**ABSTRACT**

Optical Character Recognition, or OCR, is basically converting an image containing text to an editable text format. The image could either be a scanned document, or a simple newspaper cut-out. Using Supervised Learning in the form of Neural Networks will make the system produce the output required with a much larger accuracy.Unlike English, Kannada Language has a greater number of characters since it includes gunithaksharas, vattaksharas, etc. This makes recognition of the characters much complex. The project mainly concentrates on OCR for the Kannada Text. With little or no systems available for this language, we plan to develop a system that is font and size independent. In OCR, the image undergoes thresholding to convert it into a black and white image and then processed. This gives an advantage for segmentation of the characters. Characters can be extracted from the documents using various Segmentation methods. And the type of method used can vary the accuracy of the system. The vattaksharas are extracted/differentiated from the words by using base-line technique. When the characters are recognized, they are compared with Unicodes available on the system and then printed. In the above method, CNN plays a pivotal role in reading the character and comparing it with the Unicode look up table values to print the output.