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Analysis

- speed_thresh: double

- heading_thresh: double

+ converge(): void

Robot

- wheel_base: double

- wheel_track: double

- wheel_radius: double

- com_offset: double

- heading: double

- speed: double

- inner_wheel_velocity: double

- outer_wheel_velocity: double

+ drive(double,double): void

+ getSpeed(): double

+ getHeading(): double

UserInterface

- target_speed: double

- target_heading: double

+ getTargets(): void

+ getTargetSpeed(): double

+ getTargetHeading(): double

Visualization

+ show(double,double, UserInterface&): void

Controller

- max_steering_angle: double

- max_throttle: double

- Kp_theta: double

- Ki_theta: double

- Kd_theta: double

- Kp_s: double

- Ki_s: double

- Kd_s: double

- dt: double

- target_speed: double

- target_heading: double

- speed_error: std::vec<double>

- heading_error: std::vec<double>

+ computeError(double, double): std::tuple<double, double>

+ computeSteering(): double

+ computeThrottle(): double

+ setTargets(double, double): void