

ASSIGNMENT # 1

Q.1) How and where is Facebook using Machine Learning to improve user experience?(2.5 marks)

Ans.1) There are several scenarios in which Facebook deploys Machine Learning. Some of them are mentioned here.

I. Advertisements:

The ads that a user clicks on, while using Facebook, are being always being monitored. A user is only recommended the type of ads that he clicked on, previously.

II. Tagging Friends:

The name of the friend whose profile is often visited by a user “U” or who is in contact with “U” more than others, is shown on the top of the likes, tagging options, etc. to the user “U”.

III. Recommendations for Adding Friends:

One of the factors that contributes to the “*People You May Know*” feature of Facebook is that the name of those people are given higher priority that are stalked on and off by the user “U”.

IV. The News Feed Section:

There are, as previously stated, multiple factors that contribute to the ranks or priorities of friends from a specific user’s view. Likewise, the “*News Feed*” section of Facebook also ranks others’ post while considering various factors based on Machine Learning. One of these factors is that Facebook monitors the kind of posts a user “U” likes usually, etc.

Q.2) How do you think Deep Learning can change the world and do wonders? (2.5 marks)

Ans.2) Deep Learning is a subset of Machine Learning that works on neural networks(just like those in the human brain). In today’s world, Deep Learning Algorithms may be deployed to detect and/or do away with life-threatening diseases such as cancer and different tumors. In simple words, it allows a computer to behave and think just like a human being, i.e. to take decisions while keeping in mind multiple factors yet maintaining their priority. All that is required is to provide the machine with large amount of data which, it would use to learn how different processes are carried out. Once the machine has learnt how tasks are performed, it might outclass any human being in terms of cognitive and psychomotor capabilities.

Q.3) What is your dream AI project that can become reality and can have a commercial value? (5 marks)

Ans.3) Lately, the technology has advanced exponentially thereby automating a huge number of tasks which were previously performed manually. At a point where this technological evolution has alleviated the manual handling of certain tasks, it also has adversely affected the human health. One of these health-related issues is the diet that humans follow.

As per studies, a proper diet plan does not exist for human beings. Rather every human body responds differently to a diet. Therefore, one of my goals would be to create a system that takes the necessary human body readings (e.g. height, weight, glucose level, etc.) as well as the hours that the person works for (per day) and suggest the most appropriate and personalized diet plan for him for a given time while keeping in mind the readings that were noted. These observations would be taken on weekly basis and consequent changes would be made to the diet plan upon the detection of a distinguishable change in the readings.