RESULT ANALYSIS

| **METHOD** | **RESULTS** |
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| Yang Zhang and Hao Zhang HaoranLi | Picture is taken from a perpendicular upright view,  illumination of the image not being uniform has caused a higher error rate |
| Rishabh Mittal and Anchal Garg | Only focused on skew correction, all the images were of high quality and hence they didn’t consider to use preprocess methods |
| Sanjeev Kumar, Mahika Sharma, | Does not cover images with uneven brightness, watermarks, or different fonts. |
| Dan Sporici, Elena Cușnir | A reinforcement learning approach is used and does not guarantee that local optimums will be avoided each time  Algorithm gets stuck on kernel configurations |
| Sahana K Adyanthaya | Successfully performed Noise Removal by applying Gaussian filter and mean filter |
| Naveen Sankaran and C.V Jawahar | Used BLSTM-Bidirectional Long Short-Term Memory which did not require segmentation and resulted in errors. |
| Kukich | For Information extraction, he concluded that ngram dictionary can be used so that words may be correctly identified that are not in the dictionary of geographical names |
| Dr. PL Chitra, and P Bhavani | Performed removal of noise using Laplacian and Harr Filtering only. |
| Lavanya Bhaskar and R Ranjit | Algorithm is not tested for event information taken from handwritten images and complex font text present in the images |
| S. Akopyan, O.V. Belyaeva | They worked on a dataset collected from social media where the images were of high quality and printed. |
| Anupriya Shrivastava, Amudha J.Deepa Gupta | Suggests the use of Convolutional Neural Network and Long ShortTerm Memory for text recognition |
| Brijesh Kumar Y. Panchal, and Gaurang Chauhan | User edits/crops the image based on what text he wants. |
| K.Gaurav, Bhatia P. K. | The pre-processing techniques that were included are contrast stretching, noise removal techniques, normalization and segmentation.  Though it was a detailed pipeline, the accuracy of the preprocessed image is not upto the mark |
| Salvador España-Boquera, Maria J. C. B | Produces a new method in the form of preprocessing and recognition which are both based on ANNs |
| K. Karthick, K.B. Ravindrakumar, R. Francis and S.Ilankannan | Only outlined a text recognition flow and suggested classifiers such as ANN and SVM. Didn’t focus on preprocessing the images. |
| **OUR METHOD** | **Preprocess the image by sharpening, brightening, deblurring, noise removal, deskewing, and detecting documents from the background.**  **Detects and Extracts printed text from images efficiently and converts it into an audio file.** |

Images used in our dataset contained the number of words ranging from 800 to 1500 words per document. We observed an average error rate of 11% at word level.

The entire processing of the image to the conversion to speech takes about 3-5 seconds.

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