MidTerm Project

Lane Detection

Class Diagram

LaneDetector

- attribute1:type = defaultValue

inputImage: MatgrayImage: MatthreshImage: MatbwImage: Matroilmage: Mat

- edgedImage: Mat

-lines: vector
- rho: double = 1
- theta: double = 1
- hthreshold: double
- leftSlope: double

rightSlope: doubleleftPoints: vectorrightPoints: vector

meanLeftSlope: doublemeanRightSlope: double

- turnPredict: string

+ roiMaskSelection(Mat): Mat

+ hsvThreshold(Mat): Mat

+ edgeDetector(Mat): Mat

+ houghTransform(Mat): vector, vector

+ slopeCalculation(vector): double, double

+ predictTurn(double, double): string

+ plotResults(Mat, string, vector, vector): None