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ML COURSE (3rd BATCH)

**SUBMITTED ON: 27/FEB/2020** 

**ASSIGNMENT NO. 1** 

# **QUES NO. 1:**

How and where is Facebook using Machine Learning to improve user experience? (2.5 marks)

## **ANSWER:**

Facebook is using machine learning in multiple ways that includes related advertisement, face detection, text detection, text translation, friend suggestion and many more.

## • DEEP TEXT:

#### HOW:

Facebook built up a text investigation tool called Deep Text to analyze words in a book and perceive the connections between them. This model investigates words relevantly, deciding the implications of words from how they are utilized.

#### WHERE:

Facebook uses deep text to determine the content of the post, and the sentiments that are promoted through it. If it is found to be violent further actions are taken.

### • DEEP LEARNING TRANSLATION:

#### HOW:

Deep Learning translation model of Facebook uses a neural system-based framework that utilizes Long Short-Term Memory (LSTM) systems to examine and decipher complete sentence rather than extracting the meaning of each word and combining it at the end. The translation done by complete sentence translation makes more sense and interprets the actual meaning of sentence that is translated.

The neural-based framework considers the specific slangs, context, abbreviations, and accentuations in a sentence/phrase to deliver the most accurate interpretation.

#### WHERE:

One might have seen the "See Translation" option in the bottom of each textual post or comment done on Facebook. This helps a lot of users to understand the context of other people who don't speak English.

# **OUES NO. 2:**

How do you think deep learning can change the world and do wonders? (2.5

marks)

# **ANSWER:**

## **DEEP LEARNING**

Deep learning executes the machine learning procedures utilizing artificial neural net that is made out of various levels organized in a hierarchal order.

Listed below are the ways by which deep learning can change the world and do wonders:

- Deep learning is quicker and requires less computational strength than different other training methods that are used in machine learning. So, it speeds up machine learning process.
- The capability to learn from unlabeled or unstructured data is a colossal advantage for many real-world applications.
- It can serve as a powerful engine (for big data) for producing results that helps in various types of future predications.

# **OUES NO. 3:**

What is your dream AI project that can become into reality and can have a commercial value? Justify your answer. (5 marks)

### **ANSWER:**

## **DREAM PROJECT:**

## SOCIAL MEDIA SENTIMENT ANALYSIS:

My dream AI project is social media sentiment analysis, that takes information through people's social media accounts. The analysis is done on the basis of given data (i.e. content that they like or share through their social accounts) and will specify the mood swings and mental health changes of a person over a period of time.

### **COMMERCIAL VALUE:**

In a world where suicide rate is increasing day by day it will help psychiatrists to understand human behavior more efficiently and produce results upon resemblance of information observed in patients.

Not only suicide cases this will also help in detecting people going through mental traumas or if a person is mentally stable or not.