Abstract

Based on bioinformatics algorithm, there are a wide range of implementations. With the urge for program speed, many applications take the heuristic approach to compensate running time. One of the most critical shortcomings of this technique is the loss of optimality, i.e. the desired results may not always be found. To overcome this problem, many different hardware architectures have been experimented for bioinformatics algorithm such as cell broadband
engine, cluster and compute unified device architecture where, the main technique for obtaining high performance is to parallelize the task to be run simultaneously by multiple vector execution units with single instruction multiple data and by multiple processors with multiple instruction multiple data. In this paper we presents a survey of data intensive bioinformatics applications on variety of parallel Architecture that are available for accelerating the processing of large biological data set.

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Index Terms

Computer Science
Biomedical

Key words

Cell broadband engine
Clusters
CUDA Suffix

Weighted suffix tree (key words)