Distance

- avgHumanHeight = 175: double
- poseMatrix: Eigen::Matrix4d
- perceivedFocalLength = 1028.57143: double

+ camToRobotTransform(std::vector<std::vector<double>>): std::vector<Eigen::Vector4d>
+ displayLocation(std::vector<Eigen::Vector4d>, std::string): int
+ findDepth(std::vector<double>, std::vector<cv::Rect>): std::vector<double>
+ getXY(vector<double>): std::vector<std::vector<double>>

Detect

+ cv::HOGDescriptor HOG
+ box_coordinates: std::vector<cv::Rect>

+ detectHuman(cv::Mat): std::vector(double)
+ putBox(cv::Mat,std::vector<double>): std::vector<double>

Data

+ frame: cv::mat
- frame_copy: cv::mat
- resized_frame: cv::mat
- Detect human_detector
- Distance dist

+ getCamera(int): int
+ loadVideo(std::string): double
+ preProcessing(cv::Mat): cv::Mat
+ videoPreProcessing(cv::Mat): cv::Mat