

Fantasy Football Analytics and Predictor

Project Authors:

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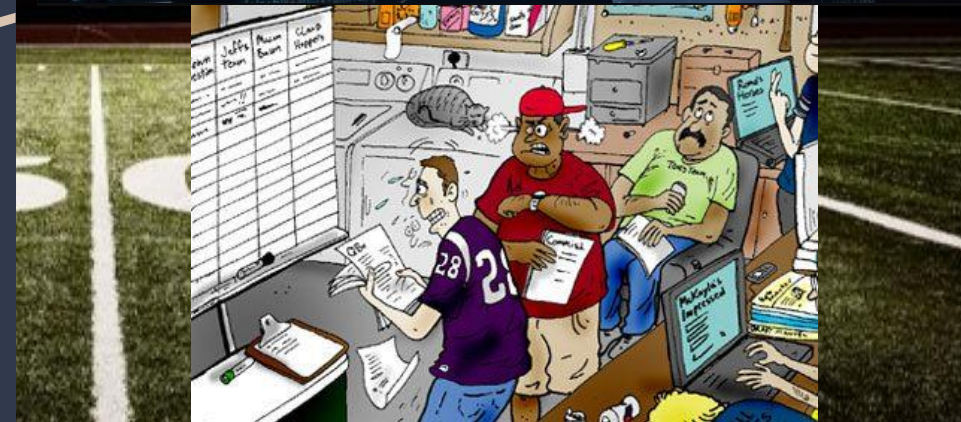
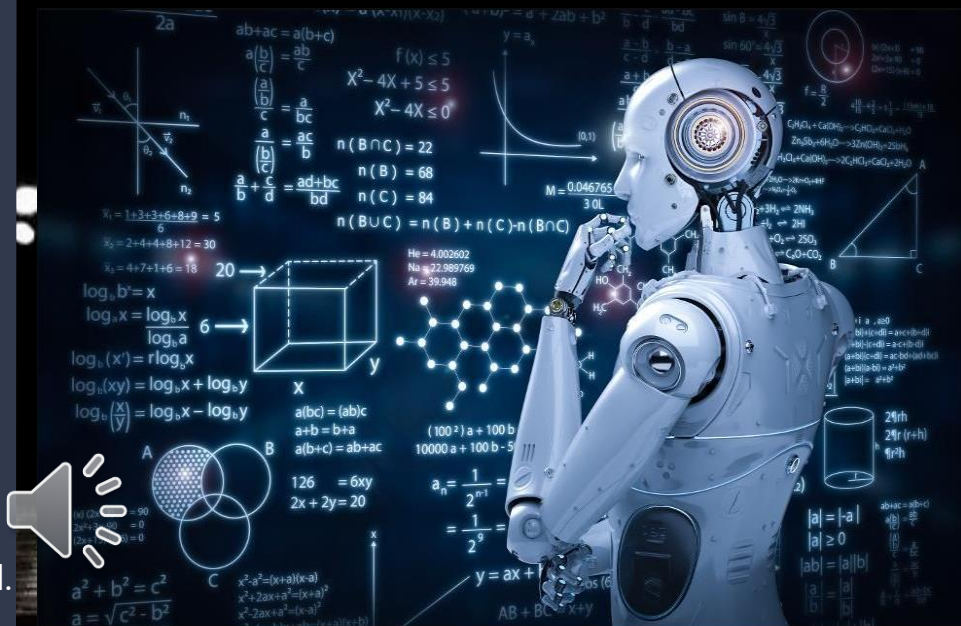
Sponsor: Joe Pollock
of

