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Machine Learning

ML HW week 4

2/7/23

* write a for-loop to compute the dot product

for i in range(0, n):

dotProduct = dotProduct + vecA[i] \* vecB[i]

return dotProduct

* What is stochastic gradient descent?

It is a more extreme version than minibatches. It uses just one piece of data to estimate the gradient at each iteration, and then picks a random piece of data from the training set. A single input vector is chosen along with an output and the error calculated along with it.

* What is mini-batch stochastic gradient descent
* What questions do you have about the reading?

In the book it defines mini-batch and stochastic gradient descent as almost the same but two separate ideas. Are there ways to combine both?