

bumpsetscrapR:

An R package for scraping NCAA volleyball data

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August 07, 2019

1 Abstract

We introduce the R package **bumpsetscrapR**, which allows R users and volleyball fans both to easily interact with NCAA volleyball data. Currently this data is embedded within <http://stats.ncaa.org> and is difficult to access, pull, analyze, and visualize. Other online volleyball data sources are proprietary or out of scope (US college volleyball). This package allows users to analyze both men and women's volleyball players as well as teams over time. Additionally, we introduce a R **Shiny** app so users can summarize and visualize the scraped data. This app allows the programming novice to benefit from the data without having to learn the programming language R. Our end result is a combination R-package/Shiny app similar to that of past and current sports scraping tools such as hockey's waronice.com, football's R package **nflscrapR**, and tennis's R package **deuce**. Notably, we maintain and improve upon these tools by maintaining current standards of reproducibility and by introducing a "head to head" page, which is easily interpretable by analysts, coaches, and players alike.