

**COMPUTER ENGINEERING DEPARTMENT**

**SUBMISSION REPORT**

**SUB: Machine Learning**

**COURSE: T.E.**

**Year: 2020-2021**

**Semester: VI**

**DEPT: Computer Engineering**

**SUBJECT CODE: CSDLO6021**

**SUBMISSION DATE: 18/05/2021**

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**Name: Amey Thakur**

**Roll No.: 50**

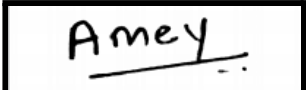
**Class: TE Comps B**

**ID: TU3F1819127**

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**Signature:**



## Assignments

### Machine Learning Assignment 1

Marks: (9/10)

Dear AMEY,

Dr. Shaveta Malik just returned [ML Assignment-1](#).



ML Assignment-1

OPEN

### Machine Learning Assignment 2

Marks: (9/10)

Dear AMEY,

Dr. Shaveta Malik just returned [Assignment -2](#).



Assignment -2

OPEN

## Machine Learning Assignment 3

Marks: (9/10)

Dear AMEY,

Dr. Shaveta Malik just returned [Assignment-3](#).



Assignment- 3

OPEN

## Quizzes

### Machine Learning Quiz 1

Marks: (10/10)

### Introduction- Unit-1

Quiz - Introduction on Machine Learning

Email address \*

ameythakur@ternaengg.ac.in

Division \*

☐ A

☒ B

☐ C

Name \*

AMEY THAKUR

Roll No \*

50

## Machine Learning Quiz 2

Marks: (10/10)

### Neural Network (Unit-2)

Total points **10/10** ?

Quizes

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## Machine Learning Quiz 3

Marks: (10/10)

### Optimization Techniques

Unit3

Total points **10/10** ?

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## Machine Learning Quiz 4

Marks: (10/10)

### Regression & Tree

Quiz on Regression and Tree

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## Machine Learning Quiz 5

Marks: (10/10)

### Classification & Clustering (Unit-5)

Total points **10/10** ?

Quizzes

Name \*

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☐ C



## Machine Learning Quiz 6

Marks: (10/10)

### PCA- QUIZ

Unit- 6

Total points 10/10 ?

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☒ B

☐ C

## Machine Learning IAT 1

Marks: (17/20)

## IAT 1 Descriptive Answer Sheet

(First page attached)

NAME: AMEY MAHENDRA THAKUR

COMPS TE B

ROLL NO.: 50

SUBJECT: ML

EXAM: IAT-1

PAGE NO.: 1/6

Q.6A) i)

Activation Functions used in Neural Network

Linear Function:

- We start off with the simplest function, the linear function. The value of  $f(z)$  increases proportionally with the value of  $z$ . The input value is the weighted sum of the weights and biases of the neurons in a layer. The linear function solves the issue of a binary step function where it reports only a value of 0 and 1.

Sigmoid Function (or):

- The sigmoid function takes a value as input and outputs another value between 0 and 1. It is non-linear and easy to work with when constructing a neural network model. The good part about this function is that it is continuously differentiable over different values of  $z$ , and has a fixed output range.

Tanh Function:

- The Tanh function is a modified or scaled up version of the sigmoid function. What we saw in sigmoid was that the value of  $f(z)$  is bounded between 0 and 1. However, in the case of tanh the values are bounded between -1 and 1.

TU3F1819127

SIGNATURE: Amey.

## Machine Learning IAT 2

Marks: Not Received

### IAT 2 Descriptive Answer Sheet

(First page attached)

Amey B 50 <u>Amey</u>	<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 70%; padding: 2px;">Page No.:</td><td style="width: 30%; padding: 2px;">youva</td></tr><tr><td style="padding: 2px;">Date:</td><td></td></tr></table>	Page No.:	youva	Date:	
Page No.:	youva				
Date:					

Q6 A]

Sol:

By Markov chain property

$$P \{ \text{Dry, Rain, Rain, Dry} \}$$
$$= P(\text{Dry} | \text{Rain}) \cdot P(\text{Rain} | \text{Rain}) \cdot P(\text{Rain} | \text{Dry}) \cdot P(\text{Dry})$$
$$= (0.7) \cdot (0.3) \cdot (0.2) \cdot (0.6)$$
$$= \underline{0.0252}$$

## Exit Survey

### Machine Learning Course Exit survey




## Machine Learning Course Exit Survey

Thank You!

## Google Classroom Submission Report



AMEY

Final Submission Report	Tomorrow	Handed in
ML Course Exit Survey-FH-2021	7 May	Handed in
Assignment- 3  1	15 May, 23:59	9/10
Assignment -2  1	15 May	9/10
ML Quizzes	30 Apr	Handed in
ML Assignment-1  1	15 May	9/10