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Assignment #1

1/25/2019

<u>Eye Detection</u>

**Problem:**

To detect coordinates of left and right eyes within given image.

**Solution:**

To find the locations of the eyes within an image I first converted the said image to a grayscale format. I then was able to use this grayscale formatted image to detect BRISK features. This returned me all the BRISK points within that grayscaled image. I then grabbed the strongest BRISK point and assumed this would be an eye. Using this assumption I was then able to make a determination of where the other eye coordinates were by using an x and y scalar threshold. I made sure the eye we are looking for was a certain distance away from the assumed eye (so that we do not detect the same eye) but made sure it was the closest point within the y threshold. This then gave me a determination of eyes on a given image.