Ackerman PID Controller UML Class diagram

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Robot trackLength:float wheelBase:float wheelRadius:float turningRadius:float robotHeading:float robotVelocity:float leftWheelAngle:double rightWheelAngle:double leftWheelVelocity:double _rightWheelVelocity:double + getTrackLength():float + getWheelBase():float + getWheelRadius():float + getTurningRadius():float + getRobotHeading():float + getRobotVelocity():float + getLeftWheelVelocity():double + getRightWheelVelocity():double + getLeftWheelAngle():double + getRightWheelAngle():double + setLeftWheelVelocity(double leftWheelVelocity):void + setRightWheelVelocity(double rightWheelVelocity):void + setLeftWheelAngle(double leftWheelAngle):void + setRightWheelAngle(double rightWheelAngle):void Ackerman _targetVelocity:double _targetHeading:double + setTargetVelocity(double targetVelocity):void + setTargetHeading(double targetHeading):void + getTargetVelocity():double + getTargetHeading():double + Calculate():void PID _kp:double ki:double _kd:double leftWheelAngleError:double rightWheelAngleError:double _leftWheelAngleHeading:double rightWheelAngleHeading:double + setkp(double kp):void + setki(double ki):void + setkd(double kd):void

+ getkp():double + getki():double + getkd():double

+ CalculateLWAngleFeedback():double + CalculateRWAngleFeedback():double + CalculateLWHeadingFeedback():double + CalculateRWHeadingFeedback():double

Learn about this template

UML class diagrams map out the structure of a particular system by modeling its classes, attributes, operations, and relationships between objects.

To customize this template:

- Click on any shape and type the information you would like to include.
- Add and arrange class shapes as needed.
- Update cardinality.
 - Click on a line and navigate to the properties bar to adjust the endpoints.
 - Click on a line and hover over the gear icon to add multiplicities.
 - Add additional lines by hovering over a shape and clicking the red dot

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