

## Detector

- yolo\_model : cv::dnn::Net
- yolo\_img\_size : cv::Size
- original\_img\_size : cv::Size
- confidence\_threshold : float
- nms\_threshold : float
- score\_threshold : float
- yolo\_grid\_cells : int
- img : cv::Mat
- boxed\_img : cv::Mat
- yolo\_classes : std::vector<std::string>

- + Detector(yolo\_model, yolo\_img\_size, confidence\_threshold, nms\_threshold, score\_threshold, yolo\_grid\_cells, yolo\_classes)
- + detect\_humans(video\_frame) : DetectorOutput
- preprocess\_image() : cv::Mat
- postprocess\_image(std::vector<cv::Mat> yolo\_outputs) : DetectorOutput
- get\_bounding\_boxes(std::vector<cv::Rect> boxes, std::vector<float> confidence\_values, std::vector<cv::Point>& box\_pixels) : void