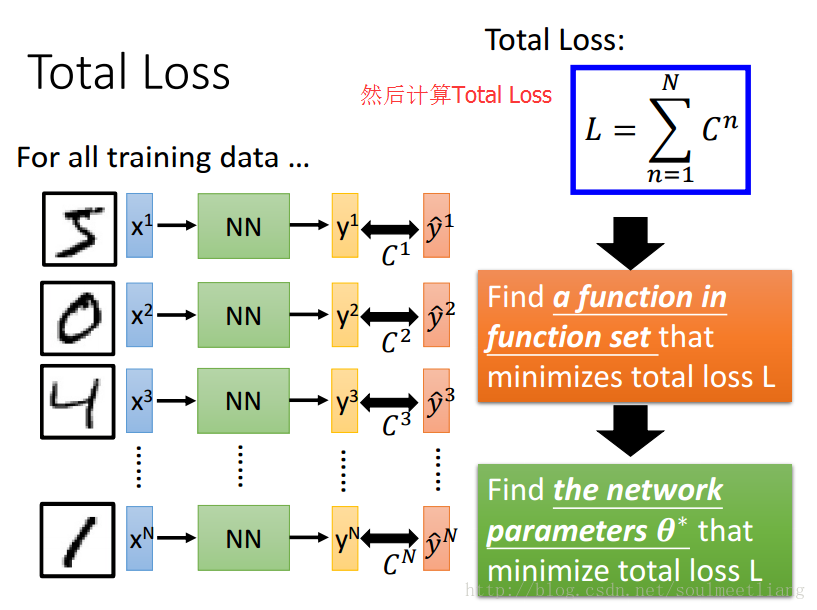


Example Application

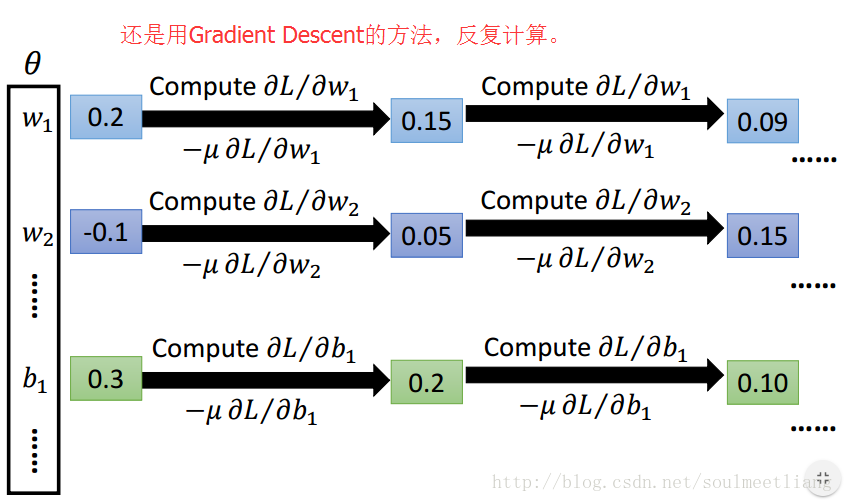
  


**Step 2 ：Goodness of function**

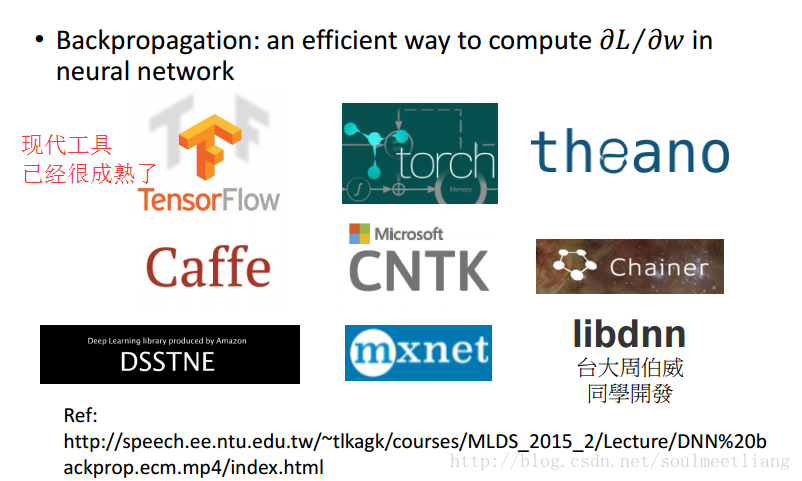
Loss for an Example

  
   
知道了怎样计算Loss，下面就是挑选Loss最小的function。

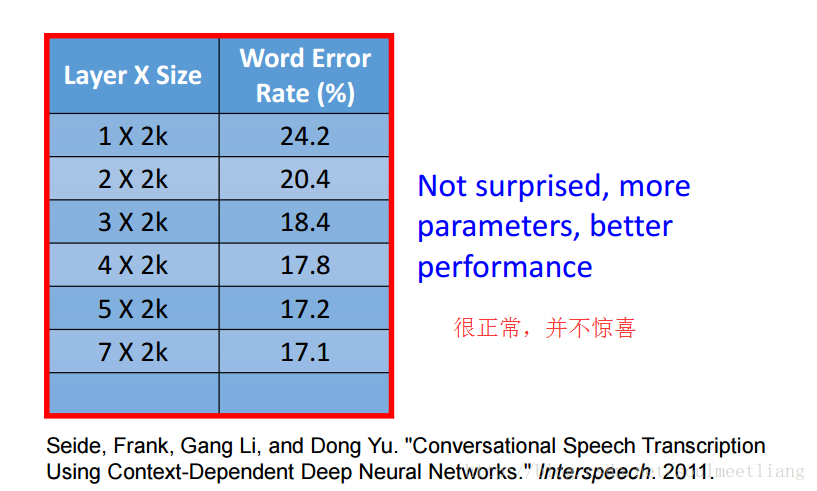
**Step 3 ：Pick the best function**



# Backpropagation



# Deeper is Better?



# Universality Theorem

