Abstract

The intrinsic parallelism in bit operations like AND/OR inside a computer word is known as bit parallelism. Since 1992, this bit parallelism is directly used in string matching for matching efficiency improvement. Some of the popular bit parallel string matching algorithms Shift OR, Shift OR with Q-Gram, BNDM, TNDM, SBNDM, LBNDM, FBNDM, BNDMq, and Multiple pattern BNDM. This paper discusses the working of various bit parallel string matching algorithms with example. Here we present how bit parallelism is useful for efficiency improvement in various algorithms.

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Index Terms

Computer Science

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Keywords

String Matching, Bit Parallelism, Shift OR, BNDM, TNDM, SBNDM, LBNDM, FBNDM
BNDMq

SBNDMq

WW Algorithm.