

RECORDED VIDEO ANALYSIS SCRIPTS

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Install MATLAB – Recommended version of MATLAB is show below in the image

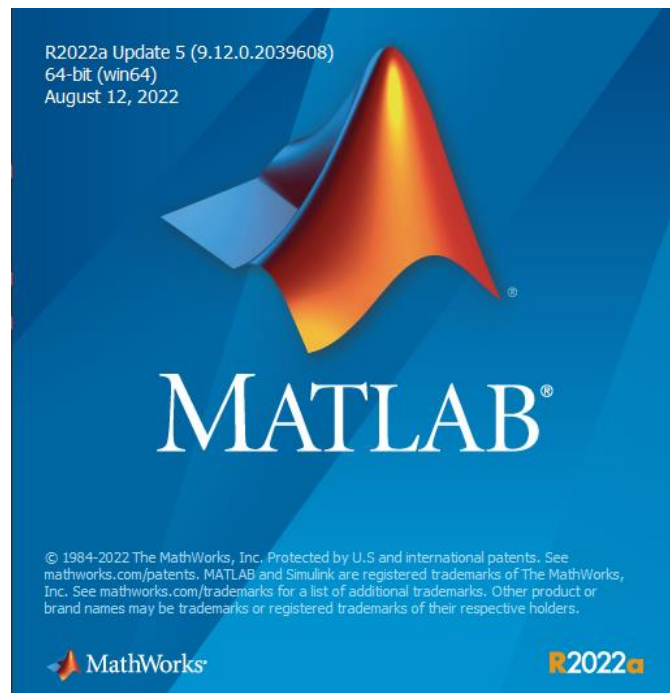


Figure 1: MATLAB Version

Folder Structure and Image details Information

- Create “roi_images” & “threshold_images” folders and also put recorded video in the current directory along with the 4 given scripts with .m extension.
- To see details of image, click on the 2nd icon named “Data Tips”.

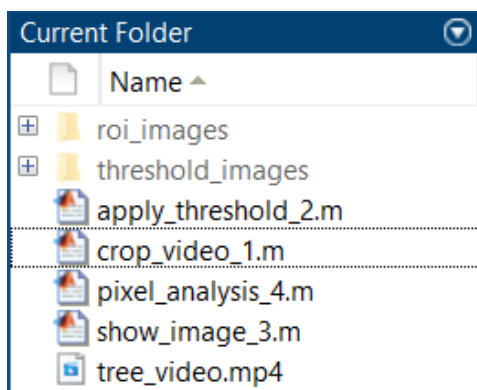


Figure 2: Folder Structure



Figure 3: Click on 2nd icon “Data Tips” to see pixel details in image

Run Crop Video Script to Crop Video by locating (left-top [x1, y1]) and (right-bottom [x2, y2]) axes of pixels, also enter the difference between 2 consecutive frames (fps)

