

EKF Localization and Fusion

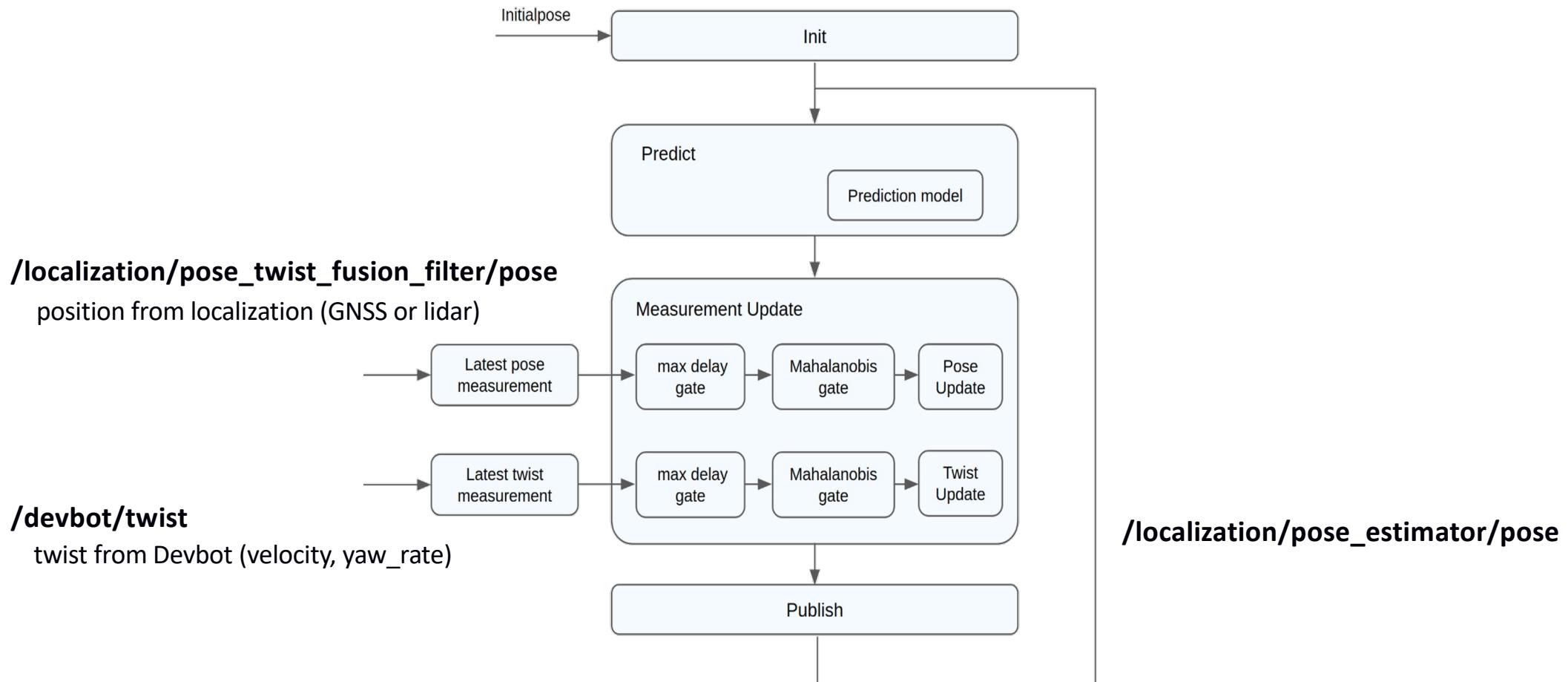
Localization / Roborace / Croix-en-Ternois



