Abstract

Multi-core processors play a vital role in the application such as image processing. In this manuscript the focus is made on such types of imaging applications where in which, the image processing is done on handwritten scriptures of palm leaves to study its mechanics of characters inscribed. Here in this paper the approach adopted is the digital image reconstruction with acquiring of the discrete projection image data. This manuscript highlights the important research directions which combine the image based analysis with exciting new developments in Field Programmable Gate Array (FPGA) which is based multi-core processor technology is utilized for image processing approaches. In the present research work we propose the method of FPGA based histogram equalization technique to recognize characters of Handwritten Scriptures in palm leaves in the form of discrete projections data. The FPGA used here is Virtex-4 the synthesis and analysis results are compared with the theoretical calculations.

- P N Sastry, Ramakrishnan Krishnan, &quot;A data acquisition and analysis system for palm leaf documents in Telugu DAR'12 Proceeding of the workshop on Document Analysis and Recognition, ACM New York, NY, USA ©2012.


**Index Terms**

Computer Science          Pattern Recognition

**Keywords**

Histogram Equalization   Pattern Recognition   Image reconstruction   Discrete Projections

FPGA

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