

CS 6301 - Machine Learning Lab

Date: 21.03.22

Spot question

1. Implement Polynomial Regression?

Assume that there is only one independent variable x . If the relationship between independent variables x and dependent or output variable y is modeled by the relation,

$$y = a + a_1x + a_2x^2 + \dots + a_nx^n$$

for some positive integer $n > 1$, then we have a polynomial regression. Plot your results for the following equation

$$y = a + a_1x + a_2x^2$$

$$x = 3, 4, 5, 6, 7$$

The values of a , a_1 , and a_2 can be assumed :