

Abstract

The Cell Broadband Engine (CBE) processor provides the potential to achieve an impressive level of speed up for multimedia applications. Video Surveillance is a growing multimedia application due to its concern in various areas like commercial security, military applications. In this paper, we present CBE as a cost effective computational solution for the application and demonstrate the real time performance of its parallel execution on the platform. We present a method to implement the algorithm on the CBE, along with introduction to our previous work in implementing on computer cluster discussing various issues related to porting the code on CBE, followed by simulated results demonstrating a 43x speed up over non distributed version of the algorithm and comparison of the results with implementation of same on computer cluster.

References

- Video Over IP Servers from MOXA; http://www.moxa.com/land/Video_over_IP_Servers.htm (last accessed on 8 June 2008).
Implementation of Video Surveillance Analytics on the STI Cell Processor


Index Terms

- Computer Science
- Multimedia

Keywords

- Cell processor
- Video Surveillance
- Parallel Computing
- Computer Cluster
- Image Processing