Abstract

Parallel computation has become a recent trend in research from past few years. Parallel Computation is widely used in weather prediction, earthquake prediction, nanotechnology, astronomy for the study of planetary movements, pharmaceutics, defense for weapon simulation and so on. Satellite plays a major role in military for communication and surveillance. Area surveillance is one of the major application of satellite used in defense. Even though the technology enhancement occurs day by day, nabbing the terrorist activities and illegal border crossing into the nation has become a major primary issue. In this paper, a novel parallel processing approach for border surveillance in monitoring the borders of land and marine of a nation using single satellite is presented. A video dehazing algorithm is considered for parallel processing using OpenMP, a shared memory programming. Independent tasks are assigned to multiple threads of a core exhibiting data and task parallelism. Thus proposed idea of parallel video dehazing resulted in increase in speedup compared to sequential execution time.

References
8. www.angelfire.com/co/pallav/celmechanics.html

Index Terms
Keywords

Parallel Computation; Border; Satellite; Monitor; Video Dehazing; OpenMP