

**A Binarization Method for Degraded Document Image using Artificial Neural Network and Interpolation Inpainting**

**Abstract**

The binarization of degraded document image is documnet analysis technique used to extract text from the original image. A multistage approach is being proposed by recently which has, a preprocessing phase to enhance the contrast of the original image and to eliminate noises. Then an interpolation inpainting is performed to create the background estimation and foreground (text) estimation, that will be used as feature to train and test a supervised artificial neural network. The final stage is the use of the Artificial Neural Network (ANN) to classify the pixels of the original image into 0 for black and 1 for white to get the final binary image. All the suggested method has to be tested and evaluated over DIBCO’2009 database.

We are going to perform Deep Neural Network (DNN) to learn about the text pixel and background pixels and define the edges of the text pixels.

**Key Words:** Binarization, Artificial Neural Network, Interpolation inpainting, Degraded Documents, DIBCO’2009 database.

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