exaples machine learning

Machine learning has helped businesses with accomplishing milestones that seem impossible by manual operations in the current world. Artificial Intelligence an alias of Machine Learning is expected to further expand the horizons in the same field. Below I will state 2 realtime problems and describe how ML can assist on resolving such complex real-time problems:

# DNA Sequence– classification task

Each genome is made up of DNA sequences and each DNA segment has specific biological functions. However, there are DNA segments which are non-coding, i.e. they do not have any biological function (or their functionalities are not yet known). One problem in DNA sequencing is to label the sampled segments as coding or non-coding (with a biological function or without).

The raw DNA data comprises sequences of letters, e.g., A, C, G, T for each of the DNA sequences. One method of classification assumes the sequences to be realizations of random processes. Different random processes are assumed for different classes of sequences.

# Business Decisions - regression task

Let’s understand it with a simple example. Suppose you have a lemonade business. A simple linear regression real life example could mean you finding a relationship between the revenue and temperature, with a sample size for revenue as the dependent variable. In case of multiple variable regression, you can find the relationship between temperature, pricing and number of workers to the revenue. Thus, regression analysis can analyze the impact of varied factors on business sales and profits.

# REFERENCE:

# <https://online.stat.psu.edu/stat508/lesson/1a/1a.5>

# https://courses.lumenlearning.com/boundless-biology/chapter/evolution-of-genomes/