Introduction To Machine learning And The Machine learning Process - Part 1

**Machine learning (ML)**

Machine learning involves giving a system a set of input and output data, which then transforms the data into a model (code), that is used to make intelligent decisions. This process compared to the Traditional Software development process which involves a person first finding patterns in the data and then writing code to convert the data to the desired outcome using the manual discovery patterns.

**The Machine learning Process**

The ML process involves the use of the Cross-Industry Standard Process for Data Mining (CRIS-DM), which is a step-by-step methodology for implementing a successful machine learning project. The ML process is made up of six steps, namely;

1. Business understanding: This stage of the ML process involves identifying the problem, how to solve the problem, and whether machine learning will be a useful tool for solving it.
2. Data understanding: This stage is where the available dataset is analysed and a decision is made whether to collect more data.
3. Data preparation: At this stage of the ML process, the data is transformed into a tabular form which can be used as input for a machine learning model.
4. Modelling: This stage of the ML process deals with training of models. In order words, where data is fed to an algorithm to discover patterns in the data.
5. Evaluation: At this stage of the ML process, the performance of the model is evaluated to see if the model solves the original business problem.
6. Deployment: The final stage of the ML process is where the model is deployed to production based on the results of the evaluation.