

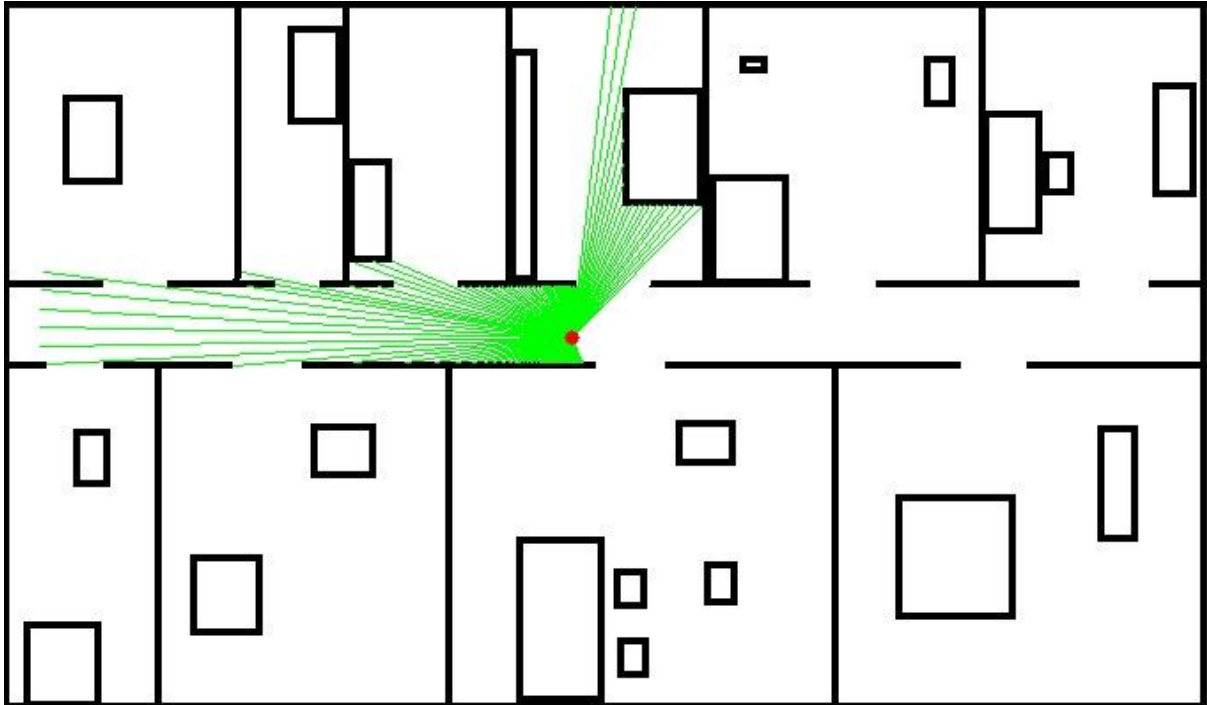
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Robotics - Fall 2023
Assignment 1

Requirement 1:

