Optical Character Recognition Technique using Intro Sort

Abstract

In this study, we propose an optical character recognition technique using Intro Sort. Main feature of this proposed technique is that we segment images using intro sort. It reduces the comparison time for matching the pixels of an image. It reflects reduction in OCR time. Intro sort algorithm begins with quick sort and when recursion depth exceeds a level it switches to heap sort, based on the number of pixels being sorted. This approach also has advantage of recognizing number plates and text documents in very nominal time. Our approach is able to extract characters of different font sizes. Our technique is performed well in noisy images too.

References

1. Dan ClaudiuCiresan and Ueli Meier and Luca Maria Gambardella and Jurgen Schmidhuber, 2011 “Convolutional Neural Network Committees for Handwritten Character Classification”, International Conference on Document Analysis and Recognition, IEEE.

**Index Terms**

Computer Science                  Pattern Recognition

**Keywords**

OCR, Intro sort, Image segmentation, Feature extraction, Digital image processing.