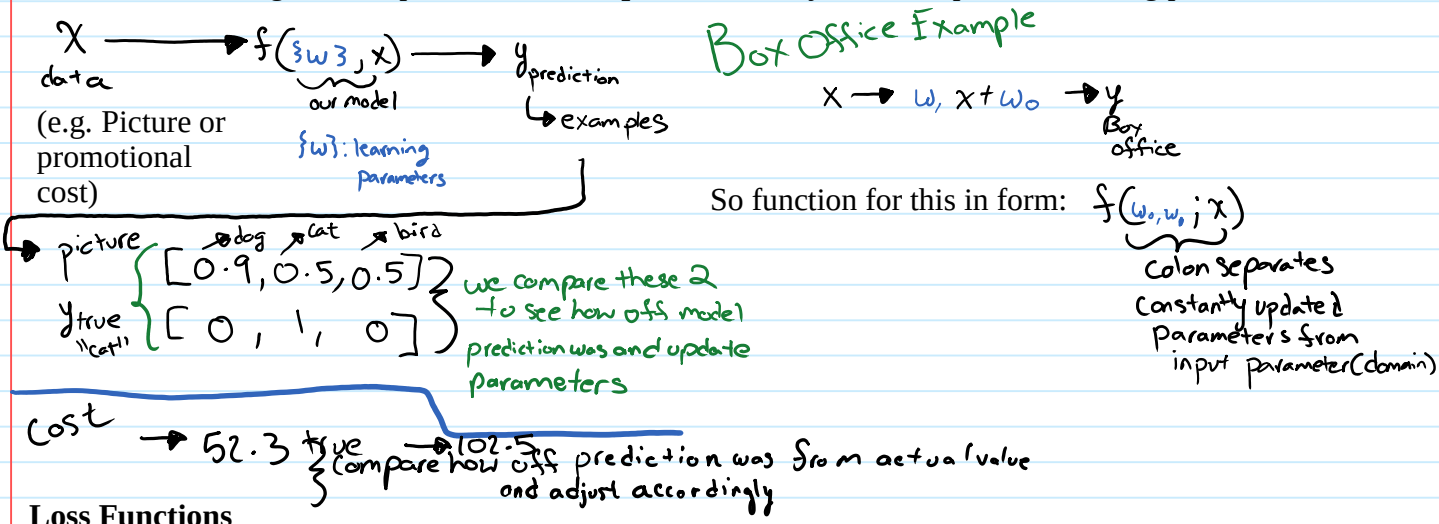
Supervised Learning via Gradient Descent

Monday, July 15, 2019 10:31 AM

Gradient Descent is the step by which we update our parameters to make better predictions based on data

We will be observing an example of a **forward pass,** which is just one step in the learning process

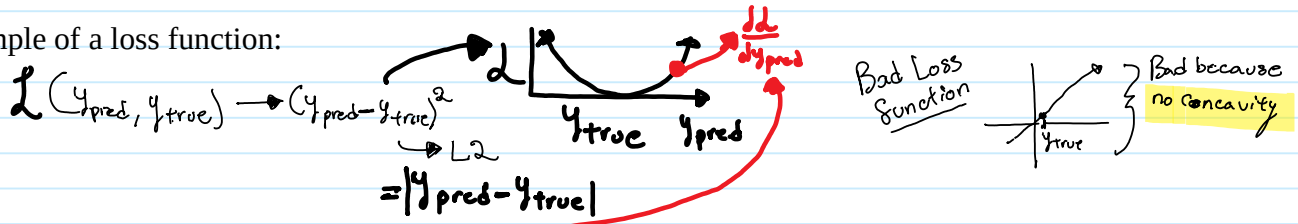


Loss Functions

Loss functions help us see how good or bad our prediction was to help us adjust our parameters

$L(y_{prediction}, y_{truth}) \rightarrow$ { big value, when y_{pred} disagrees with the truth → Can vary within a range; small value, when y_{pred} agrees with the truth

Example of a loss function:



The goal of the loss function is to get the **slope** and adjust our parameters based on this

Once we have trained our model, to use our function, we just do a regular forward pass with the parameters and domain values