

Featured Code Competition

NFL Big Data Bowl

How many yards will an NFL player gain after receiving a handoff?

\$75,000

Prize Money



The National Football League · 892 teams · a month to go (a month to go until merger deadline)

Overview

Description

Submissions will be evaluated on the Continuous Ranked Probability Score (CRPS). For each `PlayId`, you must predict a cumulative probability distribution for the yardage gained or lost. In other words, each column you predict indicates the probability that the team gains \leq that many yards on the play. The CRPS is computed as follows:

Evaluation

Timeline

Prizes

Code Requirements

$$C = \frac{1}{199N} \sum_{m=1}^M \sum_{n=-99}^{99} (P(y \leq n) - H(n - Y_m))^2,$$

where P is the predicted distribution, N is the number of plays in the test set, Y is the actual yardage and $H(x)$ is the Heaviside step function ($H(x) = 1$ for $x \geq 0$ and zero otherwise).

The submission will not score if any of the predicted values has

$$P(y \leq k) > P(y \leq k + 1)$$

for any k (i.e. the CDF must be non-decreasing).

Submission File

For each `PlayId`, you must predict 199 values that represent its cumulative distribution from -99 to 99 yards gained. The file must have a header and contain all 199 values in the following format:

```
PlayId,Yards-99,Yards-98,...Yards98,Yards99
20190905000050,0.0,0.0,...,1.0,1.0
20190905000195,0.0,0.0,...,1.0,1.0
etc...
```

Notebooks

VIP Hint coded

41 votes · 5 hours ago

LGBM_Regression_view

21 votes · 16 hours ago

lgbm, multiple classifier

17 votes · 13 hours ago

neural network, with mae objective, 0.01385

66 votes · 2 days ago

initial wrangling & Voronoi areas in Python

127 votes · a day ago

208 discussion topics

Best Single Model

71 replies · 23 minutes ago

Offence and Defense position group mapping

2 replies · 38 minutes ago

My best features so far

58 replies · an hour ago

Can we use statistics of the players ?

9 replies · an hour ago

A paper on weather impact for rushing plays

6 replies · an hour ago

Launch

14 days ago

Close

a month

892 Teams 980 Competitors 6,454 Entries

Points This competition awards standard [ranking points](#)
Tiers This competition counts towards [tiers](#)

Tags sports american football crps extra small