

Magnitude



What is the distance between the two trash bins on the left side of the sidewalk? 12.3m



A1: 5.2m. (Error: 7.1m)
 A2: 13.0m. (Error: 0.7m) ❌

Different errors; both rejected ?



A1: 5.2m. (Margin: 0.2675)
 A2: 13.0m. (Margin: 0.0172)
 Margins encode error magnitude
 GaugeVLM: It is 12.3 meters. ✅



What is the vertical distance between the yellow taxi and the traffic light above it?



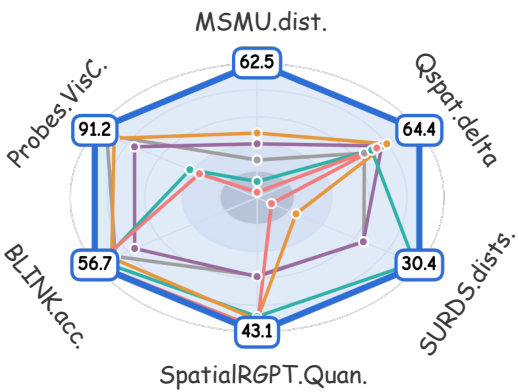
It is 4.9 meters.



From the cyclist's perspective, what clock direction is the person pushing a bicycle?



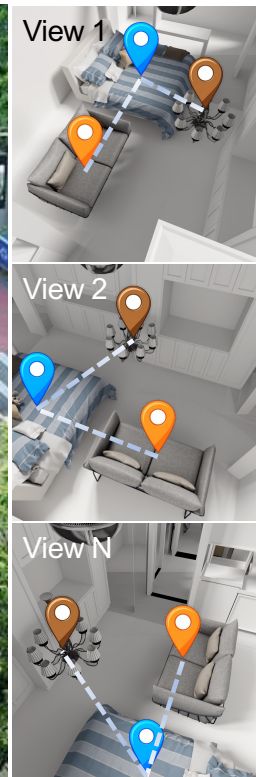
It is at the 10:30 position.



Complex Scene



Cross-View



Constasy

What is the distance between the sofa and the bed?

View 1: It is 0.7 meters.
 View 2: It is 0.4 meters. ❌
 View 3: It is 1.2 meters.

Same relation, BUT different answers ?

Direct cross-view supervision
 Rank the true relation first in every view ✅

Views 1-3: It is 0.5 meters.

What is the vertical distance between the bed and the ceiling light?

View 1: It is 1.7 meters.

View 2: It is 1.7 meters.

View 3: It is 1.7 meters.