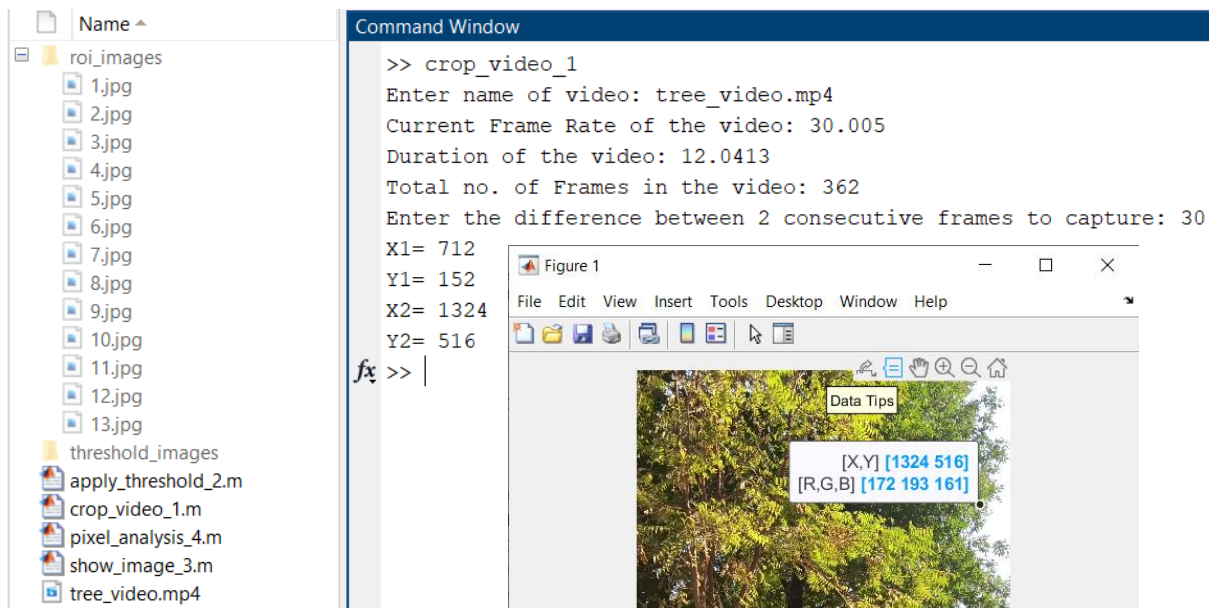


Figure 4: Crop Video Script - 1

To Apply Threshold to ROI Images run Script – 2, required total frames from “roi_images” folder and RGB value to apply threshold

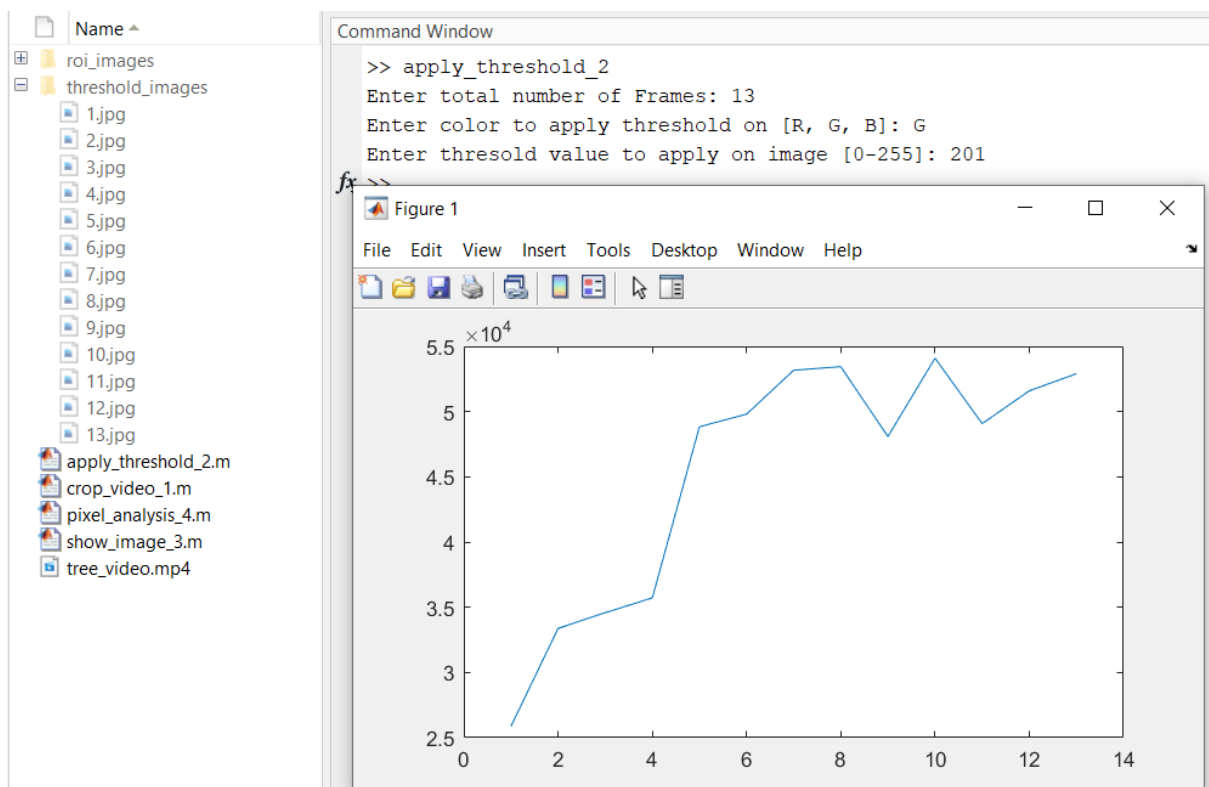


Figure 5: Apply Threshold Script - 2

Show Image Script displays the RGB Channels of Desired Image along with its Histograms

