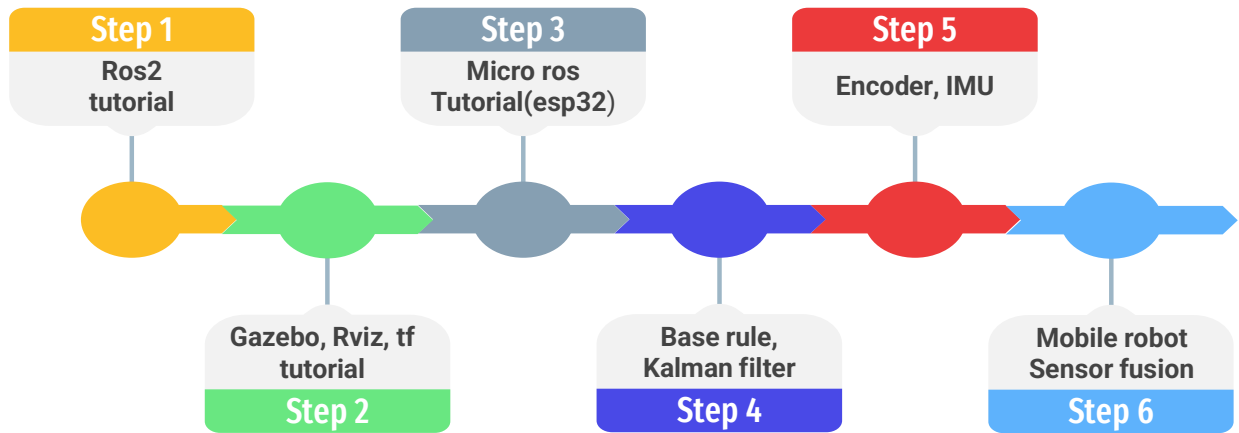
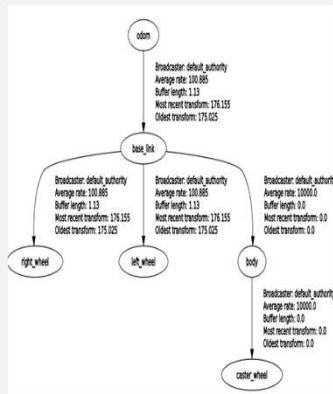
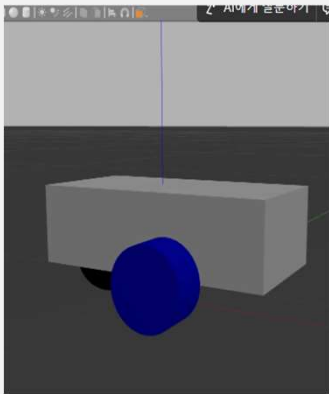


Timeline Infographics



Gazebo, tf

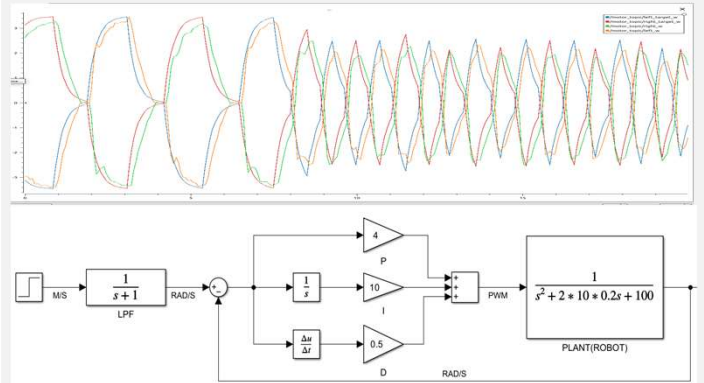
URDF 작성 및 실제 로봇과 Odometry를 통한 연동



Encoder pid control, IMU

Motor PID Tuning

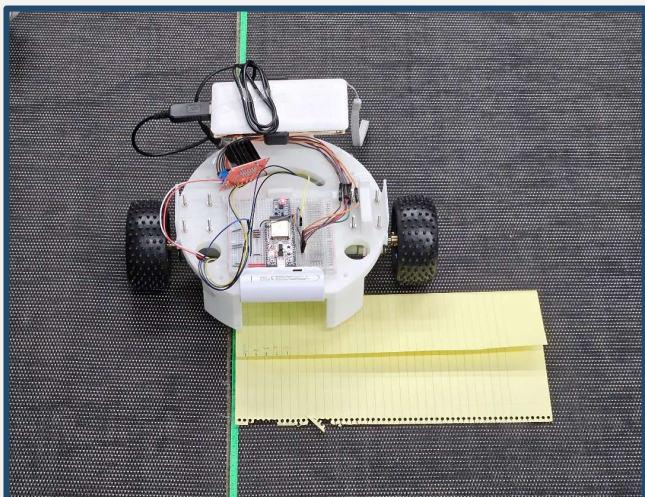
$$f(\text{target } w(t), \text{measured } w(t))$$



Sensor fusion test

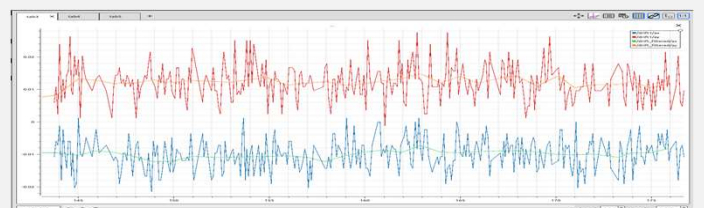
Encoder + IMU , EKF

$$\text{state } X = \begin{bmatrix} x \\ y \\ th \end{bmatrix} \quad u = \begin{bmatrix} Vel \\ Rad/s \end{bmatrix} \quad z = \begin{bmatrix} x \\ y \\ th \end{bmatrix}$$



Encoder pid control, IMU

LPF(ax, ay)



Zero Velocity Update(ZUPT)

before

after

