

Supervised VS unsupervised machine Learning

In this document I will explicate what machine learning is with respect to supervised and unsupervised learning.

Machine learning

Machine learning is the practice of implementing computer algorithms to automatically improve through experience and the use of data. Machine learning algorithms create models from example data, this data is called the training data. This model is fit with the sample data to make decisions or do predictions.

Machine learning can offer a solution to problems where regular procedural programming will not suffice.

Supervised Machine Learning

Supervised machine learning is the task of learning a function, based on known inputs and known outputs. An example where this can be implemented is the breast cancer dataset. Some set of known features (input) describe a known outcome (output) malignant or benign.

Unsupervised Machine Learning

Unsupervised machine learning on the other hand, is used for the clustering or analyzing of unlabeled datasets, it is implemented to find hidden patterns or data groupings, our output is not known for training.