NBAi

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Mission Statement: Adding the (A)“i” to NBA

Overview: A machine learning program that is able to detect when “exciting” platform will take place using TensorFlow

Prompt: Make a model for predicting exciting runs

What is a run?

Defined by an 8 point differential by one team over a short period of time.

Machine Learning

Plays are predicted by a linear model with Tensorflow

Weights are used to determine excitement by these types:

shot, shot clock time (Fast breaks) , hype_factor(Twitter API), and comeback_potential (score differential)

For example a dunk, pop up, alley oop, etc. are exciting.

A long run is boring …

Technology:

Python and TensorFlow. Twitter api

Data used:

We parsed through the Play by Play csv and created a new CSV file. When a team rached a minimum of 10 points, we began keeping track of point differentials. A point differential of at least +8 meant that the home team would have the value ‘run’ whereas a point differential of -8 meant that the away team would have the ‘run’ value. We also plan on using the Twitter api in order to determine a ‘hype’ factor in terms of online sentiment.

Graph 1: Displays the amount of runs that occurred from the dataset provided