

# Computer Vision:

## Practical Assignment 1:

### Instructions:

- 1) This problem is to be solved in group of 5-7 members.
- 2) Dead line is till Sunday 26 Feb 2017 11.59 pm.
- 3) All the codes must be uploaded in your GitHub repository and 'thepunitsingh' must be added as a collaborator on your repository.
- 4) You must include following things with your code:
  - a. Sample Input data,
  - b. Sample Output data,
  - c. Sample Expected Output (ground truth),
  - d. A brief document on how to run your code,
  - e. Reference of the code/technique you are using,
- 5) Snapshot of your GitHub repository will be taken on the deadline time, and the evaluation will be done on that snapshot.
- 6) The problem must not be hard coded.
- 7) Maximum marks for this problem is 10.

### Problem Specification:

- a) **Technique:** This practical problem is based on Camera Calibration.
- b) **Input:** Photos of your pen.
- c) **Output:** Real length of your pen.
- d) **Problem:** You may need to use your webcam/mobile camera to take photos of your pen, and you need to find out the real length of the pen (which you must measure on millimeter scale beforehand as ground truth). You may use any programming language, and any calibration technique to solve this problem.