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## **Data Mining Approach for Identifying Suitable Sport for Beginners**

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## **Abstract**

Anthropometric measurements are generally used to determine and predict achievement in different sports. An athlete's anthropometric and physical characteristics may perform important preconditions for successful participation in any given sport. Further, anthropometric profiles indicate whether the player would be suitable for the competition at the highest level in a specific sport. Recently, more researches have been carried out on Sport Data mining. In this study, we propose an approach to identify the most suitable sport for beginners using data mining and anthropometric profiles. We propose clustering base approach. We apply a spatial clustering technique called the Spherical Associated Keyword Space which is projected clustering result from a three-dimensional sphere to a two dimensional (2D) spherical surface for 2D visualization. Empirical study of our approach has proved the effectiveness of clustering results.

Keywords: Anthropometric measurements, Data mining, Clustering, Euclidean distance