A new Machine Learning based Deep Performance Index for Ranking IPL T20 Cricketers

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Abstract

T20 cricket has brought about a revolution in cricket. The Indian Premier League (IPL) tournament organized every year by the Board of Cricket Control of India has become very popular with a huge fan following. It is based on franchises bidding for acquiring players to play for their side. Huge amounts of money are involved in the auction. Ranking of players in IPL according to their performance is an important step that would allow franchises and team managers to take better informed decisions in choosing their sides. In this paper, a machine learning based approach is used to create a new index, named as Deep Performance Index (DPI), that reflects the performance of the batsmen and bowlers on a deeper analysis of the requirements of T20 cricket. The Recursive Feature elimination algorithm based on machine learning is used for extracting meaningful features and their relative importance towards designing the DPI. It is shown that DPI is able to better capture performance related data for both batsmen and bowlers when compared to some other well-known ranking schemes for T20 cricket.
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**Index Terms**

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**Keywords**

IPL, Cricket, T20, Performance Index, Player Evaluation