Applications of structure from motion: a survey

运动推断结构：应用综述

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- Structure from motion (SfM) has been an active research area in computer vision for decades and numerous practical applications are benefiting from this research

- In computer vision, SfM refers to the process of simultaneously estimating the 3D geometry of a scene (structure) and the poses of cameras (motion)

- SfM exploits corresponding image points in two or more views to reduce the number of degrees of freedom

- Existing applications of SfM are categorized into 10 categories, namely augmented reality, autonomous navigation/guidance, motion capture, hand-eye calibration, image/video processing, image-based 3D modeling, remote sensing, image organization/browsing, segmentation and recognition, and military applications

- Understanding the specific role of SfM in the context of each category of applications may be useful for researchers to position their work in the context of existing techniques, and to perceive both new applications and relevant research problems