

In this week's readings, we learnt about Linear Neural Networks-mainly Linear Regression and Softmax Regression.

We saw the problems which can be solved using linear regression and read about how to implement the model. We read about the loss function, gradient descent function and normal distribution which can help us better our model to give a more accurate prediction based on the given data. We saw the implementation of linear regression too. We learnt the concepts of Deep Networks using the linear regression approach in mind.

We also read about the softmax regression model and how it can be used for solving classification problems. How it gives the probabilities of the various possible classes or outcomes and how they should sum up to 1 and cannot be 0. We also learnt that the class with the max probability is our classification outcome. We saw various loss functions and how they can be used to make our model more and more accurate by hyper parameter tuning. We also saw the implementation of the MNIST Fashion classification problem and implementation of softmax regression.