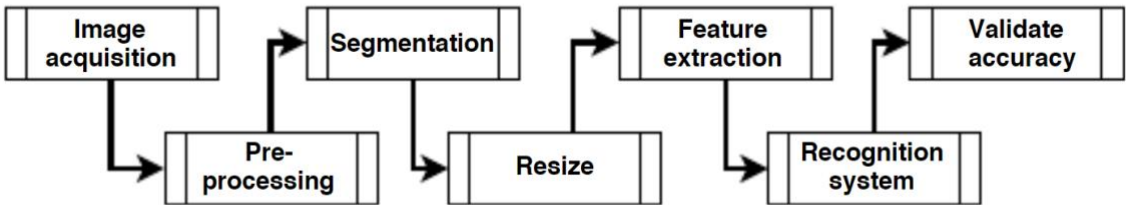
PROPOSED SOLUTION

NOVELTY:

- Our model is different from others because our model can read postal addresses, bank check amounts, and forms. Furthermore, OCR plays an important role for digital libraries, allowing the entry of image textual information into computers by digitization, image restoration, and recognition methods.
- The system not only produces a classification of the digit but also a rich description of the instantiation parameters which can yield information such as the writing style;
- the generative models can perform recognition driven segmentation;
- the method involves a relatively small number of parameters and hence training is relatively easy and fast; and
- unlike many other recognition schemes, it does not rely on some form of pre-normalization of input images, but can handle arbitrary scalings, translations and a limited degree of image rotation. We have demonstrated that our method of fitting models to images does not get trapped in poor local minima

BUSINESS MODEL:



SOCIAL IMPACT:

•Writing electronic applications in one's own handwriting and native script here are a number of native language/script speakers/writers who want to exchange information with the computer system. These writers know their native script only, but don't know typing in their script. One of the problems of these writers is to write electronic applications. In such situations, it becomes difficult for native script writers to communicate with computing devices.

One of the options for such writers is speech recognition. But speech recognition has certain limitations/problems. In such scenarios, writing electronic applications in one's own handwriting and native script is the best solution. It can be supported using online handwriting recognition.

•Digitalization of Manuscripts handwriting recognition is solving the ancient manuscript disputes, where the actual writer of the manuscript is identified based on certain features of writers' handwriting. In this way, it assists to avoid false claims of handwriting or manuscript.

•Automated music symbol notation reader the development of automated music symbol notation reader. In this way, a composer can write his composition using all the notations directly.

Then it is converted to the standard format to display/print for a book or for his symphony group.

FEASIBILITY OF IDEA:

• Automatic conversion of prescription to typed form .It is one of the challenging tasks to understand the doctor's handwriting. This problem can be solved by using offline and online handwriting.

•Putting in the mathematical equations by simple handwriting.The handwriting recognition is assumed to achieve the goal of automatic conversion of online handwritten mathematical equations to typed form or student notes. So it will not be wrong to imagine the happiness that would be experienced by a chemist, mathematician or an academician, if they can place the mathematical equations by simple online handwriting on the digital surface and make his/her book, plenary talk and journal papers.

•Electronic form filling an immediate and direct conversion of handwritten data to typed data will result in reducing the huge cost and it will also increase the productivity. In this way, all government application forms can be completed and filled using handwriting recognition and the data will be directly entered to structured databases.

SCALABILITY OF SOLUTION:

The recognition system can be used for wide range of applications .It can be extended to large scale implementations .

- People write cheques on a regular basis and cheques still play a major role in most non-cash transactions. In many developing countries, the present cheque processing procedure requires a bank employee to read and manually enter the information present on a cheque and also verify the entries like signature and date. A large number of cheques ,i.e around thousands ,can to be processed every day saving costs and hours of human work.
- Insurance industry receives more than 20 million documents a day and these document can contain various different handwriting styles and these can be recognized using this automation .
- Patient prescription digitization is a major pain point in healthcare/pharmaceutical industry. Another area where handwritten text detection has key impact is patient enrollment and form digitization. By adding handwriting recognition to their toolkit of services hospitals/pharmaceuticals can significantly improve user experience by extending its service to thousands of people per day.