## A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

## **Problem Statement:**

The handwritten digit recognition is the capability of computer applications to recognize the human handwritten digits. It is a hard task for the machine because handwritten digits are not perfect and can be made with many different shapes and sizes. The handwritten digit recognition system is a way to tackle this problem which uses the image of a digit and recognizes the digit present in the image.

| Who does the problem affect?            | The problem affect is the characters look very similar, making it hard for a computer to recognize accurately.                                                                                                                                          |
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| What are the boundaries of the problem? | The problem is faced more when many people write a single digit with a variety of different handwritings. The uniqueness and variety in the handwriting of different individuals also influence the formation and appearance of the digits.             |
| What is the issue?                      | The issue is that there is a wide range of handwriting which includes good and bad.                                                                                                                                                                     |
| When does the issue occur?              | The issue occurs when the person handwritten digits are not recognized by the machine. This makes it tricky to provide enough examples of how every character might look.                                                                               |
| Where is the issue occurring?           | The handwritten digit recognition is the ability of computers to recognize human handwritten digits. It is a hard task for the machine where the issue occurring in handwritten digits and are not perfect and can be made with many different flavors. |
| Why it is important to fix the problem  | The results can be made more accurate. As the handwritten digits are not of the same size, thickness, style, and orientation, therefore, these challenges are to be faced to resolve this problem.                                                      |