LVLM Reasoning

"Can you please find the blue rug in the bathroom?"

Targets = [A blue rug, a bathroom]



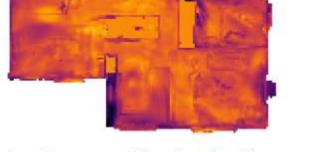


Semantic Navigation



Map building and Robot navigation





Environment observations

b) Combined semantic similarity map

Object Detection

A blue rug detected!

c)

Validation

LVLM validation output =
"The image shows a bathroom.
There is a small blue rug
positioned on the floor. The blue
rug is inside the bathroom"

Validation SUCCESS, target FOUND!

d)