

Technical Manual

(Version 1.1)

for

Tracking Analysis & Verification (ver 1.1) TAV 1.1

Prepared by

Chandrashekhar Padole (chandupadole@yahoo.com)

Prof. Luis Alexandre (lfbaa@di.ubi.pt)

SOCIA LAB

University of Beira Interior,
Covilha, Portugal (Europe)

For more information, visit us at

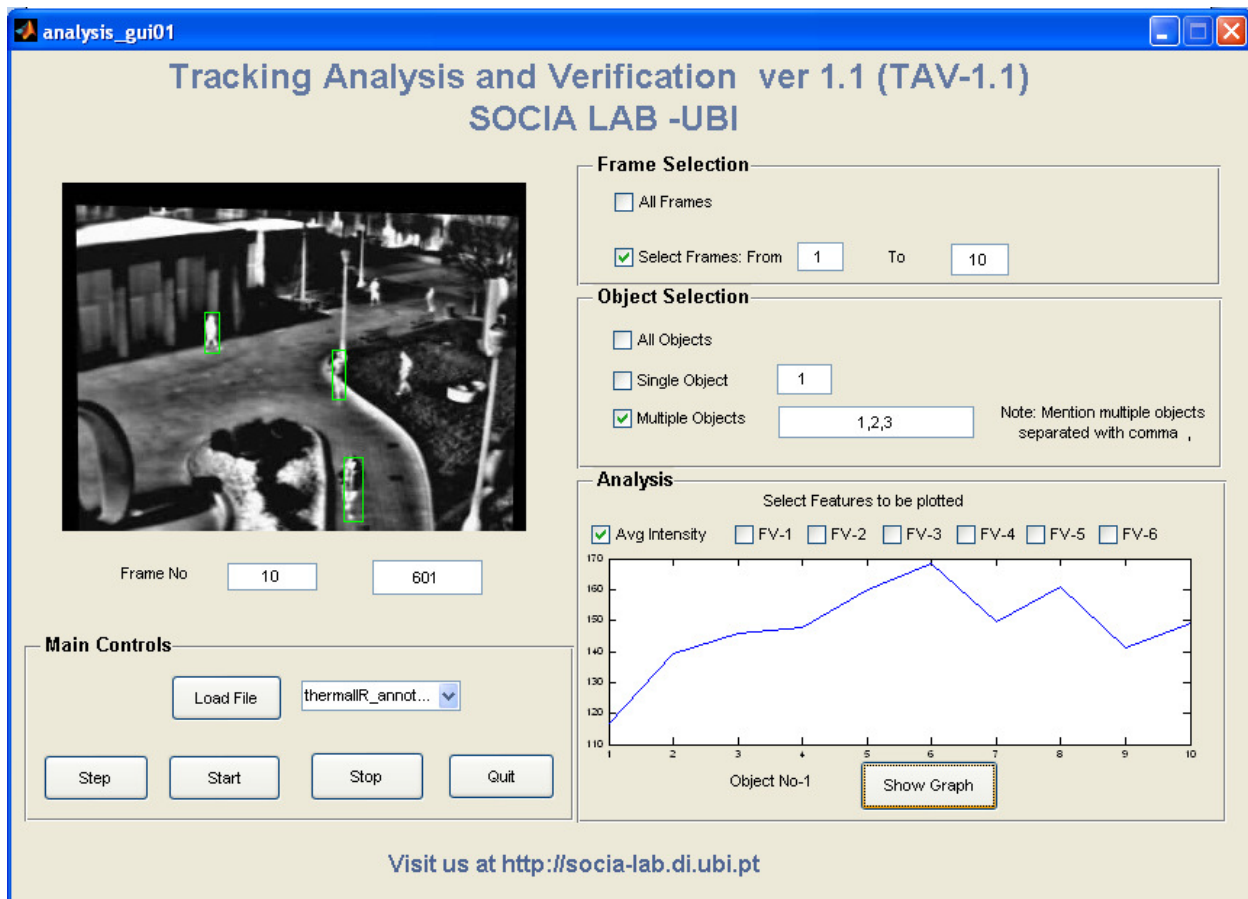
<http://socia-lab.di.ubi.pt/>

Analysis and Verification Tool, TAV 1.1: Manual ver1.1

Object Tracking has become very essential element in so many applications like virtual reality, unconstrained biometrics, driver assistance system and others. Researchers have sometimes the problem in generating ground truth for videos, which can be done now with the help of [TAG 1.1](#). Even, after having Ground truth data, it becomes essential sometime to verify the ground truth with associated video. Sometimes, it may be required to verify the algorithm generated results with video sequence. For researches, it is also the important to know the different features values for the object across the frames. TAV 1.1 is going to fulfill these types of requirements in the analysis and verification in object tracking including rigid and deformable objects. We list out here three broad situations where TAV 1.1 can be used, though there are many others:

- Ground truth data available for video and would like to verify that with associated video.
- Results of tracking algorithm are available and would like to verify the results in video sequence.
- Would like to analyses the object features behavior across the desired set of frames in given video.

The GUI screen snapshot of TAV 1.1 is given below:



Main Controls:

This panel has following components:

- *Load File*
- *File name list*
- *Step*
- *Start*
- *Stop*
- *Quit*

Load File-File name list

- The desired annotated data file (ground truth data) can be selected from pull-down list of '*File name list*'. To load this selected file for superimposing its data on associated video, click on '*Load File*'. The associated video file name will be already in data file.
- As data file is loaded, total number of frames in that file will be displayed in the edit box, below the frame.

Step

- This pushbutton will advance the one frame ahead in frame display

Start

- This pushbutton will start the displaying the frames as selected in frame selection panel. The number of current frame being displayed will be shown in the edit box of frame no, below the frame.

Stop

- Not useful in this version of TAV

Quit

- This will close the GUI.

Frame Selection:

This panel has following components:

- *All Frames*
- *Select Frames-From-To*

All Frames

- With this option ticked (checked) , all frames will be shown in sequence , after clicking ‘*Start*’

Select Frames-From-To

- With this option ticked (checked) , frames numbered ,from mentioned in edit box of ‘*From*’ up to number mentioned in edit box of ‘*To*’ , will be shown in sequence , after clicking ‘*Start*’.

Object Selection:

This panel has following components:

- *All Objects*
- *Single Object*
- *Multiple Objects*

All Objects

- With this option checked, all objects will be shown with green rectangles of parameters obtained from annotated data file.

Single Object

- With this option checked, objects with number mentioned in supporting edit box will be shown with green rectangle of parameters obtained from annotated data file.

Multiple Objects

- With this option checked, objects with numbers (separated by commas) mentioned in supporting edit box will be shown with green rectangles of parameters obtained from annotated data file.

Analysis:

This panel has following components:

- *Avg Intensity*
- *FV1-FV6*
- *Show Graph*

Avg Intensity

- With this option is ticked, feature vector of avg intensity is selected for plotting in graph

FV1-FV6

- Will be used in future version

Show Graph

- On clicking on this pushbutton, graph of selected feature will be plotted for object no 1(selection of object or multiple object will be provided in future version) in all selected frames.

Send your valuable feedback at
chandupadole@yahoo.com or lfbaa@di.ubi.pt

For more information and updates,
visit us at

<http://socia-lab.di.ubi.pt/>