

# RECORDED VIDEO ANALYSIS SCRIPTS

**Author:** Venis Prajapati

**GitHub:** [github.com/venisprajapati](https://github.com/venisprajapati)

**LinkedIn:** [linkedin.com/in/venisprajapati](https://linkedin.com/in/venisprajapati)

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

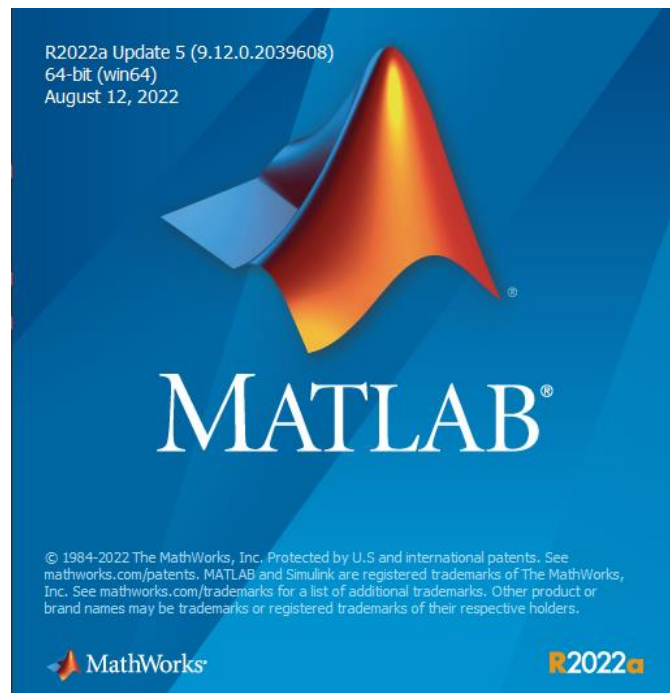


Figure 1: MATLAB Version

## 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 2<sup>nd</sup> icon named “Data Tips”.

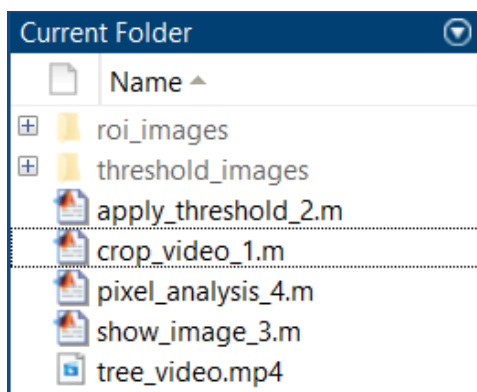


Figure 2: Folder Structure



Figure 3: Click on 2<sup>nd</sup> 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)**

