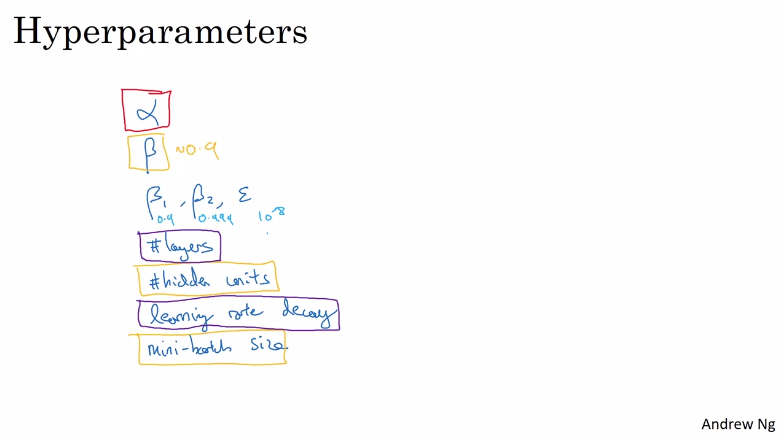
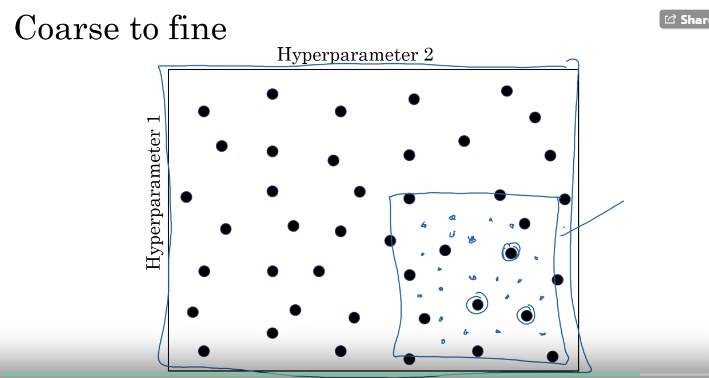
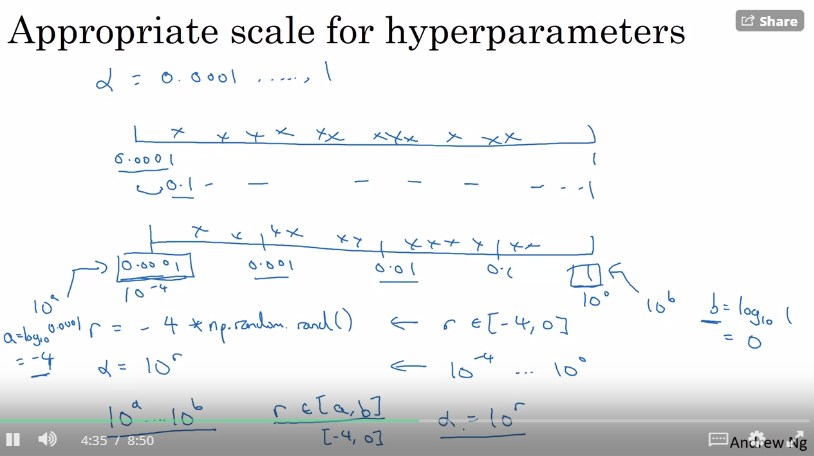
6/5/2021