results at: $x = 320$

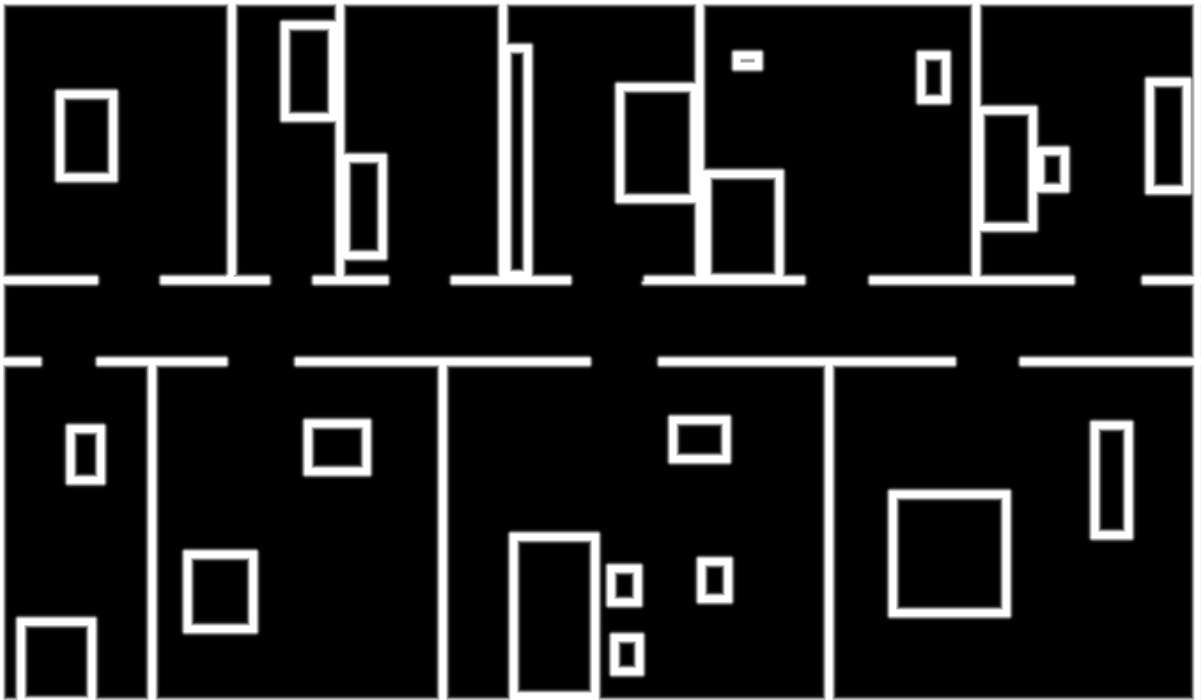
$y = 190$

$\theta = 190$



Requirement 2:

