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laneDetector

orglmg: Mat
undlmg: Mat
pplmg: Mat
graylmg: Mat
edgelmg: Mat
roilmg: Mat
cameraMatrix: Mat
distCoeff: Mat

lines: vector<vector<double>>leftLines: vector<vector<double>>rightLines: vector<vector<double>>>

leftLane: vector<double>rightLane: vector<double>vanishingPt: vector<double>

+ undistortImage(Mat orgImg, Mat cameraMatrix, Mat distCoeff): Mat

+ preprocessImage(Mat undImg): Mat

+ grayImage(Mat ppImg): Mat

+ detectEdges(Mat grayImg): Mat + extractROI(Mat edgeImg): Mat

+ perspectiveTransform(Mat roilmg): Mat

+ detectLanes(Mat roiling): vector<vector<double>>

+ sortLanes(vector<vector<double>>): void

+ computeFitLine(vector<vector<double>> leftLines, vector<vector<double>> rightLines): void

+ projectNormalView(vector<double> leftLane, vector<double> rightLane): Mat

+ augmentLane(vector<double> leftLane, vector<double> rightLane): Mat

+ predictTurn(vector<double> leftLane, vector<double> rightLane): void