

Supervised Learning

Supervised Learning is a machine learning paradigm where models are trained on labeled data, with each input-output pair explicitly provided during training. The goal is to learn a mapping from inputs to outputs, enabling the model to make predictions on unseen data. Supervised learning algorithms include classification, regression, and time series forecasting. They are used in various applications, including spam detection, image classification, credit scoring, and medical diagnosis, where labeled data is available for training.