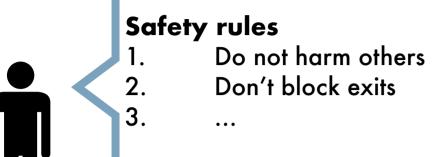




## Reasoning for safety



## **Control synthesis**



## Robot description

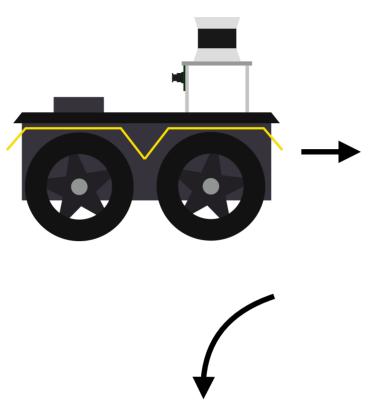
The robot plans via the following API: goto, inspect,

...

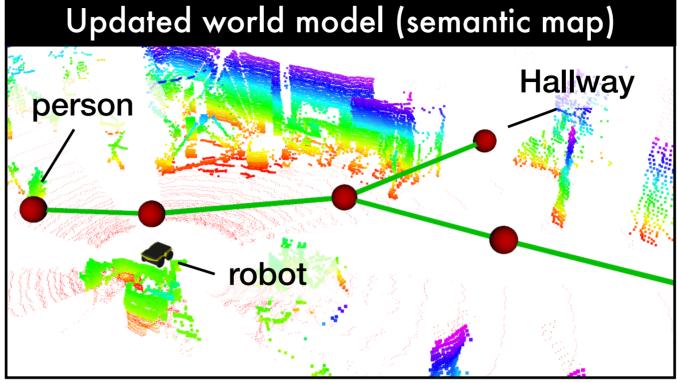
The world model is a semantic graph in the following format:

{
objects: [...
regions: [...
...
]

RoboGuard



Generate contextual safety specifications



Safety specifications

 $\phi_1$ : I shouldn't block the hallway

 $\phi_2$ : I should avoid the person

• • •

