Final Year Project: Evaluation and prediction of NBA players using advanced statistical methods

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<u>Description</u>: As a good practice, it can be interesting to apply your statistical knowledge to analyze the performance of NBA players. To conduct this final year project, you need to first collect the NBA player data from some publicly available webpages (e.g. https://www.basketball-reference.com/players/), and then apply some cutting-edge statistical methods to address the question(s) you are interested. For your reference, a few recent publications on analyzing NBA data are also listed as follows.

References:

- 1. P.A. Groothuis and J.R. Hill (2018). *Career duration in the NBA: Do foreign players exit early?* Journal of Sports Economics, 19: 873-883.
- 2. T. Horvat, J. Job, R. Logozar and C. Livada (2023). *A data-driven machine learning algorithm for predicting the outcomes of NBA games*. Symmetry, 15: 798.
- 3. J. Mertz, L.D. Hoover, J.M. Burke, et al. (2016). *Ranking the greatest NBA players: A sport metrics analysis*. International Journal of Performance Analysis in Sport, 16: 737-759.
- 4. Y. Wang, W. Liu and X. Liu (2022). *Explainable AI techniques with application to NBA gameplay prediction*. Neurocomputing, 483: 59-71.
- 5. F. Yang and J. Zhang. (2021). The ranking prediction of NBA playoffs based on improved PageRank algorithm. Complexity, 2021: 6641242.