

IMLPR Homework #04

In Chapter 3,

1. Implement **BackpropXOR**, solve the XOR problem using backpropagation. Try this problem with a single NN, what happens? What happens now with multilayer neural nets. Discuss about the results
2. Implement **BackpropMmt**. Compare backpropagation with and without momentum. Check out their differences in their performances (i.e., regular backpropagation vs. backpropagation with moments.) For example, plot the training error vs. epoch like Figure 2-20. Discuss the results in terms of training time and inferencing accuracy.
3. Implement **BackpropCE**. Compare the effect of cost functions (i.e., SSQ vs. CE) by solving the XOR problem. Plot the training error vs. iterations. Discuss the results in terms of training time and inferencing accuracy.