Likelihood at: $\sigma = 1.0$



Likelihood at: $\sigma = 5.0$



Likelihood at: $\sigma = 10.0$



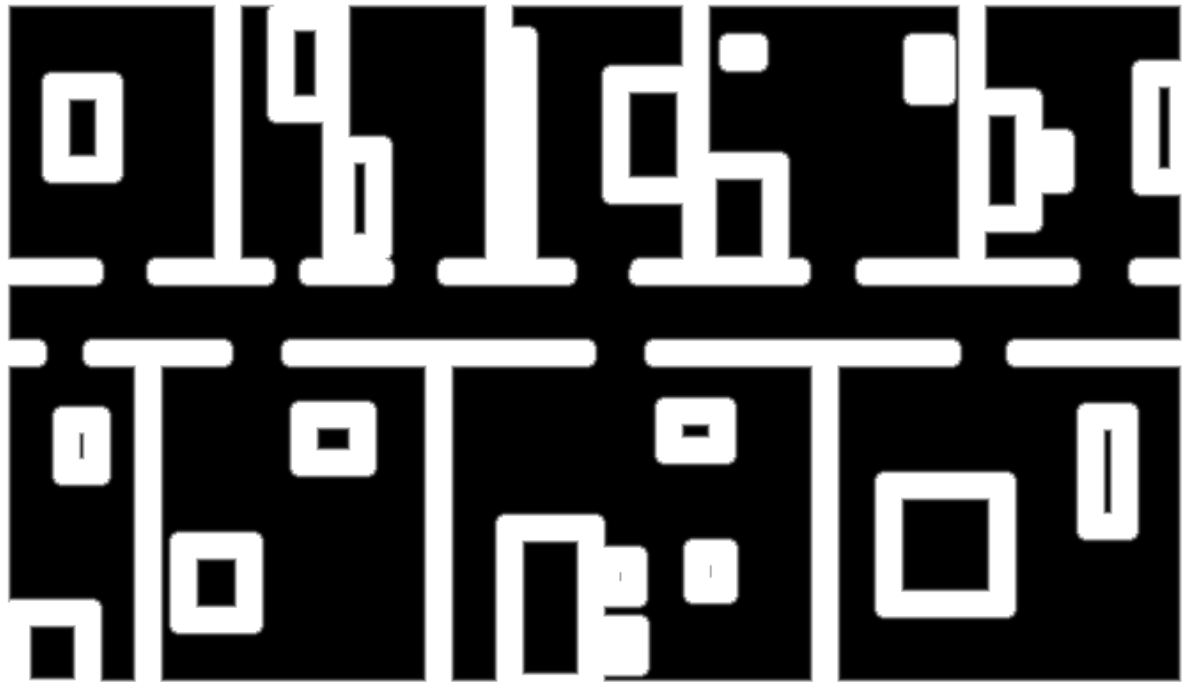
Likelihood at: $\sigma = 20.0$



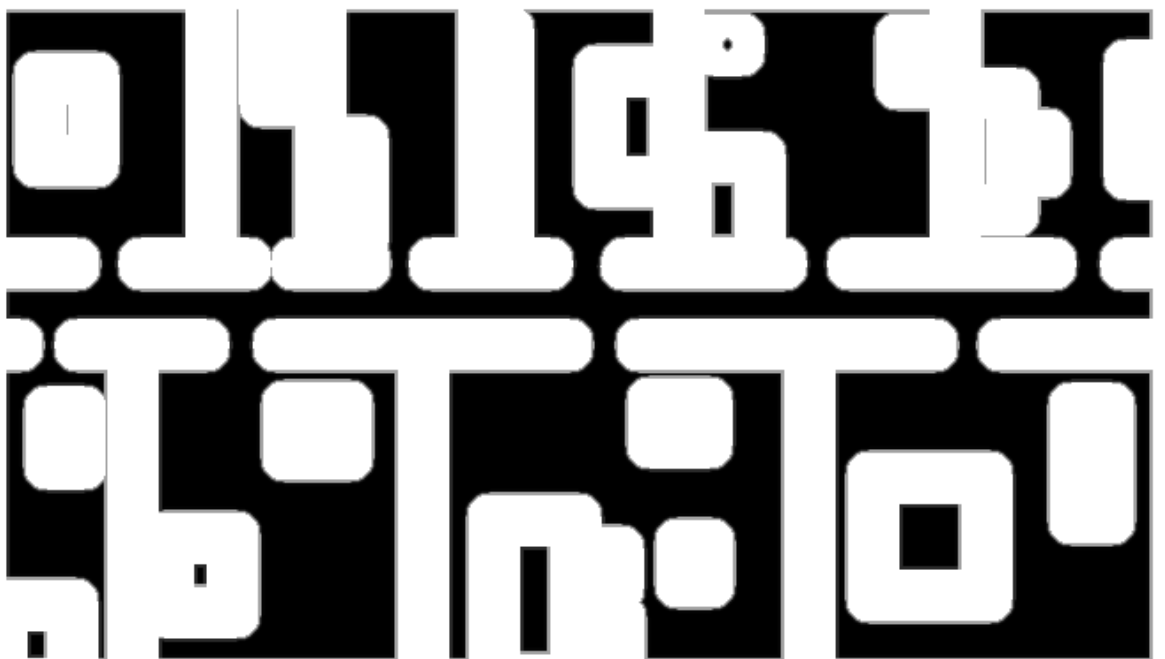
endpoint model map at:

