

# Research on Tensorflow.js

Main things to keep in mind when using a Neural Network or Machine learning algorithm:

- 1) Epochs : no of times the training process is going to be iteratively repeated
- 2) Loss function : function to check the inefficiency of algorithm by computing a value
- 3) Optimisation algorithm : to reduce the value of Loss function by making the algorithm efficient ( Gradient descent )
- 4) type of neural network or machine learning algorithm going to be used in the Project ( RNN , CNN , GAN , Linear Regression, knn clustering )
- 5) Regularization to avoid Overfitting ( by providing a penalty like lambda function )
- 6) Activation function : Softmax and Sigmoid

## The idea for projects in Virtual AI Lab :

- 1) Beginner: Linear Regression(plot and predict) eg Housing Prediction Value
- 2) Intermediate: NLP(sentiment analysis) eg To check the toxicity of the given language
- 3) Advanced: Image Classification eg to differentiate between two types of images like humans and dogs etc.