

PROBLEMS AND SOLUTION FIT FOR NOVEL METHOD FOR  
HANDWRITTEN DIGIT RECOGNITION SYSTEM

PROBLEM /STATEMENT

Following are the constraints faced when computers approach to recognize handwritten digits

- 1.) The handwritten are not always of the same size ,width ,orientation and justified to margins as they differ from writing of person to person
- 2.) The similarity between digits such as 1 and 7,5 and 6,3 and 8,2 and 7 etc so, classifying between these numbers is also a major problem for computers
- 3.) The uniqueness and variety in the handwriting of different individuals also influence the formation and appearance of the digits
- 4.) A new people doesn't know language how to communicate?
- 5.) It using a encryption method strategy that accuracy also some problem made?

### SOLUTION FIT

1. Also the underlying problems of not having the same size ,width, orientation, and margin always has been taken care of with the help of computer vision's opencv library's functionalities.
2. The problem of difficulty in distinguishing the difference between digits such as 1 and 7, 5 and 6, 3 and 8 etc has been resolved to a great extent with the opencv's edge detection and contour features
3. Also problems of dim lighting and blurry or unclear edges in images are corrected with the help of Gaussian blur technique. Now users can find their handwritten digits in one go without much complications
4. Using this technology easily identified what word be found out new people or another country man also easily using this technology identified what they phrase identified
5. Using this handwritten technology most of website using captcha technology so we hardly know some word so high so using method for encryption strategy