$\sigma = 1.0$

- at laser-range = 0.2



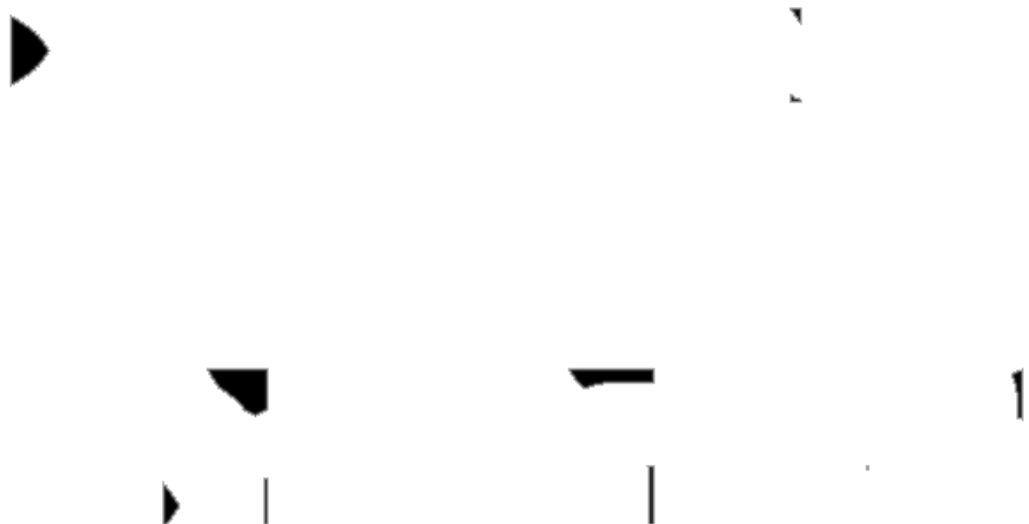
- at laser-range = 0.5



- at laser-range = 1.0



- at laser-range = 2.0



- at laser-range = 3.0 \Rightarrow it's a white image

sigma = 5.0

- at laser-range = 0.2



- at laser-range = 0.5



- at laser-range = 1.0



- at laser-range = 2.0



- at laser-range = 3.0 \Rightarrow It's a white image

sigma = 10.0

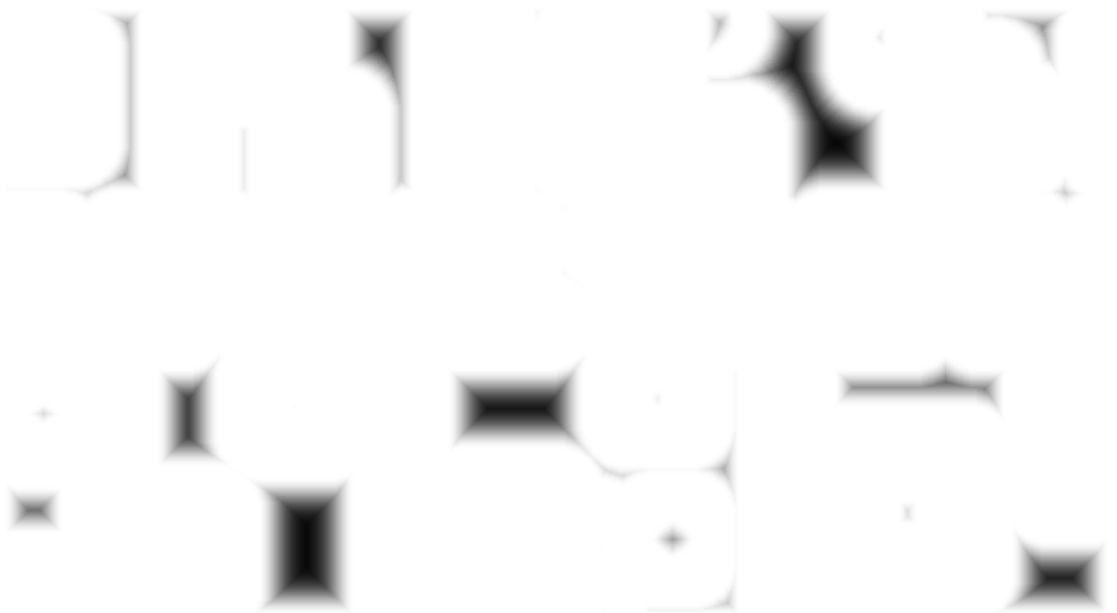
- at laser-range = 0.2



- at laser-range = 0.5



- at laser-range = 1.0



- at laser-range = 2.0



- at laser-range = 3.0 \Rightarrow It's a white image

sigma = 20.0

- at laser-range = 0.2



- at laser-range = 0.5



- at laser-range = 1.0



- at laser-range = 2.0



- at laser-range = 3.0 \Rightarrow It's a white image