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## UML CLASS DIAGRAM RAJ SHINDE PRASHEEL RENKUNTLA

## Navigation SteerAlgorithm - kp\_: double - wheelCircumference : double - ki \_ : double - IWheelAngle : double - kd : double - rWheelAngle\_ : double - diffTime : double - corrRadius\_ : double error \_ : double - robotAngle\_ : double previousError \_ : double + shaftLength : double - maxMotorSpeed \_ : double + shaftDistance : double + motorDirection : boolean + maxTurnVelocity : double + heading : double + Navigation(): none + targetHeading : double + gnuVelocityGraph(std::vector<std::pair<double, double>>, + dir: int double, bool) : bool + gnuSteerAngleGraph(std::vector<std::pair<double,double>>, + SteerAlgorithm(): none double, bool): bool + ~SteerAlgorithm(): none + ~Navigation(): none + getCorrRadius\_(): double + calculate(double, double, double, int) : double + setCorrRadius\_(double) : boolean + calculatePID(double, double) : std::vector<double> + arcLength(double, double) : double + getkp\_() : double + changeWheelAngles(double, double, double): double + getki\_() : double + resetWheel(): boolean + getkd\_(): double + turnTime(double, double) : double + setkp\_(double) : boolean + setki\_(double) : boolean + setkd\_(double) : boolean