TPA 13: Image based rendering for novel views (equivalent to photosynth) using 3 or more images

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Problem Statement: Image based rendering for novel views equivalent to Photosynth) using 3 or more images.

Input: Input to the system are the following

- Set of images containing a panorama from a single location with a single zoom level.

Expected Output: The developed code should be able to do the following

- Show the stitched output using the input images in a 360 degree view.

References

- Noah Snavely, Steven M. Seitz, and Richard Szeliski. 2006. Photo tourism: exploring photo collections in 3D. In ACM SIGGRAPH 2006 Papers (SIGGRAPH '06). ACM, New York, NY, USA, 835-846.

- Noah Snavely, Steven M. Seitz, and Richard Szeliski. 2008. Modeling the World from Internet Photo Collections. Int. J. Comput. Vision 80, 2 (November 2008), 189-210.

- Manolis I. A. Lourakis and Antonis A. Argyros, The design and implementation of a generic sparse bundle adjustment software package based on the levenberg-marquardt algorithm. In Technical Report FORTH-ICS/ TR - 340, August 2004

- Adelson, E.H., Bergen, J.R. (1991). "The plenoptic function and the elements of early vision", In Computation Models of Visual Processing, M. Landy and J.A. Movshon, eds., MIT Press, Cambridge, 1991, pp. 320