

Red File: /libs/calib3D/cvCalib3D.reds  
Source: C\_Functions/calib3D\_c.h  
Fonctions: 32

Function	Summary
cvCreatePOSITObject	Allocates and initializes CvPOSITObject structure before doing cvPOSIT
cvPOSIT	Runs POSIT (POSe from Iteration) algorithm
cvReleasePOSITObject	Releases CvPOSITObject structure
cvRANSACUpdateNumIters	Updates the number of RANSAC iterations
cvConvertPointsHomogeneous	idem
cvFindFundamentalMat	Calculates fundamental matrix given a set of corresponding points
cvComputeCorrespondEpilines	For each input point on one of images computes parameters of the corresponding epipolar line on the other image
cvTriangulatePoints	Triangulation functions
cvGetOptimalNewCameraMatrix	Computes the optimal new camera matrix according to the free scaling parameter alpha: alpha=0 - only valid pixels will be retained in the undistorted image alpha=1 - all the source image pixels will be retained in the undistorted image
cvRodrigues2	Converts rotation vector to rotation matrix or vice versa
cvFindHomography	Finds perspective transformation between the object plane and image (view) plane
cvRQDecomp3x3	Computes RQ decomposition for 3x3 matrices
cvDecomposeProjectionMatrix	Computes projection matrix decomposition
cvCalcMatMulDeriv	Computes $d(AB)/dA$ and $d(AB)/dB$
cvComposeRT	Computes $r3 = \text{rodrigues}(\text{rodrigues}(r2)*\text{rodrigues}(r1))$ , $t3 = \text{rodrigues}(r2)*t1 + t2$ and the respective derivatives
cvProjectPoints2	Projects object points to the view plane using the specified extrinsic and intrinsic camera parameters

cvFindExtrinsicCameraParams2	Finds extrinsic camera parameters from a few known corresponding point pairs and intrinsic parameters
cvInitIntrinsicParams2D	Computes initial estimate of the intrinsic camera parameters in case of planar calibration target (e.g. chessboard)
cvCheckChessboard	performs a fast check if a chessboard is in the input image
cvFindChessboardCorners	Detects corners on a chessboard calibration pattern
cvDrawChessboardCorners	Draws individual chessboard corners or the whole chessboard detected
cvCalibrateCamera2	Finds intrinsic and extrinsic camera parameters from a few views of known calibration pattern
cvCalibrationMatrixValues	Computes various useful characteristics of the camera from the data computed by cvCalibrateCamera2
cvStereoCalibrate	Computes the transformation from one camera coordinate system to another one from a few correspondent views of the same calibration target. Optionally, calibrates both cameras
cvStereoRectify	Computes 3D rotations (+ optional shift) for each camera coordinate system to make both views parallel (=> to make all the epipolar lines horizontal or vertical)
cvStereoRectifyUncalibrated	Computes rectification transformations for uncalibrated pair of images using a set of point correspondences
cvCreateStereoBMState	stereo correspondence functions
cvReleaseStereoBMState	stereo correspondence functions
cvFindStereoCorrespondenceBM	stereo correspondence functions
cvGetValidDisparityROI	stereo correspondence functions
cvValidateDisparity	stereo correspondence functions
cvReprojectImageTo3D	Reprojects the computed disparity image to the 3D space using the specified 4x4 matrix