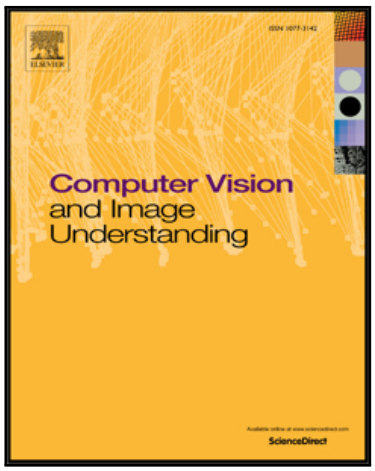

Divide and Conquer: A Hierarchical Approach to Large-scale Structure-from-Motion

Brojeshwar Bhowmick, Suvam Patra, Avishek Chatterjee,
Venu Madhav Govindu, Subhashis Banerjee

PII: S1077-3142(17)30034-6
DOI: 10.1016/j.cviu.2017.02.006
Reference: YCVIU 2543

To appear in: *Computer Vision and Image Understanding*

Received date: 30 November 2015
Revised date: 15 February 2017
Accepted date: 18 February 2017

Please cite this article as: Brojeshwar Bhowmick, Suvam Patra, Avishek Chatterjee, Venu Madhav Govindu, Subhashis Banerjee, Divide and Conquer: A Hierarchical Approach to Large-scale Structure-from-Motion, *Computer Vision and Image Understanding* (2017), doi: 10.1016/j.cviu.2017.02.006

Highlights

- A divide and conquer based large-scale 3D reconstruction pipeline is proposed.
- The method partitions a large dataset into smaller well constrained clusters.
- Each cluster is independently reconstructed using global SfM techniques.
- Registration method using epipolar geometry is proposed to merge reconstructions.