

input: lidar data  $[0.08; 10m]$   
@ 200 Hz



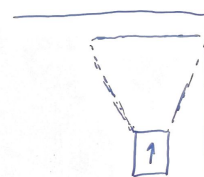
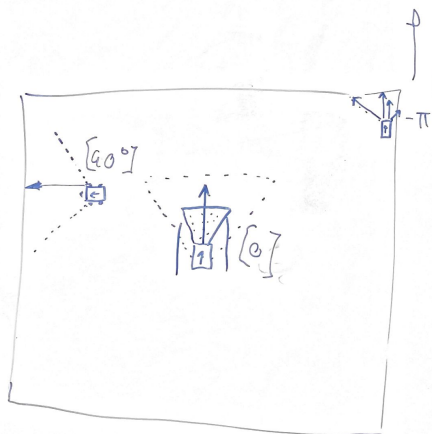
Preproc: min dist to obstacle(wall)  
max  
min dist angle obstacle(wall)  
max  
label orienting robot



restrict view-angle to  $90^\circ (\pm 45^\circ)$

output:  $\Delta$ direction:  $\dot{\theta} [0; \pm 0.4]$  rad/s  
speed:  $v [0; \pm 1.2]$  m/s

goal: drive w/o dying  
(obstacle avoidance)



in: dist: close || far  
in: dir: left || right

with constant speed

out: dir: left || right  
out: spd: slow || fast

assuming lidar data  
relative to car