

Title: Automatically detect the location of all digits in the video

Tools & Technology:

- Python 2.7.10
- Pycharm Community Edition 2016.3.2

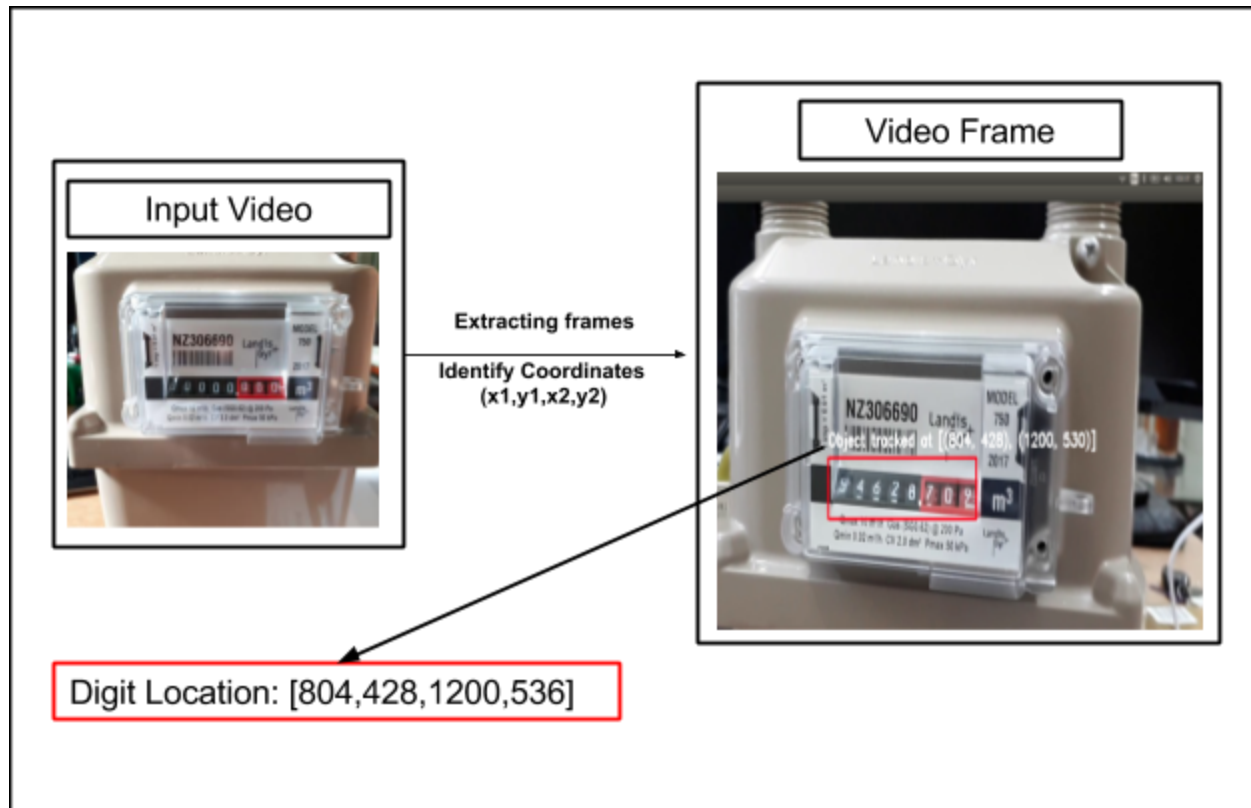
Dependencies:

- OpenCV 3.0
- Dlib

Algorithm:

1. Load video from the directory.
2. Extract frames from video and store it.
3. Select the region of digit from frame.
4. Find appropriate co-ordinates (Minimum and Maximum points [x1,y1,x2,y2],) from the frame that can represent digit location into all frames and store it.
5. Initialize tracker object using `dlib.correlation_tracker()` method.
6. Start the tracker with predefined coordinate values from frame.
7. Mark red bounding box over digit with its location above the box.
8. Continuously update the tracker based on frames of video.
9. Automatically detect the location of all digits in the video.

Sample Output:



Future Enhancement:

1. Improve Accuracy to find the digit Location while digit moving and extract it coordinates.
2. Find out different object tracking mechanism and evaluate it.