Predicting the Best Team Players of Pakistan Super League using Machine Learning Algorithms

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Abstract

Owing to short and fast paced play, T20 is the adored format of cricket sport. In T20 cricket, Pakistan super league (PSL) is one of the most famous professional leagues founded to strengthen Pakistan cricket by scrutinizing the young talent. However, the selection of the best players for PSL teams is a very critical phase which certainly affects the final results of the play. To avoid biasness caused by the human nature in selection process, this study aims to select and rank the team of top fifteen players based on their batting and bowling performance in previous five seasons of PSL using Machine learning approach. For this purpose, Support vector machine (SVM), Random forest, Naive Bayes, Linear regression and K-nearest neighbor (classification) techniques have been employed for the development of predictive model from individual batting and bowling features sets. Based on comparison of applied techniques, the evaluated results have been plotted in term of accuracy, precision, recall and “f1score”. For the selection of both batsman (in term of runs scored) and bowlers (in term of wickets taken), Random Forest performed well by yielding an accuracy of 100%. Findings of this research also ascertain that batting performance leads over bowling performance.
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Index Terms
Keywords

Pakistan Super League, Batting, Bowling, Machine Learning, Prediction, Classification, Ranking