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A PROJECT REPORT ON:

COMPUTER RECOGNITION FOR HANDWRITTEN ENGLISH & KANNADA CHARACTERS

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ABSTRACT

As the world moves closer to the concept of the "paperless office," more and more communication and storage of documents is performed digitally. Documents and files that were once stored physically on paper are now being converted into electronic form in order to facilitate quicker additions, searches, and modifications, as well as to prolong the life of such records. A great portion of business documents and communication, however, still takes place in physical form i.e. handwritten and the fax machine remains a vital tool of communication worldwide. Because of this, there is a great demand for software, which automatically extracts, analyzes, and stores information from physical documents for later retrieval. All of these tasks fall under the general heading of document analysis, which has been a fast growing area of research in recent years.

- A very important area in the field of document analysis is that of optical character recognition (OCR), which is broadly defined as the process of recognizing either printed or handwritten text from document images and converting it into electronic form. To date, many algorithms have been presented for the Printed literature to perform this task for a specific language, and these OCRs will not work for handwritten documents. Character Recognition is becoming more and more important in modern world. It helps human ease their jobs. An example is hand written character recognition. Handwritten written recognition systems are widely used in US..Example: Hand written recognition of Zip code or postal code has been employed in mail sorting in postal department.
- Archival of Existing Documents: The most common application of document image analysis is to existing hard document into a soft text forms such that manipulation of the document is possible. An important class of documents falling in this category is Judgments given by courts.

The goal of this project is machine recognition for handwritten English and Kannada characters. This is one step towards the ultimate goal of automatic machine reading of complete pages of text. There are many OCR systems are available for handling printed, handwritten and cursive scripts in English documents. But there are not many OCR systems for Asian Languages. this motivated by the fact that there are no much efforts at developing document analysis systems for the south Indian Kannada Language. The OCR's task is to identify the characters of Kannada script.