## Software UML Diagram

## - minConfidence\_: float - minOverlap\_: float - objectClasses\_: std::unordered\_set<std::string> - P\_: cv::Matx34f // Camera Calibration matrix - colors\_: std::map<std::string, cv::Scalar> - network\_: cv::dnn::DetectionModel + datasetLabels\_: std::vector<std::string> + LocalizeObjects(cv::Mat&): std::vector<cv::Point3f> + LocalizeObjectKeypoint(const cv::Point2i&): cv::Point3f + DetectObjectKeypoints(cv::Mat&): std::vector<cv::Point2i> - ParseFile(const std::string&): std::vector<string> + ObjectTracker(objectClasses: set, extP: cv::Matx34f, intP: cv::Matx34f, minConfidence: float, minOverlap: float, detectionModel\_: const std::string) | Cv::dnn::DetectionModel | uses | us

openCV API for Deep Learning based object detection