Homework: Neural Network Exercise

Repeat the steps shown in class to train and simulate a three layer feed-forward neural network to approximate the function (output 'y' = 3× input 'x'). Show TWO passes of training. The transfer function is hyperbolic for the first 2 layers and linear for the last layer. Provide detailed calculations as shown in class presentation. Also, provide a result table depicting updated weights, outputs and errors. Assume the inputs to be '1' for all simulation passes. Also, assume all the initial weights to be 0.5.
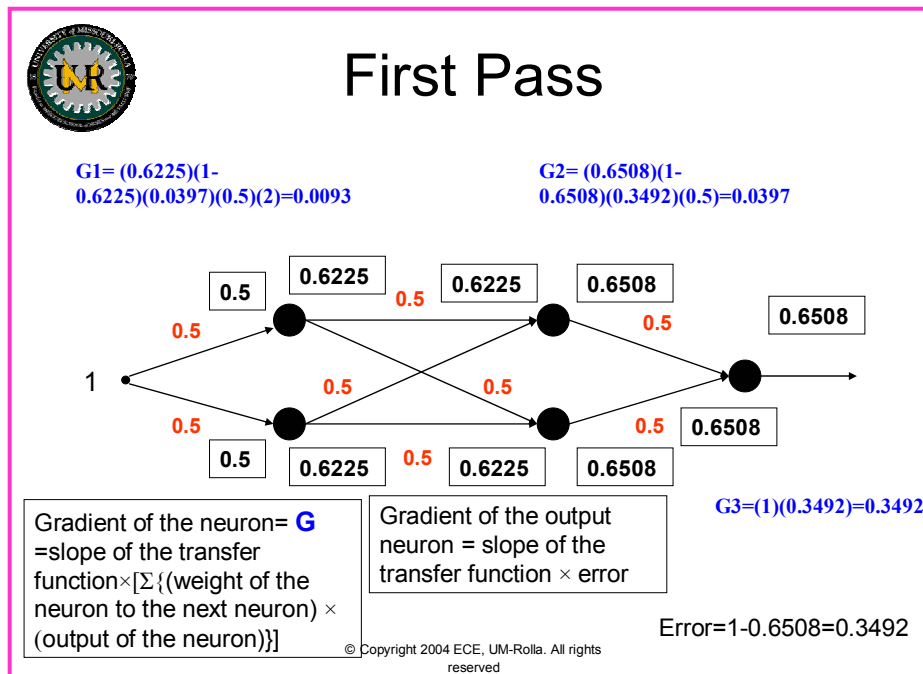

Figure: Three layer feedforward neural network. Note the input and the same initial weights.