

Fantasy Football 2021

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note: this does not include players that were just drafted into the league

Packages used

```
# packages used
packages <- c("rvest", "stringr", "tidyverse", "xml2", "ggplot2")

# install packages if not yet installed
installed_packages <- packages %in% rownames(installed.packages())
if (any(installed_packages == FALSE)) {
  install.packages(packages[!installed_packages])
}

# load packages
invisible(lapply(packages, library, character.only = TRUE))

# install packages required to pull from github repo
install.packages(c("devtools", "rstudioapi"), dependencies=TRUE, repos=c("http://rstudio.org/_packages", "http://cran.rstudio.com"))

# install ffanaalytics package from github
devtools::install_github(repo = "FantasyFootballAnalytics/ffanalytics", build_vignettes = TRUE)

# dependencies
install.packages(c("tidyverse", "rvest", "httr", "readxl", "janitor", "glue", "Hmisc"), dependencies=TRUE, repos=c("http://rstudio.org/_packages", "http://cran.rstudio.com"))

# load the package
library("ffanalytics")
```

```
## Loading required package: httr
```

Scraping from CBS, ESPN, and Yahoo for 2020 season

Which creates a list of tibbles for each position

```
# scraping
my_scrape <- scrape_data(
  src = c("CBS", "ESPN", "Yahoo"),
  pos = c("QB", "RB", "WR", "TE", "DST", "K"),
  season = 2020,
  week = 0 # week=0 for seasonal projections
)
```

Projected points are calculated, Rank and Risk Value are added, etc.

```
# creating projections from player data on MyFantasyLeague.com
my_projections <- projections_table(my_scrape)

# adding ranking info
my_projections <- my_projections %>% add_ecr() %>% add_risk() %>%
  add_adp() %>% add_aav()

# adding player info to our projections
my_projections <- my_projections %>% add_player_info()
```

Top Ten's per Position

Top Running Backs

```
my_scrape$RB %>% select(player, team, rush_yds, rush_tds, rec, rec_yds, rec_tds, site_pts)
```

```
## # A tibble: 100 × 8
##   player      team rush_yds rush_tds  rec rec_yds rec_tds site_pts
##   <chr>      <chr>   <int>   <int> <int>  <int>  <int>  <int>
## 1 Christian McCaffrey CAR      1366      13   109    935     5    315
## 2 Dalvin Cook      MIN      1551      15    58    552     1    283
## 3 Derrick Henry     TEN      1786      14    23    178     1    263
## 4 Alvin Kamara      NO       1022      10    85    640     3    222
## 5 Nick Chubb        CLE      1643      10    22    196     0    221
## 6 Aaron Jones       GB       1165      11    52    411     3    218
## 7 Jonathan Taylor   IND      1235      10    49    383     1    205
## 8 Austin Ekeler     LAC       695       3    92    881     8    203
## 9 Najee Harris      PIT      1029      10    62    463     3    203
## 10 Joe Mixon        CIN      1096       8    50    372     5    202
## # ... with 90 more rows
```

```
## saving the full .csv file for position
write.csv(my_scrape$RB, file=file.path(getwd(), "TopRBs.csv"), row.names=FALSE)
```

Top Quarter Backs

```
my_scrape$QB %>% select(player, team, pass_comp, pass_yds, pass_tds, rush_yds, site_pts)
```

```
## # A tibble: 69 × 7
##   player      team pass_comp pass_yds pass_tds rush_yds site_pts
##   <chr>      <chr>   <int>   <int>   <int>   <int>  <int>
## 1 Josh Allen   BUF       408   4663     34     514    447
## 2 Patrick Mahomes KC       445   5169     38     150    424
## 3 Lamar Jackson BAL       288   3296     31   1089    404
## 4 Justin Herbert LAC       422   4818     31     272    402
## 5 Aaron Rodgers GB        392   4494     39     165    402
## 6 Kyler Murray ARI       395   4131     29     719    397
## 7 Tom Brady    TB        417   4848     36       33    389
## 8 Dak Prescott DAL       432   4847     32     279    383
## 9 Ryan Tannehill TEN       324   3932     34     260    379
## 10 Russell Wilson SEA       376   4150     34     468    374
## # ... with 59 more rows
```

```
## saving the full .csv file for position
write.csv(my_scrape$QB, file=file.path(getwd(), "TopQBs.csv"), row.names=FALSE)
```

