18-10-2021 MACHINE LEARNING

OBSERVATION - 07

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The Radial Basic Function Algorithm :-

- Position the RBF centres by either,
  - → Using the K-means algorithm to initialise the positions of the RBF centres or
  - → setting the RBF centres to be randomly chosen datapoints.
- Calculate the actions of the RBF modes using the equation below.
- Train the output weights by either,
  - → Using the perceptron or,
  - → computing the psudo inverse of the activations of the RBF centres.

$$g(X, \omega, \sigma) = \exp\left(\frac{-\|x-\omega\|^2}{2\sigma^2}\right)$$

- The final layer of RBF don't use activation function, it rather linearly combine the outputs of previous neurons.
- There is only one hidden layer in RBF and one output layer. And the final have only one layer.