

QArm Recommended Assessment

Image Acquisiton

1. Why would we use HSV over RGB when looking into tracking an object of a specific color? Explain this using the values you got from the blue areas inside the red squares or the different blues in the sticky notes in the octopus image in step 8 of the lab procedure.

| Object | RGB | HSV |
|-----------------------------|-----|-----|
| Left red box – sticky note | | |
| Right red box - tool | | |
| Lighter part of sticky note | | |

2. What do the individual planes in the HSV (Hue, Saturation & Value) color space signify?
3. When running the lab, after colorizing the distance image, why does a lot of the image appear white for things that are far away?
4. Compare the value plane in the HSV color space to the original image converted to greyscale. What do you notice?