

Camera PCA for 3D Reconstruction

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Problem

How does the quality of 3D scene reconstructions from 2D images degrade as we remove images? Which 2D images are most vital for 3D scene reconstruction?

Background

Structure from motion (SFM) systems recover camera orientations and a 3D scene reconstruction from a stream of 2D images. In 2006, Snavely et. al. adapted the SFM algorithm proposed by Brown and Lowe [?]

Approach