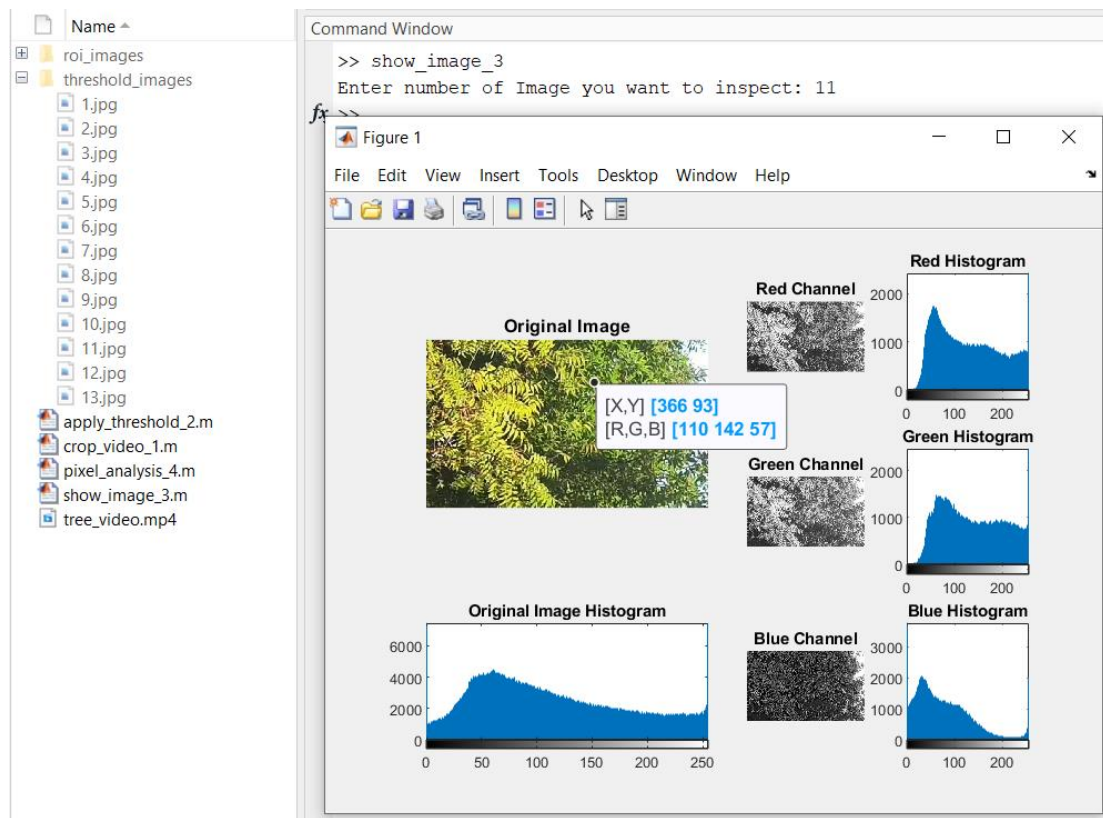


Figure 6: Show Image Script - 3

4th Script displays Intensity of pixels w.r.t. time in [0-255] range on Y-axis

Displays an exportable form (for .xlsx excel files)

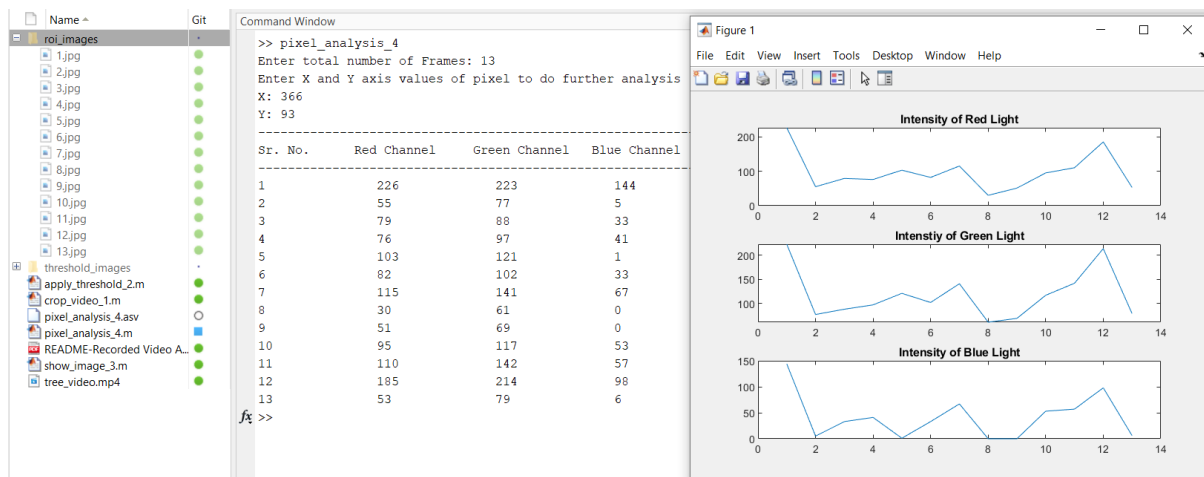


Figure 7: Pixel Analysis Script - 4