Assignment 9

Types of Learning

Using your own words, differentiate between the three types of learning (Supervised, Unsupervised, Reinforcement), and list one application for each type.

## Supervised

A supervised agent is one that is given inputs and corresponding, known outputs then attempts to create or map a function to those input/output pairs. That function can then be used with new inputs to find an output.

An example application is image recognition.

## Unsupervised

An unsupervised agent is one that creates an output for a given input based on a pre-programmed algorithm without any sort of feedback regarding the accuracy of the output.

An example application is OpenAI’s DALL-E image generation.

## Reinforcement

A reinforcement agent attempts to maximize its performance of some task by selecting actions that result in the greatest positive feedback.

An example application is an autonomous vehicle.