

Simulated SAT Training



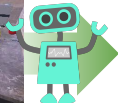
Static: Where is counter w.r.t window?
Counter is right of window

Dynamic: Did any object move?

Toaster moved left and away from camera



...



Real-world improvements on spatial reasoning

Static and **dynamic** (reasoning about effect of ego and object motion)

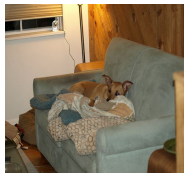
Static (Existing Bench)



Is the dog on the motorcycle?

SAT (us): No, it is laying beside...

Perspective



If I sit by the dog and face the same direction as the dog, will the lamp be to my left or right?

SAT (us): Right

Action Consequence



Is it safe to turn left and move forward in this picture?

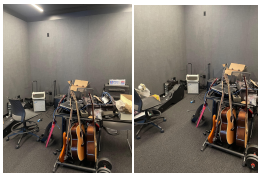
SAT (us): No

Goal Aim



If I need to go to the back of the train, do I turn left or right? SAT (us): left

Object Movement



Were any of the objects moved from the 1st scene to 2nd?

SAT (us): Chair was moved left

Egocentric Movement



How did the camera rotate from the 1st scene to 2nd?

SAT (us): Rotated right

SAT Tuning Improvements

