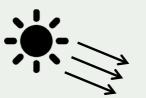**External 3D Objects (e.g., Objaverse)**

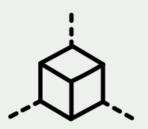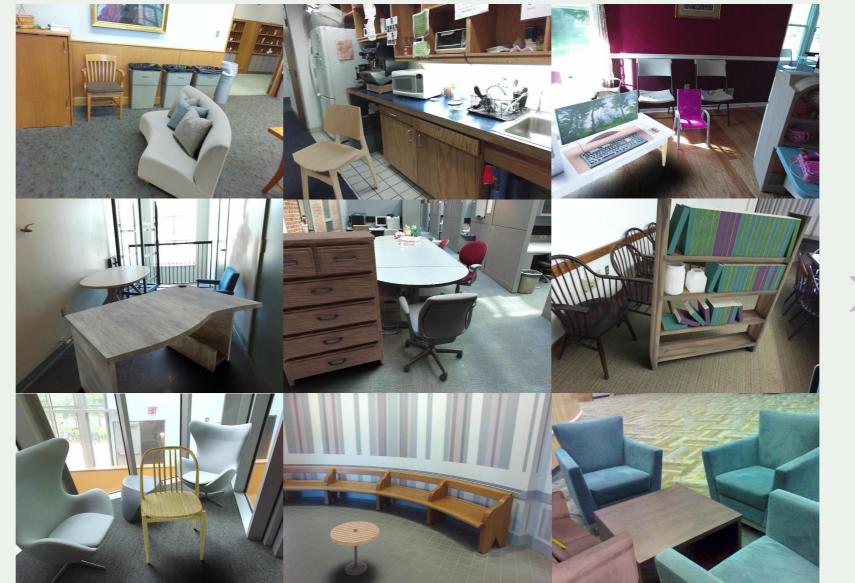**Indoor Scene Dataset (e.g., SUN RGB-D)**

3D Copy-Paste

Physically Plausible
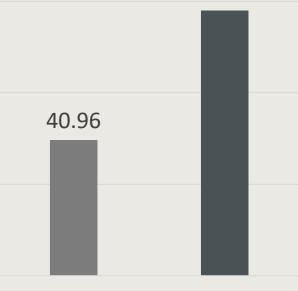
Lighting

Position, Pose, Size

Monocular 3D Object Detector Training

3D Detection mAP (%)

40.96 — ImVoxelNet

43.79 — ImVoxelNet + 3D Copy-paste