

Lecture 1 [Intro]

Machine Learning definition:

“Arthur Samuel (1959). Machine Learning: Field of study that gives computers the ability to learn without being explicitly programmed”

“Tom Mitchell (1998). Well-posed Learning Problem: A computer program is said to learn from experience E with respect to some task T and some performance measure P , if its performance on T , as measured by P , improves with experience E ”

Supervised Learning:

In supervised learning, you are given a dataset (x,y) with inputs x and labels y , and your goal is to learn a mapping from x to y

Regression Problems (the value y that you're trying to predict is continuous)

Tumor classification based on size and malignancy is an example of a Classification problem (discrete values)