

With our flagship *DataInFormation<sup>SM</sup>* suite of solutions for Image Labeling, Data Annotation, NLP Calibration and Form Data Capture, Liberty Source is proud to serve a wide range of clients across many industry verticals. Our *Solution Briefs* provide a snapshot of the challenges clients bring to us, and the outcomes we achieve for them.

### Athlete Performance Analysis

Industry  
Amateur / Professional Sports

Data Type  
Unstructured (.mp4, .mov, .avi)

Project Duration  
3 Months

Ongoing?  
Yes

### Challenge

Our client markets an array of video capture and video coaching tools for professional, college, high school and club level athletic organizations. The tools allow teams to livestream games, enable detailed views for coaching and recruiting, allow for inter-league video exchange, and capture key statistics for players and teams. The technology relies on artificial intelligence to track play action, specifically focusing on key individuals as each game progresses. Each sport requires highly specialized AI models to track very different types of action, and each model requires tremendous amounts of video training data.

### Solution

Our Data Associates precisely labeled thousands of hours of video footage, ensuring that focus remained on the player or players directly involved with each play. In addition to requiring extreme care to closely follow the progress of each event, Associates and QA Analysts relied on deep knowledge of each sport to correctly label appropriate elements in each video frame.

### Outcome

The automated cameras and data capture application allow coaches to closely inspect every aspect of their team's performance – without requiring the staff needed to film / edit games. Our client is able to focus their development efforts on continual improvement of their products' feature set instead of on labeling data to train their AI and ML models.

### Athlete Performance Analysis

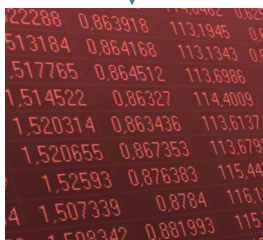
"Game Film" Video Input



Video Frames Labelled to Identify Key Player(s)



**Human in the Loop -**  
*Automatically labelled frames are reviewed, refined, and checked for consistency*



**Label Data Updates**  
**Tracking Model**



**Model Drives**  
**Automated Camera**



**Coaches View Highly**  
**Targeted Footage**