Top Wide Receivers

```
my_scrape$WR %>% select(player, pos, team, rec, rec_yds, rec_yds_g, rec_avg, rec_tds, site_pts)
```

```
## # A tibble: 100 × 9
##   player      pos team  rec rec_yds rec_yds_g rec_avg rec_tds site_pts
##   <chr>      <chr> <chr> <int>  <int>    <dbl>  <dbl>  <int>  <int>
## 1 Davante Adams WR    GB   133  1568    92.2   11.8    15    237
## 2 Tyreek Hill   WR    KC   102  1477    86.9   14.5    13    224
## 3 Stefon Diggs  WR    BUF   114  1574    92.6   13.8     9    200
## 4 Calvin Ridley WR    ATL    98  1414    83.2   14.4    10    193
## 5 Justin Jefferson WR   MIN    93  1556    91.5   16.7     7    188
## 6 DeAndre Hopkins WR   ARI   134  1529    89.9   11.4     7    181
## 7 A.J. Brown    WR   TEN    70  1193    70.2    17     11    177
## 8 DK Metcalf    WR   SEA    84  1288    75.8   15.3    10    176
## 9 Keenan Allen  WR   LAC   116  1285    75.6   11.1     9    172
## 10 Allen Robinson WR   CHI   101  1264    74.4   12.5     8    164
## # ... with 90 more rows
```

```
## saving the full .csv file for position
write.csv(my_scrape$WR, file=file.path(getwd(), "TopWRs.csv"), row.names=FALSE)
```

Top Tight Ends

```
my_scrape$TE %>% select(player, pos, team, rec_tgt, rec, rec_yds, rec_yds_g, rec_avg, rec_tds, site_pts)
```

```
## # A tibble: 100 × 10
##   player    pos  team  rec_tgt  rec  rec_yds  rec_yds_g  rec_avg  rec_tds  site_pts
##   <chr>    <chr> <chr>   <int> <int>   <int>     <dbl>   <dbl>   <int>   <int>
## 1 Travis ... TE    KC     168   123   1529     89.9    12.4     11    213
## 2 George ... TE    SF     156   120   1497     88.1    12.5      7    182
## 3 Darren ... TE    LV     125    93   1097     64.5    11.8      7    141
## 4 Mark An... TE    BAL    106    68    860     50.6    12.7      9    130
## 5 Kyle Pi... TE    ATL     92    63    814     47.9    12.9      7    110
## 6 T.J. Ho... TE    DET    110    68    888     52.2    13.1      5    109
## 7 Noah Fa... TE    DEN     96    61    738     43.4    12.1      5     94
## 8 Jared C... TE    LAC     68    44    665     39.1    15.1      6     92
## 9 Dallas ... TE    PHI     90    62    688     40.5    11.1      5     89
## 10 Robert ... TE    GB      55    46    488     28.7    10.6      8     87
## # ... with 90 more rows
```

```
## saving the full .csv file for position
write.csv(my_scrape$TE, file=file.path(getwd(), "TopTEs.csv"), row.names=FALSE)
```

Top DST

```
my_scrape$DST %>% select(team, dst_int, dst_safety, dst_sacks, dst_fum_rec, dst_fum_force, site_pts)
```

```
## # A tibble: 32 × 7
##   team  dst_int  dst_safety  dst_sacks  dst_fum_rec  dst_fum_force  site_pts
##   <chr>   <int>      <int>      <dbl>      <int>      <int>      <dbl>
## 1 LAR      16         1      55.5         14         19      204.
## 2 TB       19         1      46.4         14         19      204
## 3 NO       20         0      46.2         10         14      194
## 4 BUF      17         1      37.8         13         17      189.
## 5 SF       15         1      44.8         13         18      189.
## 6 BAL      15         1      37.2         15         20      188.
## 7 NE       20         0      34.6         10         14      184.
## 8 PHI      15         1      59.1         15         21      174.
## 9 PIT      18         1       55         13         18      173.
## 10 WAS     18         0      54.8         12         16      168
## # ... with 22 more rows
```

```
## saving the full .csv file for position
write.csv(my_scrape$DST, file=file.path(getwd(), "TopDST.csv"), row.names=FALSE)
```