

# Homework : 2

## CPS 584

### Advanced Intelligent Systems and Deep Learning

#### **EXPERIENCE:**

The first homework was a single-layered neuron where we only had to find the values of two weights. This was a little simple, as compared to the two-layer neuron. But, while writing the equation in the loop, I forgot to add up the total error each time so it gave me an error. I also had a hard time understanding the loop, and I faced issues each time when I defined the weights, as I forgot to multiply by the input. In the second part, it was difficult for me to define the set of 50 data sets of input and then pass them through the loop. After watching some videos online I was able to resolve the issue for the same.

The second question was quite difficult for me. I had to watch the help session recordings to understand the relation between the weights and inputs each time as there were a lot of variables. I faced an issue while writing inputs in the matrix/array format, it was new for me, but I'm glad I learned something new. And now I would say I don't get confused by loops anymore. The repetitions in HW#1 and HW#2 made it easier to understand everything even more clearly.

#### **CONCLUSION:**

I have successfully learned to train the neuron network for a single layer as well as a double layer, and since the rules are the same in both of them, I can design a multi-layer network in the same way. I can say the homework 1 & 2 made my concepts crystal clear and helped me a lot to understand the concepts at a much better depth.

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