M. HARIHARAN

Deep Learning - Assignment - II

(1) True

(2) False

(3) ~~Back Pro~~

(3) Back Propagation

(4) True

(5) Hyper Parameter

PART - A

(6) (6) Both assume Linear Systems

(7) 1 & 3

(8) Both Pooling layers are used to reduce the dimensions of the feature maps.

(9) It is an image model block that aims to approximate an local sparse structure in a CNN.

PART - B

(1) → This method uses simple matrix operations from linear algebra and statistics to calculate a projection of the original data.

→ PCA is an operation applied to a dataset.

→ It is a backbone of modern data analysis

→ A ~~bla~~ black box that is widely used but poorly understood

→ It is a ~~mathati~~ mathematical tool from applied linear ~~alg~~ algebra

→ It is a sample, non-parametric method of extracting relevant information from confusing data sets.

→ Provides a ~~no~~ roadmap for how to reduce a complex data set to a lower dimension

→ After that the data is projected on the best line, need to transform the co-ordinate system to get 1-D representation of vector x, y.

→ By finding the eigenvalues and eigenvectors of the co-variance matrix, we find that the eigenvectors with the largest eigenvalues correspond to the dimensions that ~~how~~ have the strongest correlation in dataset. and this is called as principal component.