

Success Story

From Fouls to Fair Play: Automated Video Analysis to Detect Illegal Player Contact

*How a leading football league labor union
achieved 90% reduction in manual effort*



The client is the second-oldest labor union of four North American professional sports leagues established to provide formal representation to players for compensation negotiation and other agreements.

Challenges

The client's existing method for analyzing footage of 32 organized team activities (OTA) to detect illegal contact between players took approximately 80 hours of manual efforts adding to high overhead costs.

Manual analysis of illegal contact in OTA was cumbersome

Accurate identification of illegal contact required a game expert

Standard video players had limitations while analyzing a frame at a time

Delivered

With the help of its strong technical knowledge, Xoriant automated the analysis of video feeds by developing a cloud-based solution that harnessed deep learning models to identify the illegal contact. This reduced the need to sift through each video frame to mark the contact and the dependency on gaming expert.

Developed

A neural network-based method for player detection, player tracking, contact detection and classification

Reduced

Manual effort required in analyzing the videos frame-by-frame

Improved

Classifications of types of illegal contacts using ML model to map contact automatically

Deployed

A web-based video player to upload videos to cloud, view results frame-by-frame and export them

Delivered

An AI/ML solution to process OTA video sequences and classify player contact into 'legal' and 'illegal'.

Business Value



Enhanced

Analysis and classification of types of contact into legal and illegal



Slashed

Manual analysis effort by 90% and the dependency on gaming experts



Achieved

Automation in analyzing video feeds of OTA and a saving of thousands of dollars in manual monitoring

Technology Stack

Microsoft Azure, PyTorch, React, Cosmos DB, Azure Blob storage

Xoriant provides advanced technology solutions and software development services for global banks, software product companies and F500 market leaders. Based in the U.S. with 17 global offices and 5000+ engineering professionals, Xoriant demonstrates exceptional experience in banking and finance infrastructure modernization and cloud migration. We deliver expert digital engineering, as well as offsite and offshore services, across high tech, healthcare, pharma, industrial manufacturing, telecom, and automotive sectors. Customers credit technological innovation and delivery excellence for our shared success over three decades.