Big Data Frameworks for Efficient Range Queries to Extract Interested Rectangular Sub Regions

Abstract

A satellite object can consist of more than one mosaic image. To extract any object from remote sensing satellite images, mosaic images need to be stitched. It is critical problem that which mosaics will be selected for image stitching among big mosaic dataset. In this paper, we propose two approaches to overcome mosaic selection problem by means of finding rectangular sub regions intersecting with range query. Former one is based on hybrid of Apache Hadoop and HBase and latter one is based on Apache Lucene. Their effectiveness has been compared in terms of response time under varying number of mosaics.

References


Index Terms

Computer Science Database Management

Systems

Keywords

Image stitching Range query Apache Hadoop HBase Lucene LandSat-8