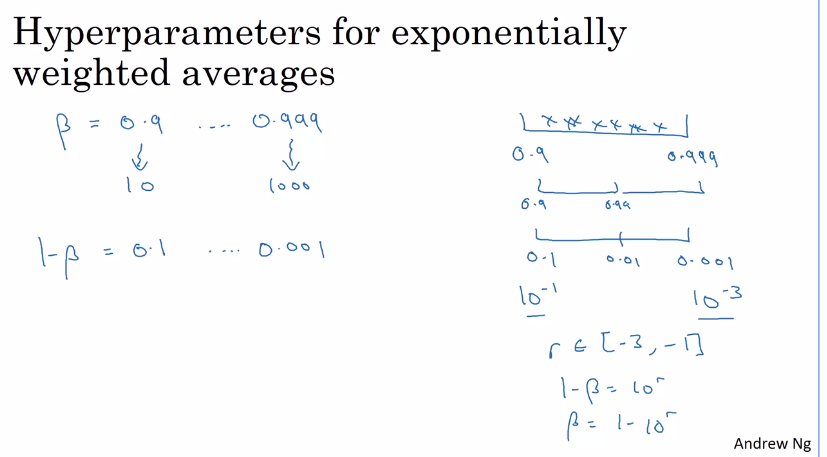
**1/ Hyper Parameter Tuning:**



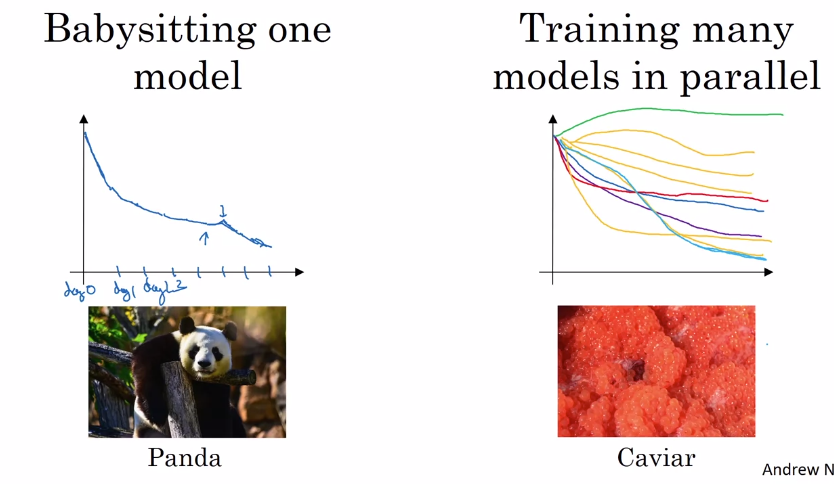


**2/ Using an appropriate scale to pick hyperparameters:**



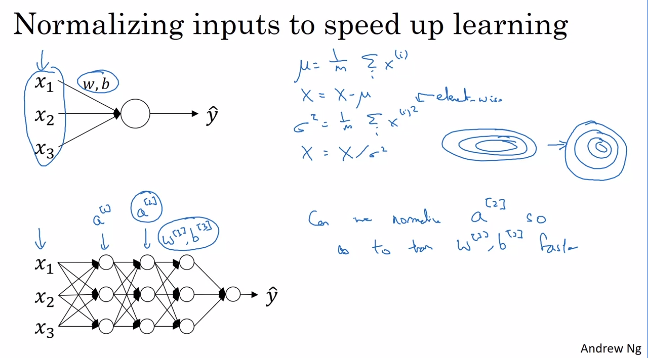


**3/ Hyperparameters tunning in practice: Pandas vs Caviar:**

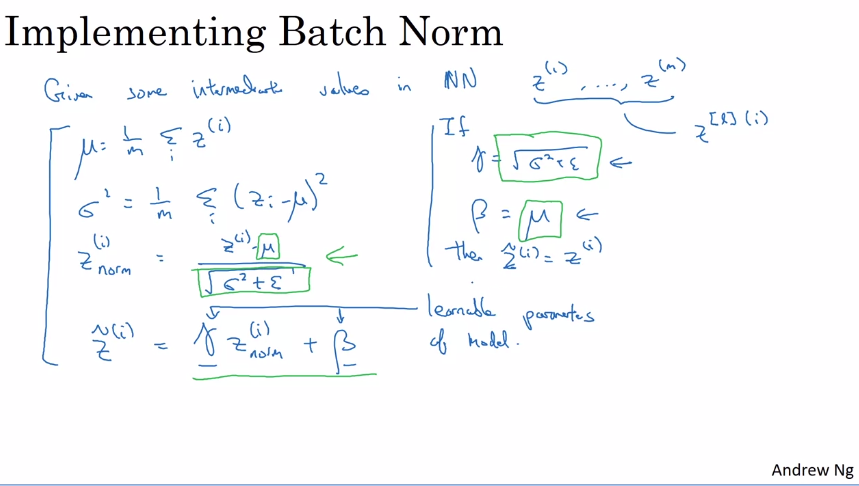


