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ON ENHANCEMENT THE SOLUTION EFFICIENCY OF THE 3D SLAM PROBLEM ON STEREO IMAGES

An adaptive method of visual odometry with a long tracking of features on images is proposed. A multi-stage data filtering scheme has been implemented in the task of calculating the trajectory of an autonomous robot and constructing a 3D model of the medium using stereo images. Computational experiments on model scenes were carried out using an simulator.

Keywords: 3D SLAM, autonomous robot, stereo images, features matching, adaptive method, filtration, triangulation.

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