PDREstimator

- -EnhancedSensorData sensor_data
- -StepEstimator step_estimator
- -OrientationEstimator orientation_estimator
- -TrajectoryCalculator trajectory_calculator
- +estimate_trajectory(): pd.DataFrame

contains

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EnhancedSensorData

- -pd.DataFrame _acc_df
- -pd.DataFrame _gyro_df
- -pd.DataFrame _corrected_orientation_df
- +get_merged_data(): pd.Dat/aFrame

OrientationEstimator

- -float drift_correction_factor
- +calculate_full_orientation(): pd.DataFrame
- +estimate_step_orientations(): pd.DataFrame

StepEstimator

- -float step_length
- -str step_length_model_path
- +detect_step_times(): np.ndarray

TrajectoryCalculator

- -dict initial_point
- -bool flip_horizontal
- -bool flip_vertical
- +calculate_trajectory(): pd.DataFrame