

## Daily Log

### Monday October 28

I kept researching online to find other possible ways to track the ball. Still could not find an adequate solution.

### Wednesday October 30

Tried to use Hough Circle Transform method in OpenCV to track the ball. We used this method in Computer Vision class to identify coins on a paper. Did not finish implementing this though.

### Friday November 1

I finished implementing the Hough Circles Transform Method from class last year. The video was still too blurry and it could not recognize the ball. I also spent some of the beginning of this class to practice my presentation.

### Wednesday November 6

I tried to do some hyperparameter tuning for the Hough Circle Transform method. Still could not track the ball. I think the problem with my program was that the video is too blurry. I will work on trying to find a clearer video.

### Friday November 8

Looked online for other possible videos. I decided to leave that task for the weekend. I reverted back to the tracker method because it worked for the scoreboard. I thought maybe I had a bug somewhere in the code.

## Timeline

Date	Goal	Met
Oct 28	Brainstorm ways to identify the number of points a shot is worth	Debugging code to track ball
Nov 4	Track the ball and calculate the trajectory of the ball	Debugging another method to track basketball. Video may be too blurry
Nov 11	Track Basketball	
Nov 18	Brainstorm and try ideas out to determine how much a shot is worth	
Nov 25	Code to add free throws and three pointers into the total score	

## Reflection

I have tried many ideas to try to solve the problem of tracking the basketball. I think the problem is with the video so I will try to download another one that is newer and with better quality. Hopefully, this will help the code work as it is supposed to. I will try the YOLO neural network and tracker methods on this new video to see which is better.