Motivation

As the great improvement of multimedia communication and artificial intelligence, the application on the smartphone becomes more and more interesting. People want to get any exciting moments with their cameras or smartphones. But most applications are used for taking charming scenery or selfie. For many sports fans, they also want to get highlight moment when they are playing with team members. The "Intelligent Arena" will be a new type of application.

Significance:

The application on the smartphones is easy to find and use. People can record their sports moment anywhere and anytime, also people don't need extra spend. The technologies of deep learning can generate many new functions. The highlight detection can analysis the video to catch the highlight by itself. People can easier and faster share their highlight moment with their friends or social network.

Objective:

In order to get highlight video, the system has to automatically select highlight video clips in real-time living camera. The most important work is how to recognize the highlight moment and save it. To sum up, this paper has the follows four points:

1, how to find and match the broadcast in the playground.

2, recognizing and saving the shoot and scoring moment in living camera.

3, decreasing the influences of the background the lighting

4, save those scoring moment into highlight video.

Most of those works need to train a deep convolutional neural network.