

CSI 4133

Lab 4

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Methodology

Utility Functions were used to convert pixels and whole images from HSV to RGB and back, these functions were then triggered by the trackbar to update the displayed image. Note that because exact hue values resulted in slightly less clear results, a slight threshold was used, in which pixels within a small threshold of the actual value were displayed too.

Part A

Figure 1 includes the resulting output for varying hue values experimented with in Part A.

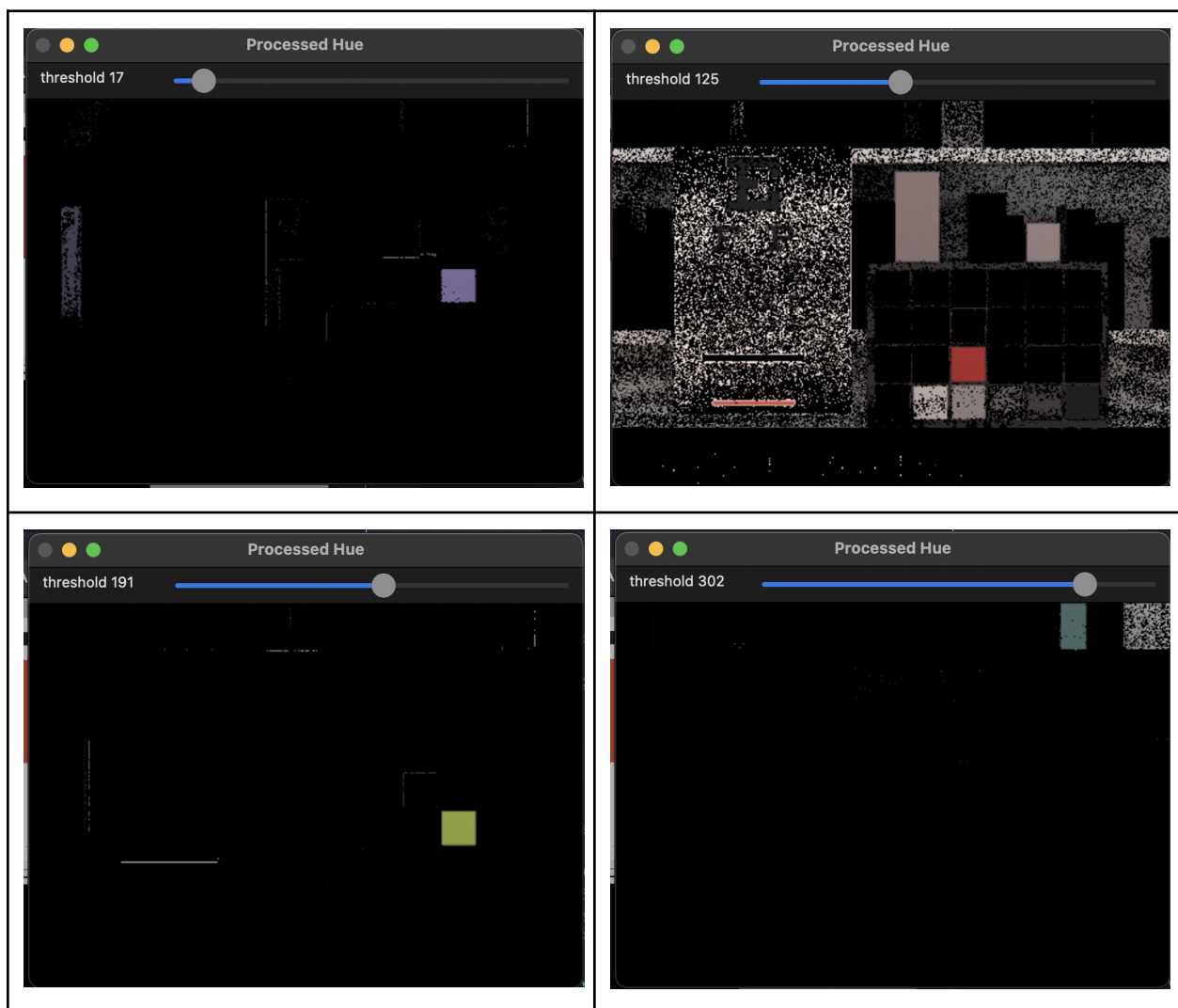


Figure 1

Part B

For Part B, the isolate function from part A was modified to include two parameters, a lower and upper value for acceptable hue values. A set of key value pairs was then written, one for each color and its respective upper and lower hue values. The trackbar was then set to update the color mask used and refresh the screen. The results for this experiment are included in Figure 2.

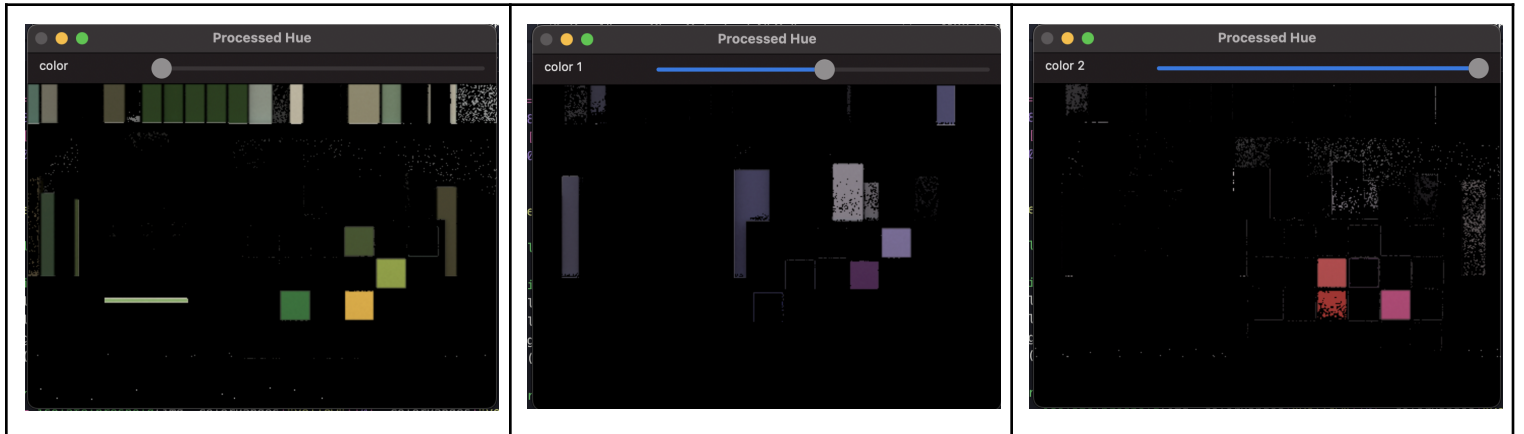


Figure 1