

# BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR

Accredited by NAAC With 'A' Grade
Approved by AICTE, New Delhi & Affiliated to Shivaji University, Kolhapur
Near Chitranagari, Kolhapur - 416013 (MS)

DTE INSTITUTE CODE : EN-6288

PRINCIPAL

Dr. Vijay Ghorpade

M.E., Ph. D. (Computer)

Tel.No.: (0231) 2638893, 2638894, Fax: 2636050

Web: http://coekolhapur.bharatividyapeeth.edu E- mail: coekolhapur@bharatividyapeeth.edu

# 1. Assignments

Assignments are useful for students to build up their critical thinking skills while looking for a solution to particular problem. Below is the example of assignments which we used to provide to students for various subjects after completion of each unit.

**Subject Name-** Machine Learning **Class-**TY CSE

### Assignment.1

- 1. What is hypothesis function for simple linear regression? (CO2)
- 2. Using the given data set find the value y when (CO3)

x=10.X={1,1,2,3,4,4,5,6,6,7}

Y={2.1,2.5,3.1,3.0,3.5,3.2,4.3,3.9,4.4,4.8}

3. Using the given data set find the value y when (CO3)

 $x=10.X=\{1,2,3,4,5,6\}$ 

FOUNDER CHANCELLOR

Dr. Patangrao Kadam

M.A., LL. B., Ph. D.

Y={25,35,42,50,55}

4. Explain multivariate linear regression. (CO1)

#### Assignment.2

- 1. What is hypothesis function for multivariate linear regression? (CO1)
- 2. Explain gradient descent for multivariate linear regression. (CO2)
- 3. Explain polynomial regression. (CO2)
- 4. What are applications of multivariate linear regression? (CO1)

#### Assignment .3

- 1. Explain logistic regression. (CO1)
- 2. Differentiate between linear regression and logistic regression. (CO1)
- 3. Explain Naïve Bayes Classifier. (CO2)
- 4. Explain K- Nearest Neighbor Classifier.(CO2)

# Assignment .4

- 1. What is decision tree? State the advantages, and limitations. (CO1)
- 2. What is random forest? Explain with example. (CO1)
- 3. What is SVM? Explain in detail. (CO2)
- 4. Differentiate between decision tree and SVM. (CO2)

#### Assignment .5

- 1. What is clustering? Explain in detail. (CO2)
- 2. Explain K Means clustering. (CO2)
- 3. Explain Hierarchical clustering. (CO1)
- 4. Explain a priori algorithm. (CO2)

# Assignment .6

- 1. What is neural network? Explain in detail. (CO1)
- 2. What is hypothesis function and cost function for neuron? (CO3)
- 3. Explain gradient descent for neuron. (CO2)
- 4. Explain Content based recommendation engines. (CO4)

#### Assignment.7

- 1. Explain Collaborative Filtering in recommendation system. (CO4)
- 2. Explain Content-based Filtering in recommendation system. (CO4)
- 3. What Are the Types of Recommendation Engines? (CO3)

Prof.V.D.Chougule

**Subject Incharge** 

**2.** Assignments have also been given through online mode by using google classroom platform.

