**Machine Learning Assignment 1**

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

Facebook uses ML for multiple purposes.

i) ADVERTISEMENT CONTROL:

ML algorithms implemented by facebook select which ads should appear on your wall according to your interests.

ii) FACE RECOGNITION:

Face recognition is an implementation of ML. Recent updates in facebook have revealed the face recognition feature, which'll allow you to login through face recognition.

iii) RECOMMENDED VIDEOS:

The "Watch" videos which appear on our timeline adjust videos according to our interests by using ML algorithms.

iv) TEXT PREDICTION:

ML predicts texts like "congratulations" in the comments box.

V) PEOPLE YOU MAY KNOW:

ML adjusts the suggestion friends' list according to whose stalking you the most, or based on mutuals.

VI) POSTS PRIORITY:

The type of posts we like/share most tend to appear often on our timeline.

Those whom we interact with more on facebook, tend to appear more on our timeline.

VII) SEARCH PREDICTION

**2. How do you think deep learning can change the world and do wonders? (2.5 marks)**

* Self-driving cars

Self- driving cars are a great innovation of DL. They've reduced

1. fuel use.
2. carbon emissions

* Traffic control

Another pro of self-driving cars. Prevention from traffic jams and accidents.

* Time reduction

DL enables us to complete any task within much lesser time than humans take.

* Security methods can be improved

Face/ Voice recognition for security purposes are way more authentic and safer than the conventional measures.

* Reduction in crime

Privacy control reduces crime rate.

* Smart world

DL has introduced a smart world for us. Nearly all work is automated.

* Reduction of human work

Machines has replaced almost all human work and made life easy.

* Ease for physically impaired

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

Well, I've seen physically impaired people struggling to explain their thoughts and ideas. It has always been my dream to design something beneficial to mankind as well as of commercial value.

I wish to design devices to enable the dumb to express their thoughts and feelings through a voice. I know this idea is already implemented, but I'd love to design it by myself.

Further enhancing on my idea, I'd like to make something which can guide the visually impaired in walking or moving about.