Video SourceVideo **Image** - mInfos: string - img: IpIImage * + getInfos(): string date : long long + Image(IpIImage *img) + open() + ipl(): lpllmage * + close() + getFrame(Image &frame) + setlpl(lplImage *) + release() **Jpeglmage** Camera clmq: cvMat * - mCapture: CvCapture * date: timespec * - mIndice : int + JpegImage(Image *img) + camera(int index) + setJpeqImage(Image *img) + open(int index) + getclmg() : CvMat* + getDate(): long long

Analyselmage - imageFactor: int filterThreshold: int - nblterErode: int - nblterDilate: int - robotHeihtReference: int robotWidthReference: int - robotFactorReference: int + computePosition(Image *img): Position + computeAreaPosition(Image *img): Position

tools ToolsTime + getTimeMillis(): long long ToolsConvert + int2ByteArray(int i, char *b) +byteArray2Int(char *b): int

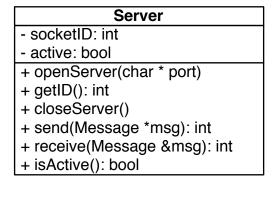
OrdreMouvement + direction: int + speed: int + getDirection(): int + getSpeed(): int + setDirection(int d) + setSpeed(int s) + OrdreMouvement(Message msg) **Position** Action - x: float - order: int - y: float + order(int) - angle: float + order(Message msg) + getX(): float +getOrder(): int + getY(): float +setOrder(int) + getAngle(): float

controler

monitor communication

image analyser

Message - dataType: char - len: int data: char* + setMessage(char type, int len, char *data) + setInt(int value) + setChar(char c) + setString(const char* str) + setJpeqImage(CompressedImage *cImg) + setPosition(Position p)



robot communication

data

CommunicationRobot
status: RobotStatus
+ RobotOpenCom(void) : RobotStatus
+ RobotCloseCom(void) : RobotStatus
+ RobotStart(void) : RobotStatus
+ RobotStop(void): RobotStatus
+ RobotSendChar(char c): RobotStatus
+ RobotGetChar(char *c): RobotStatus
+ RobotSetMotors(int motor_left, int motor_right): RobotStatus

- + RobotReloadWdt(void): RobotStatus
- + RobotGetSensor(int *sensor): RobotStatus
- + RobotGetOdo(int *odo left, int *odo right): RobotStatus
- + RobotGetVBat(int *vbat): RobotStatus