**A better perspective to look at life M.L.**

Artificial Intelligence (AI) is everywhere. Possibility is that you are using it in one way or the other and you don’t even know about it. One of the popular applications of AI is Machine Learning (ML), in which computers, software, and devices perform via cognition (very similar to human brain).

ML is basically the idea of training machines to recognize patterns in data and apply them to particular problems. The iterative aspect of machine learning is important because when models are exposed to new data, they are able to independently adapt. They learn from previous computations and predictions to produce reliable, repeatable decisions and results with minimal or no human intervention.

Machine learning has helped us to enhance not only many industrial and professional processes but also our everyday living. Machine learning algorithms are now used extensively to solve various challenges ranging from traffic predictions to self-driving cars.

A few ways through which we can actually relate this to our own life is as follows:

**Traffic Prediction by Google Maps**

[Google Maps](https://www.google.com/maps) is the most trusted app we use whenever we go out and require assistance in directions and traffic. How many of you know that the powerful machine learning algorithm and big data are driving the google maps?

Google Maps uses colored lines to represent traffic conditions on the major highways. These colored lines refer to the speed with which one can travel on that road. You will find Green, Yellow and Red colored lines indicating clear, slow-moving, and heavily congested traffic respectively. If it’s a gray line, that means there’s no traffic information available at the time and a red-black line indicates extremely slow or stopped traffic.

Google Maps makes use of two different kinds of information to formulate its traffic views and faster-route recommendations.

• Historical data about the average time it takes to cover a particular section of road at specific times on specific days  
• Real-time data sent by smartphones and sensors that report how fast vehicles are moving right then.

It’s not just this information that powers the amazing predictive powers of Google Maps; its rich and reliable data from many sources, coupled with powerful machine-learning algorithms.

**Facebook Face Recognition**

Machine learning is really fun when it comes to facebook face recognition. Automatic friend tagging suggestions is one of the most common applications of Machine Learning.

Facebook’s Deep Learning project DeepFace is responsible for this magic! Facebook uses face detection and image recognition to automatically find the face of the person which matches it’s Database and hence suggests us to tag that person based on DeepFace. It also provides Alt Tags (Alternative Tags) to images already uploaded on facebook. If we inspect the following image on Facebook, the alt-tag has a description.

**Virtual Personal Assistants**

Virtual personal assistants such as Alexa and Siri are everywhere. As the name implies, Virtual Personal Assistants (VPN) are the software agents that can perform tasks or services for you by interpreting verbal inputs or commands. Speech Recognition, Speech to Text Conversion, Natural Language Processing and Text to Speech Conversion are few of the major Applications of Machine Learning in VPA.

Say for example you need to do is ask a simple question like “What is my schedule for tomorrow?” or “Show my upcoming Flights“. To answer this, your personal assistant searches for information or recalls your related queries to collect relevant information. Chatbots in various food ordering apps, online training websites, and commuting apps have started using virtual personal assistants.

**Google Translate**

When you travel to a new place independently how do you communicate with the locals and find local spots where everything is written in a different language. Seems really difficult, right? Here Google translator extends a helping hand. Google’s GNMT (Google Neural Machine Translation) is a Neural Machine Learning that works on thousands of languages and dictionaries. It uses Natural Language Processing to improve its translations between texts. POS Tagging, NER (Named Entity Recognition) and Chunking are some of the other techniques used by this best and most used Application of Machine Learning.

**Online Video Streaming (Netflix)**

With over 100 million subscribers, there is no doubt that Netflix has a monopoly in the online streaming world. How could one single website take on Hollywood? Why blockbuster failed and Netflix’s popularity skyrocketed? The answer is machine learning

The Netflix algorithm constantly gathers massive amounts of data about various users’ activities such as pause, rewind, or fast forward, the day you watch shows/movies (, date and time you watch, ratings and searches, browsing /scrolling behaviour and a lot more.

They collect this data for each subscriber they have and use their Recommender System and a lot of Machine Learning Applications. That’s why they have such a huge customer retention rate.

**Self Driving Cars**

“Self-driving cars are the natural extension of active safety and obviously something we should do.” ~Elon Musk  
 I find the concept of self-driving cars as one of the coolest applications of Machine Learning. This was something that seemed science fiction a few years ago but now a soon-to-become part of our life. Yes, machine learning is the core method that enables self-driving vehicles to visualize their surroundings, object detection, object identification or recognition of object classification, object localization and prediction of behavior’s, calculation of movement and so on.

According to a recent survey by [Autolist](https://www.autolist.com/news-and-analysis/survey-tesla-repeats-self-driving-autonomous-leader" \t "_blank), Tesla is the most trusted brand when it comes to bringing self-driving vehicles to market.

**Conclusion**

As you can see, all of our lives are impacted by machine learning on a daily basis. Whether we are using navigation, online purchase, social media browsing or watching your favorite show on your favorite streaming service, machine learning is impacting our choices in one way or another.

Do let us know how you feel about machine learning impacting our lives by writing in the comments section below.