

# Detect an Isolated Camera Zoom Action



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# Inspiration

To Improve sports Analytics through Computer Vision and improve sports coverage which helps in better customer engagement.

## What It does?

This isolated camera zoom follows one or more players and/or coaches in the frame and ends as soon as there is a camera change. Isolated frames will always have a box score graphic and at times game flow graphics that may include the following: seasonal averages, upcoming schedule, and additional promotions for future game events.

# How we Built it?

We started with a simple 3-layer CNN model as a base model and later on used Inception V3 model to train on our dataset on AWS SageMaker

## Challenges

Loading the initial dataset into the instance and creating a balanced dataset for all the classes.

## Accomplishments

Built a full-scale CNN model and deployed it on the cloud and achieve test accuracy close to 70%.

# What we learnt

Usage of AWS SageMaker for training and deploying our Machine Learning models and to do transfer learning using a pre-trained model.

# Future Scope

Collect and augment more data and improve the test accuracy and train it on all actions to create a generalized model that can detect any type of action.