Visualizing Football Performance: Insights from the WorldfootballR Dataset

This project focuses on the visualization of football statistics using the worldfootballR dataset from Understat. Football is one of the most popular sports globally and generates vast amounts of data. When team and player performances, on-field movements, goals, and other key moments are analyzed and visualized in detail, they can provide valuable insights for both analysts and fans alike. The goal of this project is to transform data from the worldfootballR dataset into meaningful and impactful visualizations that offer new perspectives on the game of football. Also, I will predict key features with machine learning algorithms and visualize predicted results in terms of predictive multiplicity.

As part of this project, the data extracted from the worldfootballR dataset will first be cleaned and analyzed. The focus will be on key football statistics such as player performances, match results, goals scored, and goals conceded. These data points will then be visualized using various data visualization techniques. Bar charts, heatmaps, scatter plots, and similar methods will be employed to better illustrate the dynamics of football matches and player performances. In particular, the project will focus on advanced football statistics like expected goals (xG), shot maps, and team strategies.

Through effective use of data visualization tools, this project will demonstrate how visualizing football data can facilitate the work of analysts and decision-makers. By combining data science and football, the project will highlight both the entertainment and the data-rich nature of the sport, making the results accessible to a wide audience.

Python libraries (such as Matplotlib, Seaborn, Plotly, etc.) will be utilized throughout the data visualization process, emphasizing how football data can be effectively visualized. By the end of the project, the goal is to develop better skills in analyzing and visualizing football data, as well as discussing how these insights can be applied in a broader context.

https://jaseziv.github.io/worldfootballR/articles/extract-understat-data.html