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**Abstract:** Computer vision and machine learning technologies have revolutionized football analytics by providing sophisticated methods to study player abilities as well as team methods and match interactive elements. This paper presents a football analysis system that leverages YOLOv8 for object detection and tracking of players, referees, goalkeepers, and the football itself. Using Bundesliga match footage from Kaggle and annotating it using Roboflow, the detection model reaches high precision levels for identifying main entities. K-Means clustering distinguishes teams based on their positional data and uniform color patterns. Keypoint detection functions as an essential feature for creating 3D-to-2D animated motion projections to examine both spatial arrangements and player movement patterns precisely. The system also integrates ball tracking to evaluate passing patterns, movement intensity, and possession metrics. The project implements deep learning together with unsupervised learning and visual projection methods into a scalable automated system that enables football match evaluation for coaches along with analysts and sports scientists.
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