

Motion Prediction of a Ping Pong Ball

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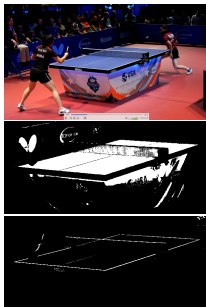
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Problems Overview

- Finding the Ping Pong table
- Finding the Ping Pong
- Calculating the current position of the ball
- Calculate the future position of the ball

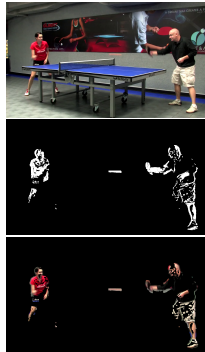
Finding the Ping Pong table

- Use color thresholding on blue on image.
- Use biggest contour to narrow down roi (assumption: Table==biggest contour).
- Use Corner detection on the white table border.



Finding the Ping Pong Ball

- Use background subtraction to find moving objects.
- Use color thresholding to find the Ball.



Calculating the current position of the ball

- Use table corners to calculate relative position of the camera.
- Calculate the relative position of the ball in the scene.

Calculate the future position of the ball

- Use two frames and the blure to calculate the moving direction of the ball.
- Calculate the speed of the ball thorough position change between frames.



Questions?

Thank you for your attention