https://github.com/virtual-vehicle/aa274_autoware_ws

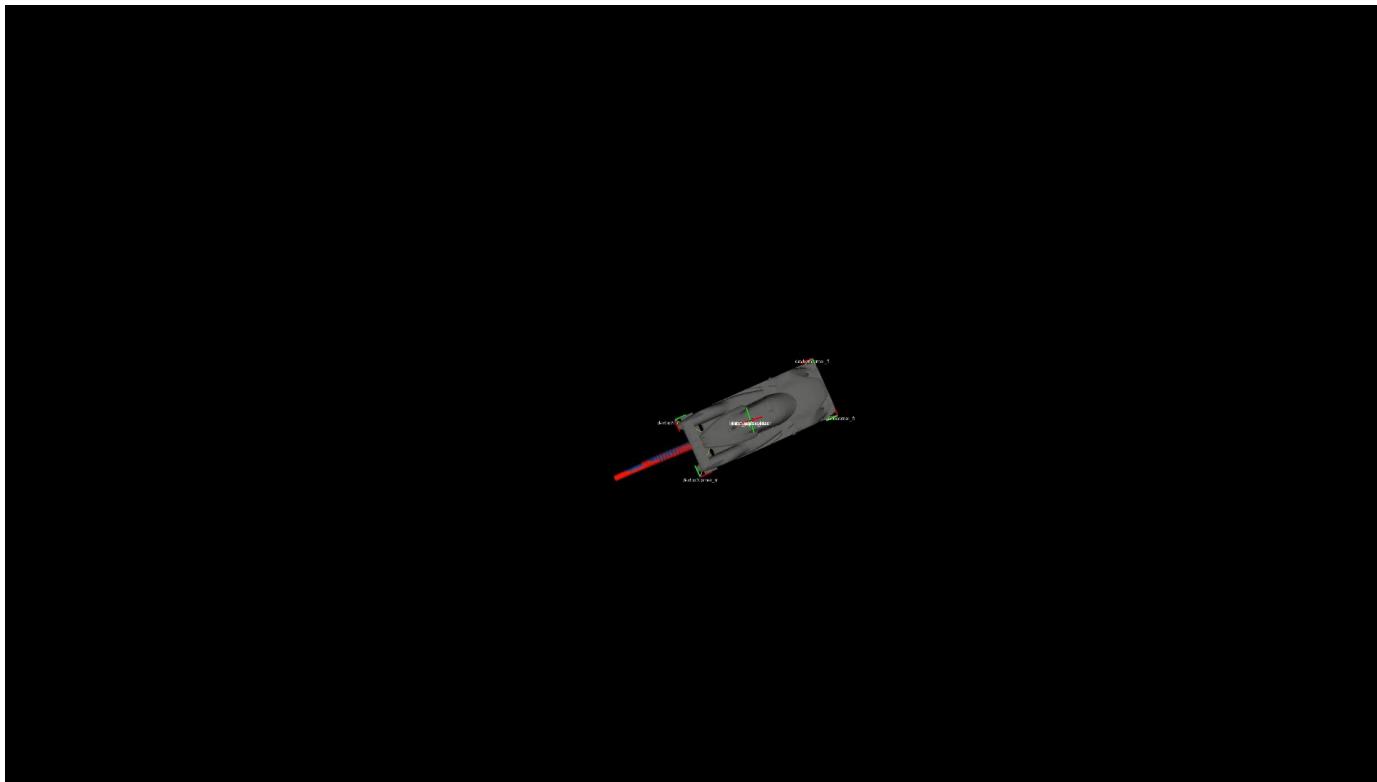
ARG
autonomous racing · graz

EKF Localizer



Localization with Odometry

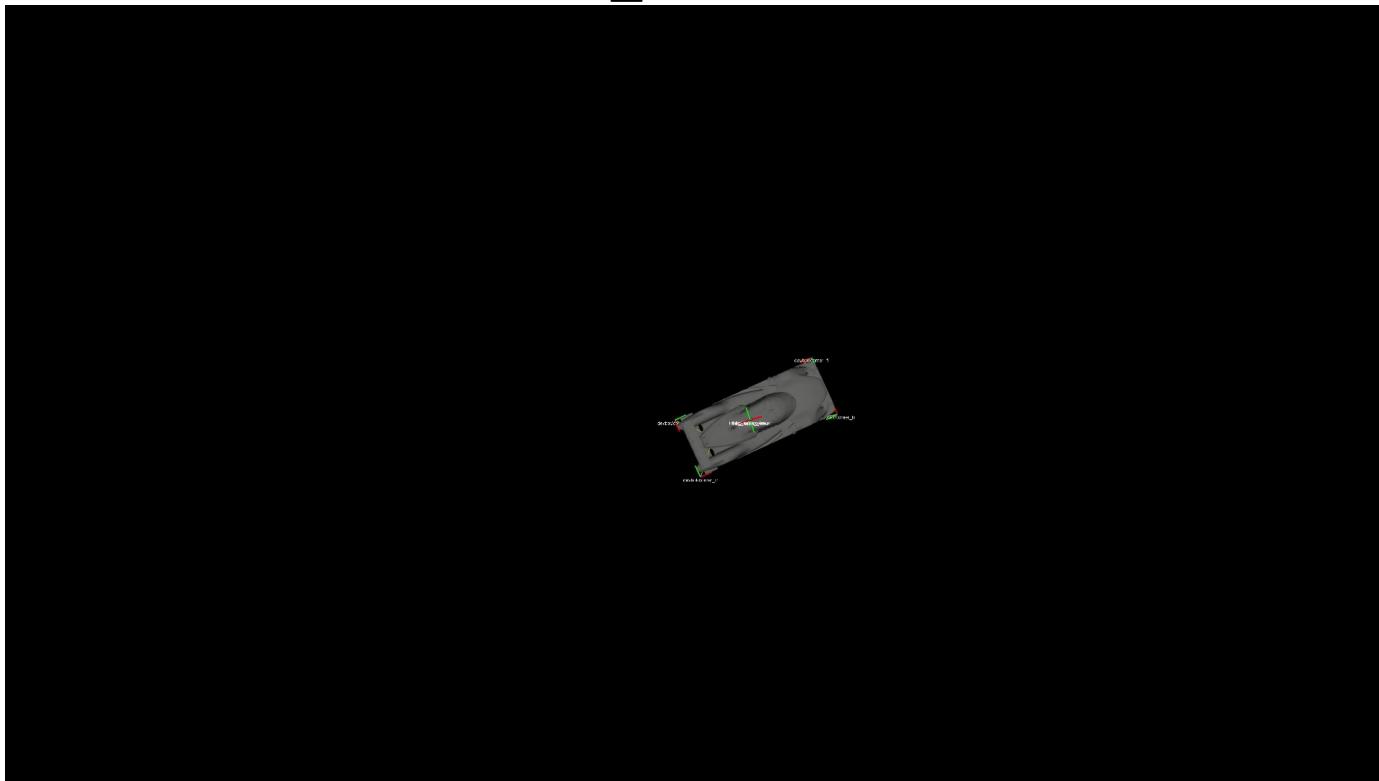
EKF input: /devbot/twist (velocity, yaw_rate)



Localization with Odometry and GPS

EKF input: /devbot/twist

/localization/pose_estimator/pose



Localization with Odometry and GPS

EKF input: /devbot/twist

/localization/pose_estimator/pose **(GPS + noise) $N(\mu, \sigma^2)$**

$N(0, 5)$

$N(0, 5)$



Localization with Odometry and Lidar

EKF input: /devbot/twist

/localization/pose_estimator/pose **(Lidar)**



Thanks for your attention! Questions?

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