Josh Konowitz - NFL 4th Down Analytics

PROBLEM: NFL coaches currently use a 'gut' decision-making process on 4th down, resulting in punting on 75% of 4th downs

SOLUTION: Using machine learning to provide insights for coaches in order to help them make the most optimal decision
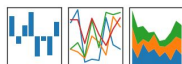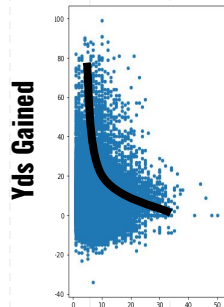
TECHNOLOGY:

PREDICTING OUTCOMES:
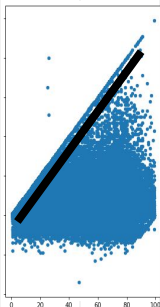
Yds To Go   **Yd Line**   **Avg. Yds Gained**
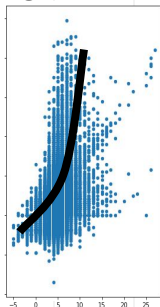
→ **RANDOM FOREST REGRESSOR MODEL** →

Average Error:

Yards Gained:	**First Downs:**
4.66 YDS	**14.15%**
Punt Distance:	**FG Completion:**
7.41 YDS	**11.56%**

LEARNING OUTCOMES..
1. Python Libraries
2. Machine Learning
3. Data Science

NEXT STEPS...
1. Turning Predictions into Insights