Applied Data Science

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Abstract

1 Loss function of Neural Networks

1.1 Loss Function

When training Neural Network, we try by minimising the loss function. By doing so we train a bunch of weights and biases that will be used to predict the distribution of Y, instead of training Y itself.

1.2 Univariate Regression

Univariate regression predicts a single value, and y is a real number. The model predicts the θ (not y itself), which are the parameters of the distribution of y. To do so, we need to define a loss function helps us to determine the best θ. This is done using the Maximum Likelihood Estimation (MLE).

1.3 Entropy Loss