Introduction to Supervised Learning

Supervised learning is a type of machine learning where an algorithm learns from labeled training data. Each training example includes an input and the corresponding correct output. The goal of supervised learning is for the model to learn a mapping from inputs to outputs so it can predict outcomes for new, unseen data. There are two main types of supervised learning tasks: classification and regression. In classification, the model predicts discrete labels such as spam or not spam. In regression, the model predicts continuous values such as the price of a house. Popular algorithms used in supervised learning include Linear Regression, Logistic Regression, Decision Trees, Support Vector Machines (SVM), and Neural Networks.