LongDbName: IEEE Xplore Digital Library
ShortDbName: edseee
AN: edseee.10688070
Title: Advancing Football Game Analysis: Integrating Computer Vision, Deep Learning, and Hybrid Techniques for Enhanced Video Analytics
PublicationDate: 20240605
Contributors: Benakesh, A H; Rajeev, R.;
DocTypes: Conference;
PubTypes:
CoverDate: 20240605
PeerReviewed: true
Source: 2024 OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 4.0, Smart Computing for Innovation and Advancement in Industry 4.0, 2024 OPJU International Technology Conference (OTCON) on
IsiType: GEN
DOIDS: ;
ISBNS: 979-8-3503-7378-3;
ISSNS: ;
PublisherLocations: ;
RecordType: ARTICLES
BookEdition:
Publisher: IEEE
PageStart: 1
PageEnd: 6
PageCount: 6
Volume:
Issue:
Abstract: This research is about football analytics with the help of deep learning and computer vision, through which we can track the movement of the ball and all ball possessions a particular team has. This will assist teams in properly analyzing their game and identifying areas where they may be lacking. The fusion of YOLO which is one of the most popular model architectures and object detection algorithm and deep learning techniques like 3DCNN, CNN, Faster R-CNN, LSTM, BLSTM and computer vision has revolutionized the landscape of sports analytics, particularly in the domain of football (soccer). This abstract provides a glimpse into the exciting field of football analytics through the lens of advanced technologies. In recent years, the application of deep learning models to football data has enabled the extraction of invaluable insight from the game. This abstract serves as a gateway to the exciting world of football analytics, where deep learning and computer vision come together to revolutionize the way we perceive and engage with the beautiful game. The possibilities are limitless, as ongoing research continues to refine models and algorithms, promising even deeper insights and a richer experience for football enthusiasts worldwide.
DOI: 10.1109/OTCON60325.2024.10688070
Language:
Subjects: Communication, Networking and Broadcast Technologies; Computing and Processing; Power, Energy and Industry Applications; Signal Processing and Analysis; Deep learning; Computer vision; Technological innovation; Fans; Tracking; Computational modeling; Visual analytics; Deep Learning; Computer Vision; 3DCNN; CNN; RNN; YOLO;