论文与报告

# 主动视觉系统中的摄像机姿态校准

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摘要
提出了在镜头畸变径向约束下,用平面上四个点及其成像关系来建立摄像机姿态的几何方法. 并运用随机样本一致性技术和多视点下摄像机内参数一致性约束提高计算的稳定性和精度. 指出了只利用摄像机正、反投影关系检验其姿态正确性是不充分的, 提出将视点间运动变换关系作为评价相应摄像机姿态精度的重要标准.
关键词　　计算机视觉　摄像机校准　随机样本一致性
分类号

## Camera Pose Calibration for Active Vision System

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Abstract
This paper presents a new geometrical method which use 4 coplanar points and their correspondences on image plane to compute the camera pose considering the lens distortion of radial alignment constraints. It also use random sample consensus technique and intrinsic parameters consistency constraints to improve the stability and accuracy of the results. The imperfectness of camera pose assessment by projection test and back-projection test is exposed. We suggest that the motion transformation between different view points should be used as important clue to verify the corresponding camera pose data.
Key words　　computer vision　camera calibration　random sample consensus

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