Department of Computer Science & Engineering

MACHINE LEARNING CS 601

ASSIGNMENT

Date of Submission : 22.04.2022

ASSIGNMENT 2

Q1. What are the advantages and disadvantages of linear regression models?

Q2. The values of independent variable x and dependent value y are given below:

X	0	1	2	3	4
Y	2	3	5	4	6

Find the least square regression line y = ax + b. Estimate the value of y when x is 10.

Q3. Discuss Gradient descent and backpropagation algorithm.

Q4. What are Autoencoders. Explain in brief.

ASSIGNMENT 3

Q1. Explain CNN in detail.

Q2. What is Dance Layer and Loss Layer in CNN.

Q3. Discuss Inception Network in detail.

ASSIGNMENT 4

Q1. Discuss LSTM AND GRU in detail.

Q2. Explain Reinforcement learning and its elements.

Q3. Explain Bellman Equation and Q-Policy.

Q4. What do you understand by Actor-Critic Model.

ASSIGNMENT 5

Q1. Explain SVM algorithm in detail.
Q2. Discuss applications of ML in speech recognition.
Q3. Define following terms :
       I. Generalization error in svm
       II. Parameter in SVM
Q4. Write short notes on :
       I) ImageNet Competition
       II) Common Software for Machine Learning

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