
***** Part 5: Testing the layers *****

Input Layer

[[-1. -1. -1. -1.]
[1. 1. 1. 1.]]

Fully Connected Layer

[[4.78632519e-05 4.38634319e-04]
[5.81183644e-05 1.07682605e-03]]

ReLu Activation Layer

[[1 2 3 4]
[5 6 7 8]]

Sigmoid Activation Layer

[[0.73105858 0.88079708 0.95257413 0.98201379]
[0.99330715 0.99752738 0.99908895 0.99966465]]

SoftMax Activation Layer

[[0.00449655 0.00449655 0.00449655 0.00449655]
[0.24550345 0.24550345 0.24550345 0.24550345]]

Tanh Activation Layer

[[0.76159416 0.96402758 0.99505475 0.9993293]
[0.9999092 0.99998771 0.99999834 0.99999977]]

***** Part 6: Connecting Layers and Foward Propagate *****

Input Layer

[[-1. -1. -1. -1.]
[1. 1. 1. 1.]]

Fully Connected Layer

[[9.01687740e-05 -1.82859629e-04]
[9.52963302e-05 1.36236236e-04]]

Sigmoid Activation Layer

[[0.50002254 0.49995429]
[0.50002382 0.50003406]]

***** Part 7: Testing on full dataset *****

Note: For this part I was unsure what you wanted for the output so I just ran the same test we did for part 6 on the actual data.

Input Layer

[[-1.43876426 -1.0105187 -0.45332 -0.90861367 1.97058663 1.34390459]
[-1.50996545 0.98959079 0.5096211 -0.07876719 -0.5074631 0.43849455]
[-0.79795355 0.98959079 0.38330685 1.58092576 -0.5074631 0.43849455]]

...
[-1.50996545 -1.0105187 1.0148781 -0.90861367 -0.5074631 0.43849455]
[-1.29636188 -1.0105187 -0.79781341 -0.90861367 -0.5074631 1.34390459]
[1.55168573 -1.0105187 -0.26138796 -0.90861367 1.97058663 -0.46691549]]

Fully Connected Layer

[[2.58205060e-04 -1.08465804e-04]
[-9.06627986e-06 5.20790733e-05]
[-2.09036365e-05 2.09081428e-04]

...
[-4.75300635e-05 -1.61546673e-05]
[3.50594995e-05 -5.46214776e-05]
[1.78816999e-04 1.53724547e-05]]

Sigmoid Activation Layer

[[0.50006455 0.49997288]
[0.49999773 0.50001302]
[0.49999477 0.50005227]

...
[0.49998812 0.49999596]
[0.50000876 0.49998634]
[0.5000447 0.50000384]]