The Fantasy Takeaway Podcast



Predicting Fantasy Football with Machines

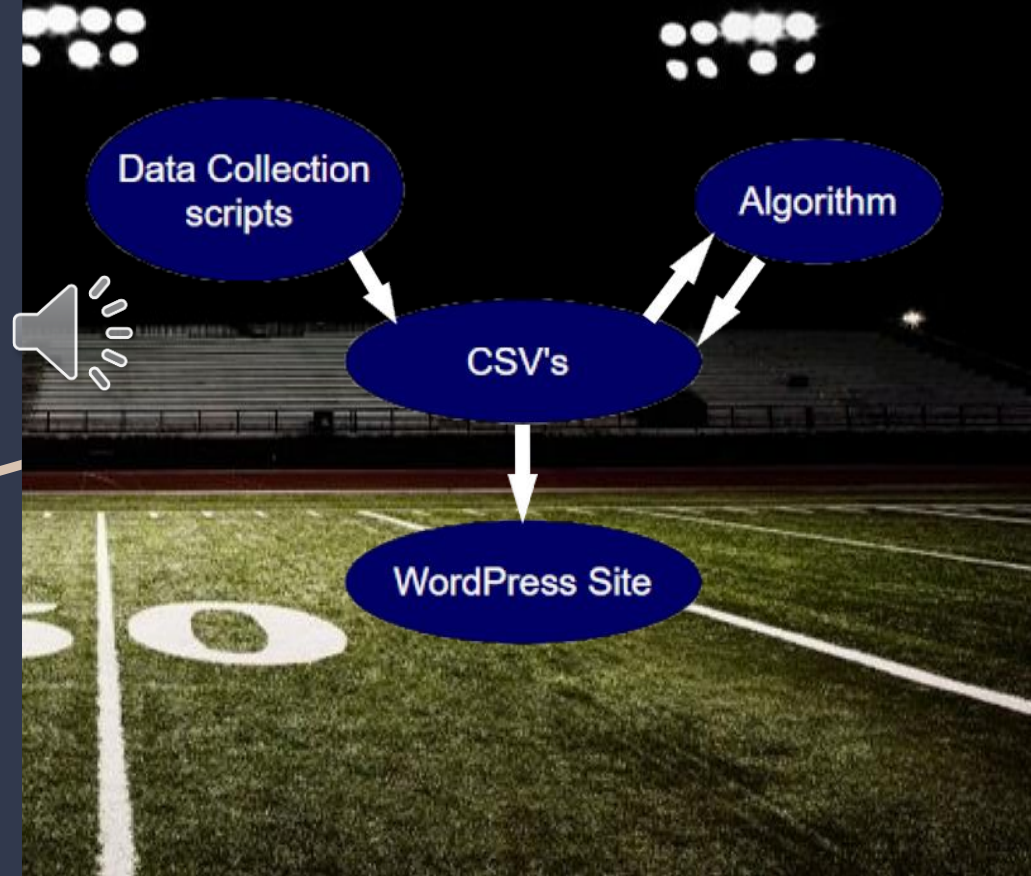
- Statistical team and player data gathered from available online sources.
- Machine Learning and algorithms use data to predict how well players will do in fantasy football.
- Post it on an easy to use website.
- <https://ffpredictor.thefantasytakeaway.com/>



Design

- 1) Data collection scripts are run on Joe's hosting which produce csv files that are sent to the database.
- 2) Data is sent to the algorithm that makes the predictions.
- 3) The predictions and player statistics are sent to the website.

<https://ffpredictor.thefantasytakeaway.com/>



Challenges we solved

- Getting the data needed from reliable sources.
- Combining the data together and reliably automating all scripts to run together biweekly.
- Predicting future fantasy football outcomes.
- Making a quality product people will rely on.



