

Identify Cricket Shots using Machine Learning

Prof. Bhakti Puranik¹, Swayam Nikam², Piyush Sandhan³, Vedant Sadgir⁴, Avishkar Jadhav⁵

Assistant Professor, Department of Computer Engineering¹

Students, Department of Computer Engineering^{2,3,4,5}

Dr. D. Y. Patil Institute of Technology, Pimpri, India

¹bhakti.puranik@dypvp.edu.in, ²swayamnikam1@gmail.com,

³sandhanpiyush20@gmail.com, ⁴vedant.sadgir12@gmail.com, ⁵avishkarjadhav623@gmail.com

Abstract: Cricket shot detection is a game-changing technology that offers deep insights into player performance and match data, completely changing the way the sport is played. The main elements and importance of cricket shot detection systems are explored in this abstract. Using computer vision and machine learning techniques, the system examines video footage of cricket matches to accurately detect and classify every shot made by batsmen. Shot types (such as cover drive, pull, or leg glance), shot trajectories, and success rates are among the important data it retrieves. Numerous stakeholders in the cricketing ecosystem find diverse uses for cricket shot detection. It provides coaches and professional athletes with an unmatched post-match analysis tool that helps with strategic planning and performance enhancement. The method is used by team analysts to create winning strategies by gaining insight into opponents' shot patterns. Shot detection provides compelling visualizations and real-time shot labels in the broadcasting domain, enhancing the viewing experience. While talent scouts and cricket organizations use technology to find players and nurture talent, cricket enthusiasts profit from comprehensive shot data. This abstract highlight cricket shot detection's potential and adaptability, highlighting how it can revolutionize the cricket industry. Technology keeps improving the game, empowering players, and enthraling spectators with a deeper comprehension of the sport. Several sports have received a lot of attention and popularity recently. Many people were pining for live sports action during the height of the recent outbreak because there were no sporting activities. With millions of devoted fans who watch the games with emotion, cricket is one of the most respected sports in India. Enticed by the game, fans frequently conduct in-depth evaluations of certain players, focusing on their skills and shot choices. A greater number of people are interested in assessing players' performances in order to make wise choices for fantasy teams, especially in light of the popularity of fantasy leagues and related services. Automation presents a potential solution to the significantly time-consuming and manual process of detecting cricket batters' shots. In order to accomplish its goals, this study uses deep learning in the form of Convolutional Neural Networks (CNNs) to present an efficient method for evaluating cricket strokes

Keywords: Computer Vision, Cricket analysis, Machine Learning, LR, Video Processing, Image Classification, Feature Extraction, Shot recognition