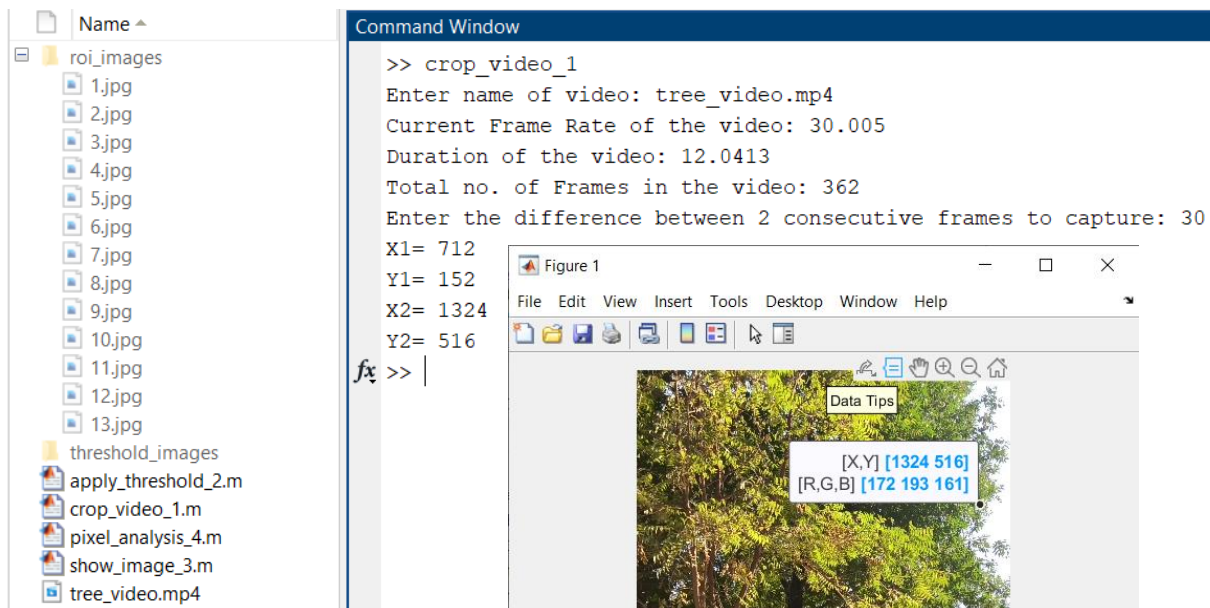


Figure 4: Crop Video Script - 1

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

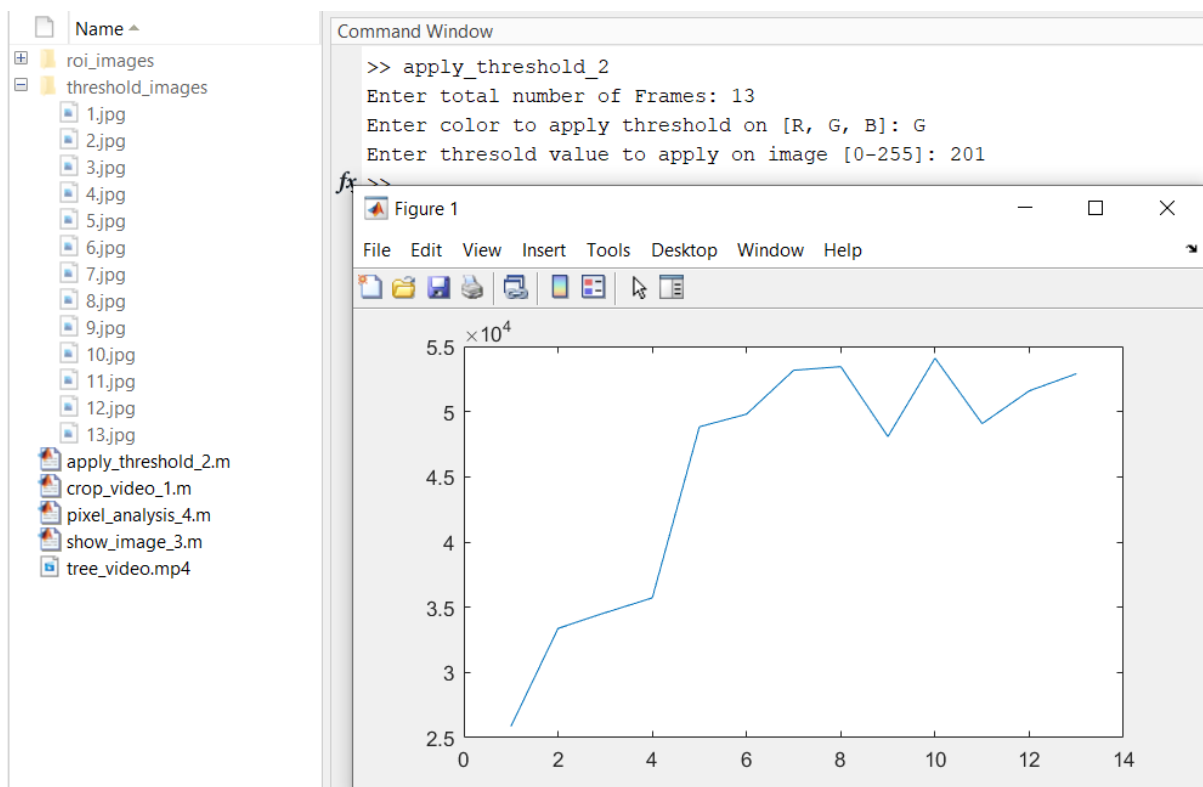


Figure 5: Apply Threshold Script - 2

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

