Abstract

Aho-Corasick is a standard string matching algorithm. It can match multiple patterns simultaneously and affirmed deterministic performance under all circumstances. Aho-Corasick feed solutions to various real world applications like intrusion detection systems, text mining, search engine, multimedia and computational biology. In order to improve performance of these applications parallelization of Aho-Corasick is crucial. PFAC (Parallel Failure Less Aho-Corasick) algorithm provides high degree of parallelization in Aho-Corasick algorithm. PFAC implementation on GPGPUs' architecture may consist various implementation issues. In this paper discrete implementation issues of PFAC on GPGPUs' using OpenCL, their solutions and comparative analysis are discussed.
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Index Terms

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