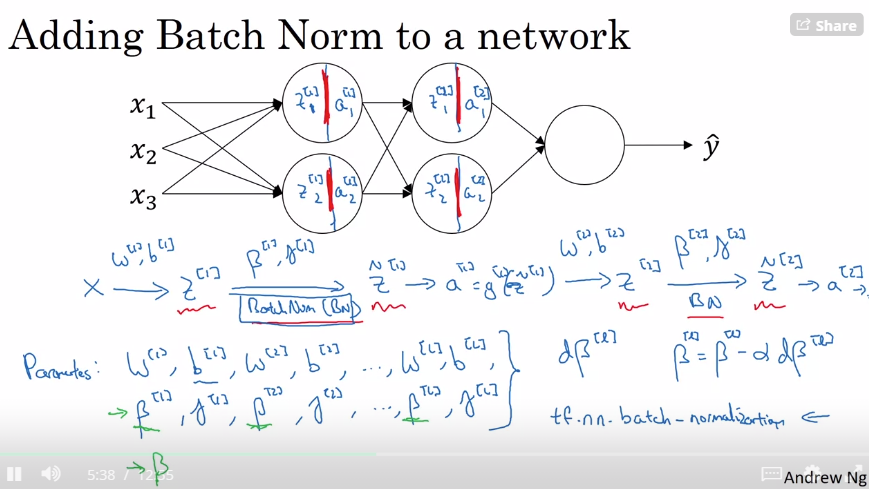
**4/ Batch Normalization:**

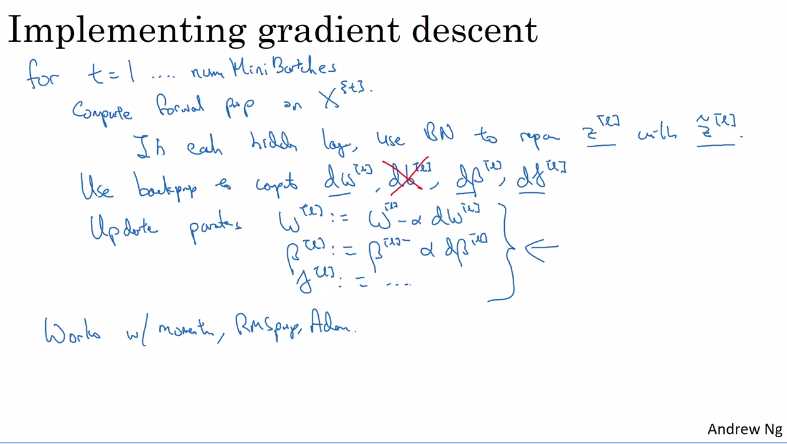
**a/ Normalizing Activations in a Networks**



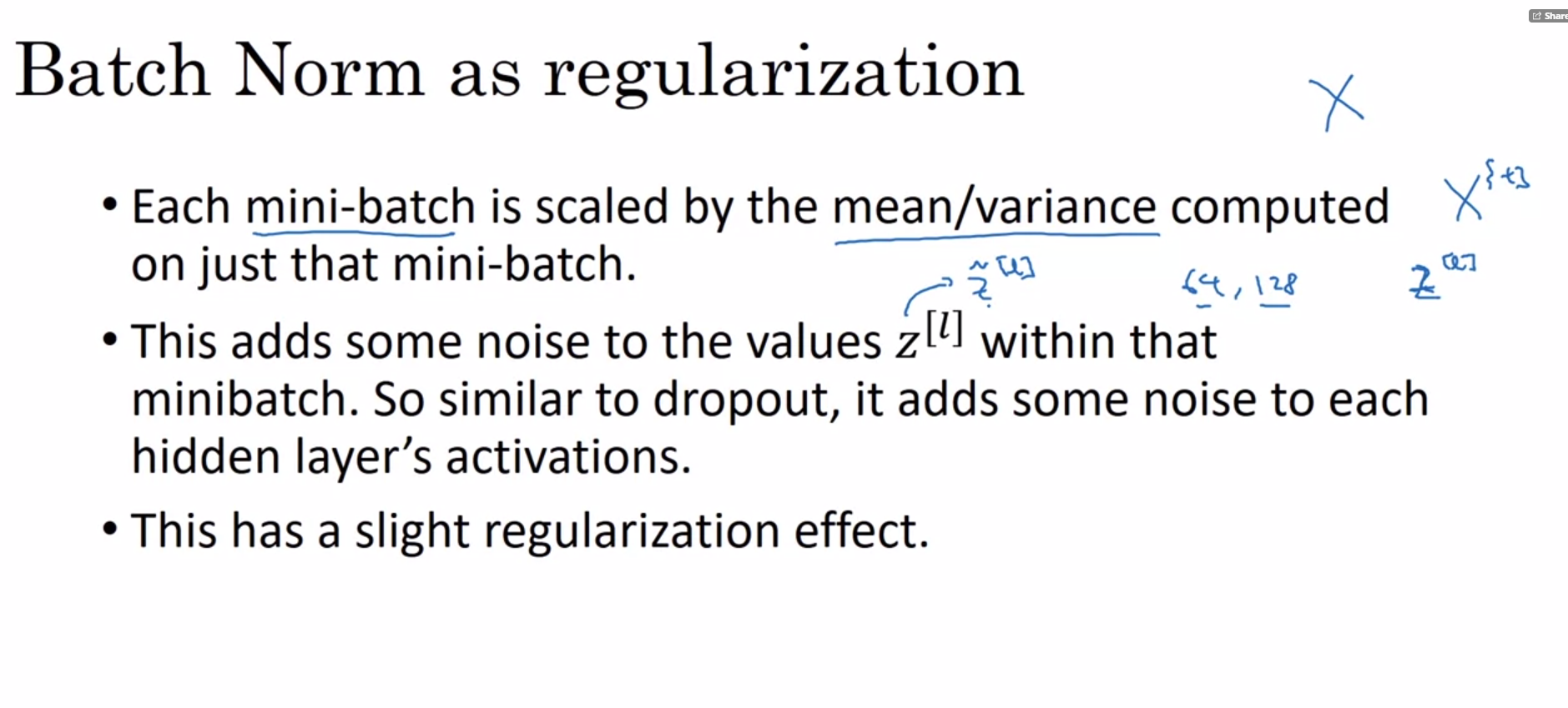
* Should normalized before putting to the activation function.





