



Motivation

The Task: Select Any Material in 3D,
on arbitrary 3D representations



The Problem: Selection models are 2D,
not multiview-consistent!



→ requires lengthy, per-asset
optimization to consolidate these errors

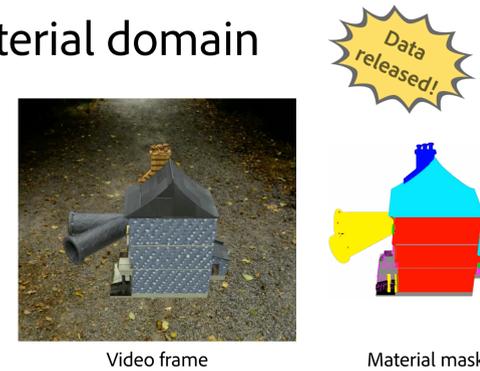
The Solution: Use a video selection model!



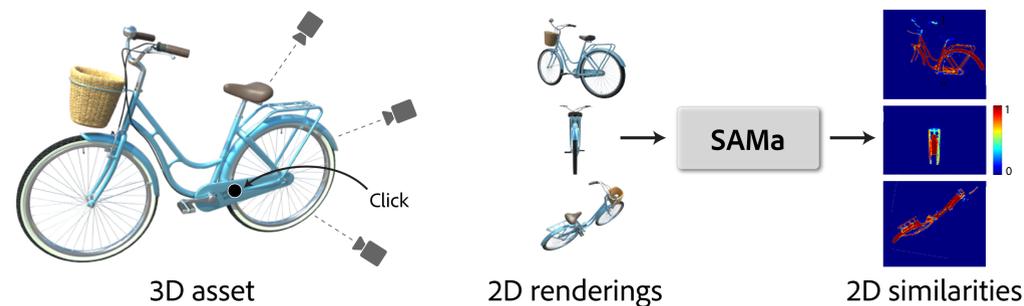
Method

1. Adapt SAM2 to the material domain

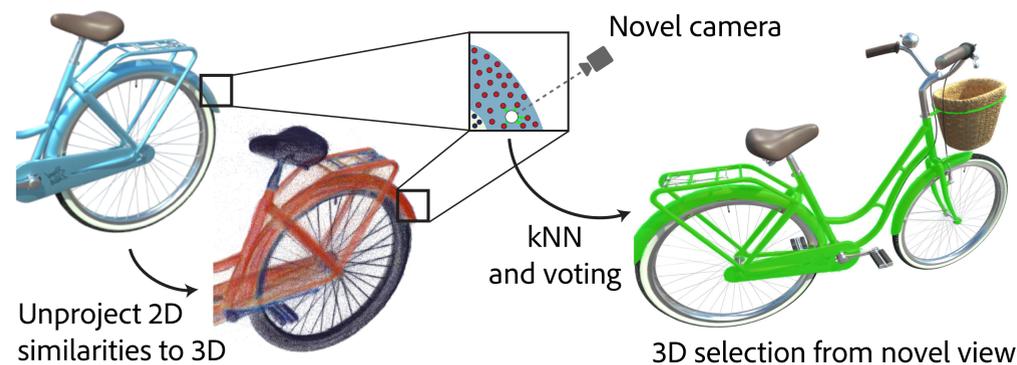
- 500 videos
- varying camera motions
- dense material annotations



2. Render keyframes and process them

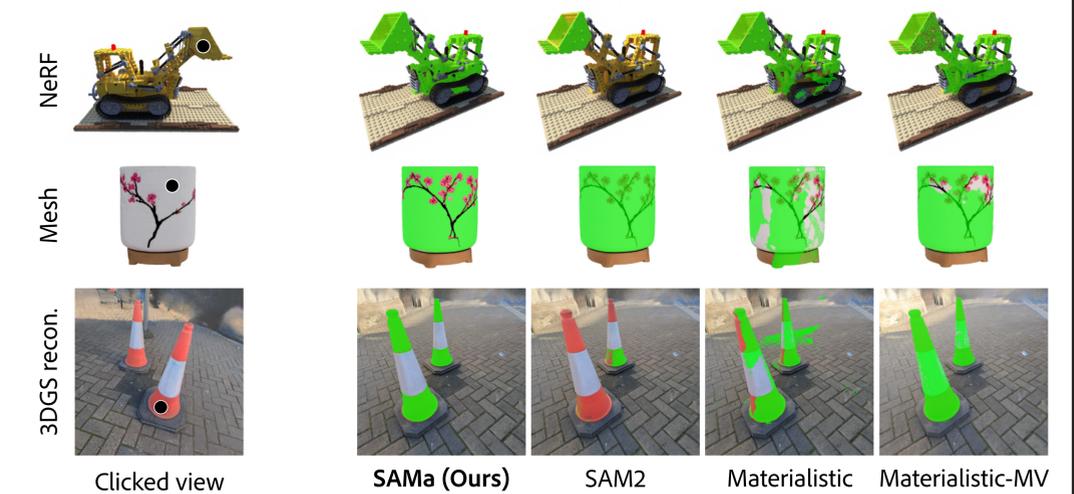


3. Re-aggregate in 3D and query kNN for NVS

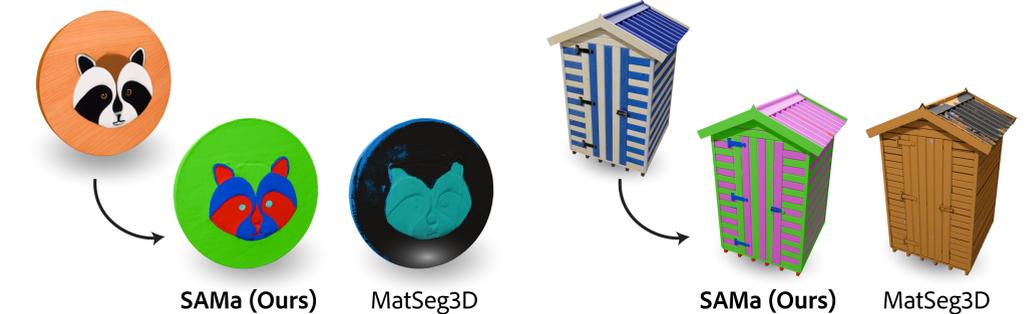


Results

Selection and novel views



Automatic material-based mesh segmentation



Fast click-to-selection times

