Abstract

Mathematical expression recognition is an active research field and it becomes a challenging problem in the field of Optical character recognition. The fundamental problem of mathematical expression recognition system is the Off-line Printed expression recognition. One of the difficulties of handwritten mathematical symbol recognition lies in the variability of the symbols, different fonts in addition to the recognition of other language characters. The segmentation is the most important phase in the recognition of the expression. This paper deals with efficient segmentation technique to segment logical mathematical expressions with subscripts. In this paper, the database of 288 printed expressions and 960 handwritten expressions using logical symbols was developed. The proposed algorithm was tested on the handwritten and the printed expression database and the results are quite promising.
References

- His-Jian Lee And J. Wang. Design of a mathematical expression recognition system, 0-8186-7128-9/95, IEEE
- Xue-Dong Tian, Hai-Yan Li, Xin-Fu Li. Research on symbol recognition for mathematical expressions. 0-7695-2616-0/2006, IEEE.
- Taik Heon Rhee, JinHyungKim, Efficient search strategy in structural analysis for handwritten mathematical expression recognition, pattern recognition (ScienceDirect)0031-32, 2009 Elsevier

Index Terms

Computer Science
Image Processing
**Keywords**

Optical Character Recognition, Printed And Handwritten Logical Mathematical Expressions, Segmentation.