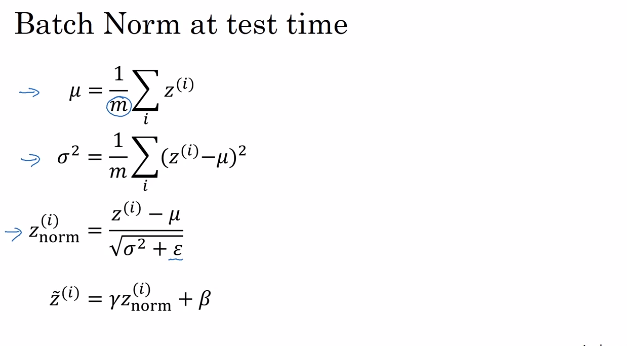


* Batch Norm make sures that the means and variance of Z for all inputs are the same

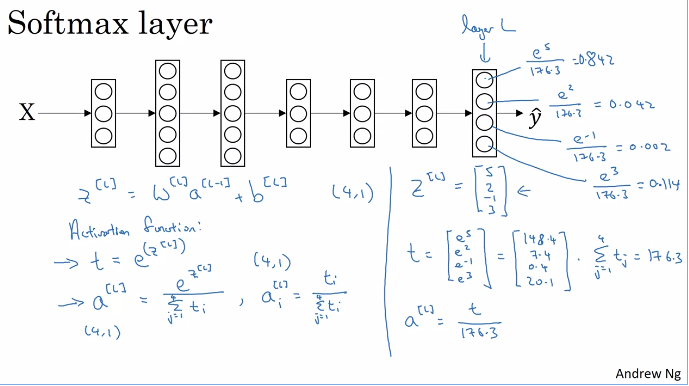


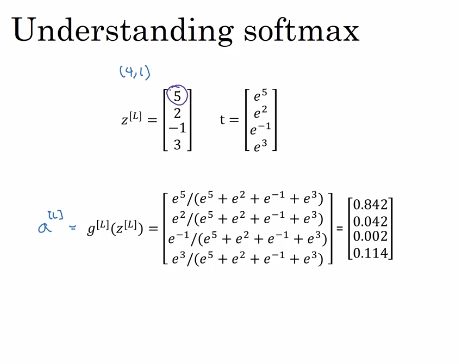
* Use BN as a way to normalize hidden unit but not as L1/L2 regularizer since it does not always work

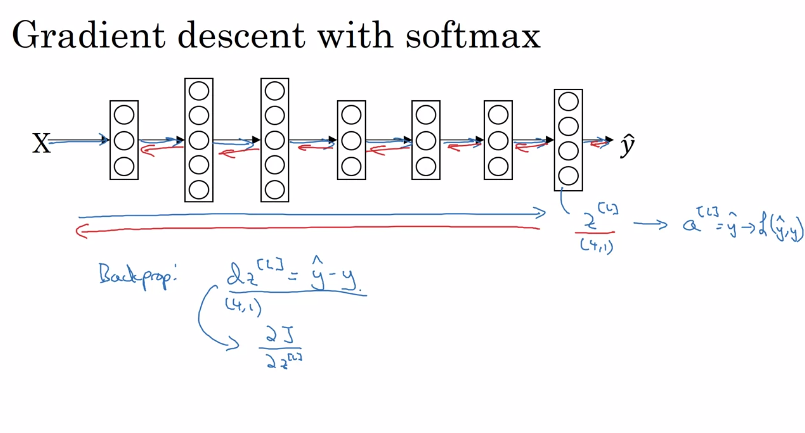
**b/ Batch Norm in test time:**

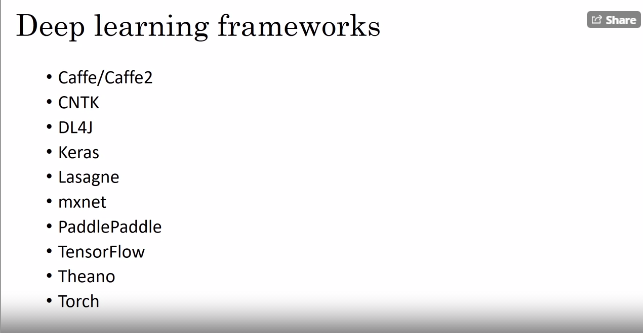


**5/ Softmax Regression => Multiclass Classification:**









**6/ TensorFlow:**

