Multi layer Perceptron

weight matrix

hidden inputs: np.dot(inputs, weights_input_to_hidden)

Some numpy tips:

for creating a column vector: data[:, None]
for transposing a matrix: data.T

* Backpropagation

same as forward but we assume the output layer is the input and compute each layer's error.

\[ \delta_1 = s_1 W_1 f'(h_1) \]
\[ \delta_2 = s_o W_2 f'(h_2) \]