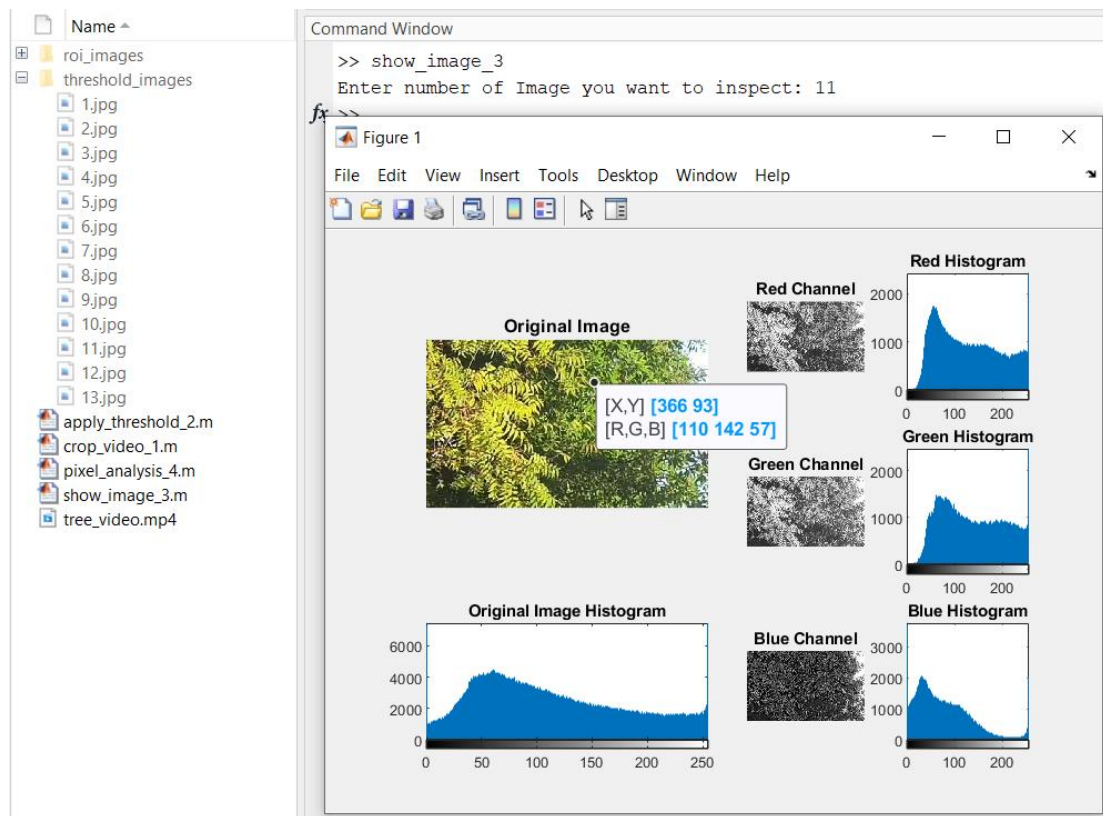


Figure 6: Show Image Script - 3

## Pixel Analysis Script shows variation in specific pixel w.r.t. time & [0-255] on Y-axis

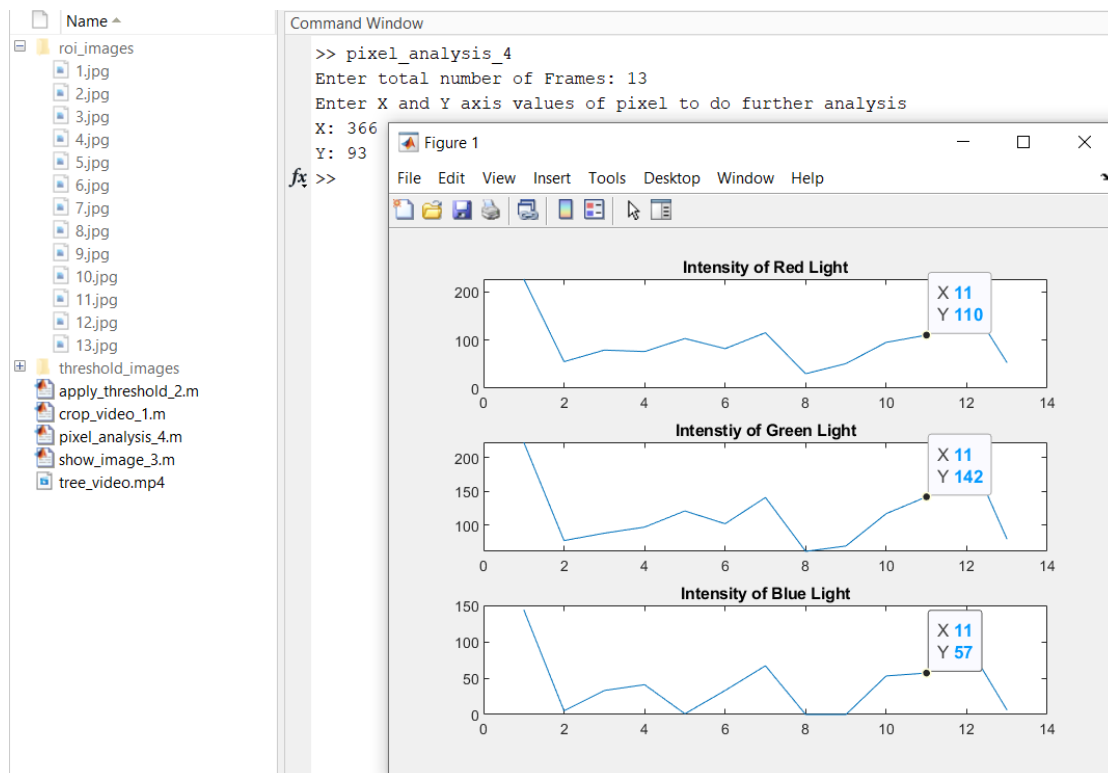


Figure 7: Pixel Analysis Script - 4