

1. Randomly initialize weights

2. Implement forward propagation to get $h_{\theta}(x^{(i)})$ for any $x^{(i)}$

3. Implement code to compute cost function $J(\theta)$

4. Implement backprop to compute partial derivatives $\frac{\partial}{\partial \theta_{j,k}^{(i)}} J(\theta)$

5. Use gradient checking to compare $\frac{\partial J(\theta)}{\partial \theta_{j,k}^{(i)}}$ computed using backpropagation vs. using numerical estimate of gradient of $J(\theta)$

6. Use gradient descent or advanced optimization method with backpropagation to try to minimize $J(\theta)$ as a function of parameters θ