**Regression for Absolute beginners**

There are many predictive models in machine learning. Regression is one of the most popular ones. There are different types of regression. We are going to focus on multi-regression. Before diving into it, let’s take a quick look at the simple linear regression with one variable. Regression basically helps predict a value. Let’s say, I spend a certain amount of money every month based on the income I receive. If I am curious to know how much my spending would be next month given that I know exactly how much I’ll be making, I can use a simple linear regression model to solve this problem. Now, that we have an idea about how useful the regression model can be, let’s tackle multiple regression. Based on the previous example, if my expenses aren’t solely based on the income I receive per month, but a combination of my monthly income and the number of hours worked every month, I can use a multiple regression for that analysis. Why? Because now I have two different factors that can help me determine how much I will be spending next month. That’s the idea behind multiple regression. We can use it any time we have multiple factors helping us predict what we would like to predict.

To build a multiple regression model. We first need to have a problem we would like to solve and some data that can help us solve the problem. Once we have the dataset we first proceed with an exploratory analysis. Here, we basically are trying to understand the dataset, the variables, and any data definition. We want to make sure to clean our data. We have to take care of all null values, we can conduct some descriptive analytics on the dataset. We want to make sure we are treating our categorical and quantitative variables appropriately. Next, we have to make sure we are checking for multicollinearity. Once the data is cleaned, descriptive analytics conducted, and multicollinearity checked, we can start building the model. We will reserve the model building topic for another post. This was a basic introduction to regression for the absolute beginners.