For 5 hidden units the correctly classified accuracy is 91.5%

For 50 hidden units the correctly classified accuracy is 96.7%

I have used several epochs and a learning rate but the best accuracy was found with 1000 epoch and learning rate of 0.1

The “best” set of parameters (alpha, number of hidden units, number of iterations) for this problem based on my experiments are

Alpha = 0.1

Number of Hidden Units = 50

Number of Iterations = 1000