Demo

← → ↻ 🏠 <https://ffpredictor.thefantasytakeaway.com> 130% ⋮ 📄 ☆ 📱 🖨



FANTASY FOOTBALL PROJECTIONS

HOME

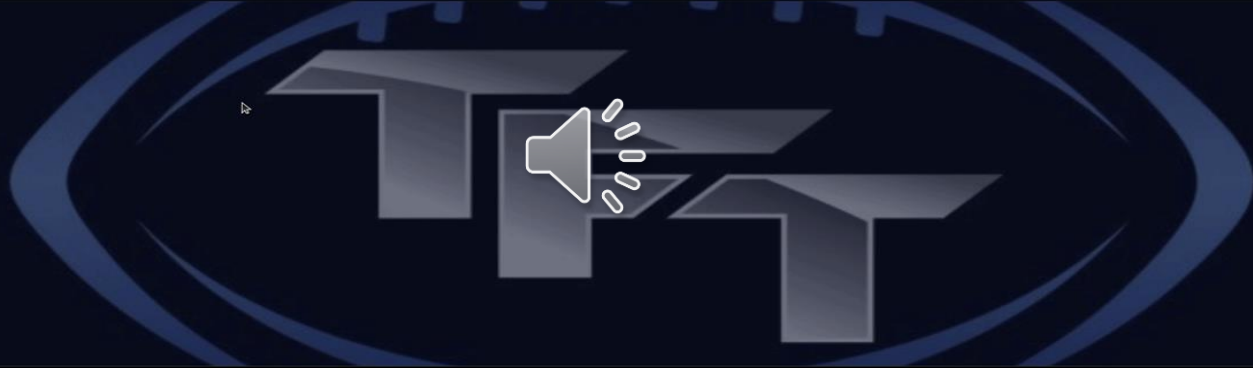
QUARTERBACKS

RUNNING BACKS

WIDE RECEIVERS

TIGHT ENDS

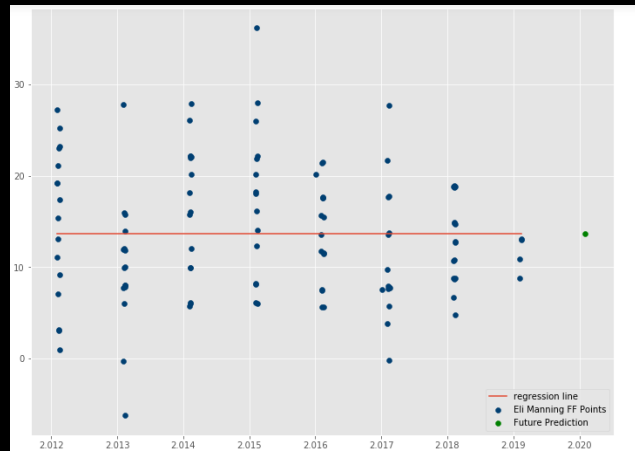
HOME



Welcome to FFPredictor! This site is still in its infancy, but it will soon be the home of a state of the art machine learning projection algorithm complete with weekly player statistical averages and snap level matchup adjustments. Feel free to have a look around as we get things up and running. Exciting things are on the horizon, Takeaway Nation!

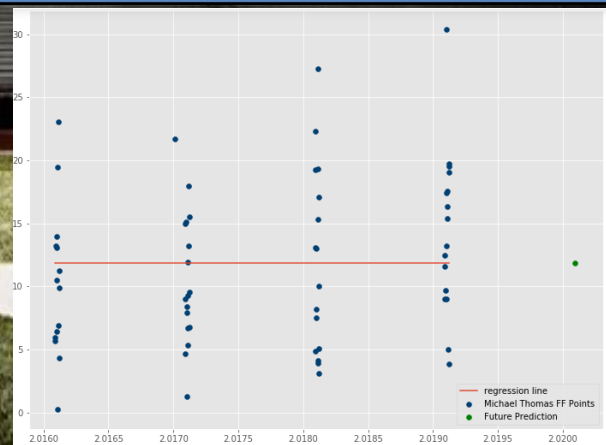
Testing and Mitigation

- Understand the data
- Find out how well players did and start making predictions for the future.



| PLAYER | STATUS | ATTEMPTS | COMPLETIONS | PASSING YARDS | PASSING TDs | INTERRUPTIONS | COMPLETION % | FUMBLES | RUSHING YARDS | RUSHING TDs | FANTASY PPG | PROJECTED PPR | OPPONENT | DEFENSE ADJUSTED PPR |
|-------------|---------|----------|-------------|---------------|-------------|---------------|--------------|---------|---------------|-------------|-------------|---------------|----------|----------------------|
| Eli Manning | healthy | 36.75 | 22.75 | 260.5 | 1.5 | 25 | 62.0% | 0.25 | 1.75 | 0.0 | 13.6 | 14.65 | PHI | 15.48 |

- Test the data against past games.
- Test the data with users to make sure it is understandable.
- Make a friendly user interface.



| PLAYER | STATUS | TARGETS | RECEPTIONS | RECEIVING YARDS | RECEIVING TDs | CATCH % | FUMBLES | SNAP % | YARDS AFTER CATCH | FANTASY PPG | PROJECTED PPR | OPPONENT | DEFENSE ADJUSTED PPR |
|----------------|---------|---------|------------|-----------------|---------------|---------|---------|--------|-------------------|-------------|---------------|----------|----------------------|
| Michael Thomas | healthy | 11.56 | 9.31 | 107.81 | 0.56 | 80.0% | 0.0 | 88.3% | 583.0 | 14.1 | 13.82 | CAR | 16.97 |

Why is this important

- Easy way to keep up with players' statistics.
- Fantasy Football is an \$18.6B market.
- Predictions may help level the playing field when making fantasy football picks.
- Fantasy football predictions presented by a podcaster and displayed in a table for a user friendly experience
- Users gain better insight on fantasy football possible future outcomes



A photograph of a football field at night. The field is illuminated by stadium lights, and the number 50 is visible on the grass. The stands are empty, and the sky is dark.

Thank You