



ryanndagreat.github.io/MAGICK



MAGICK: A Large-scale Captioned Dataset from Matting Generated Images using Chroma Keying

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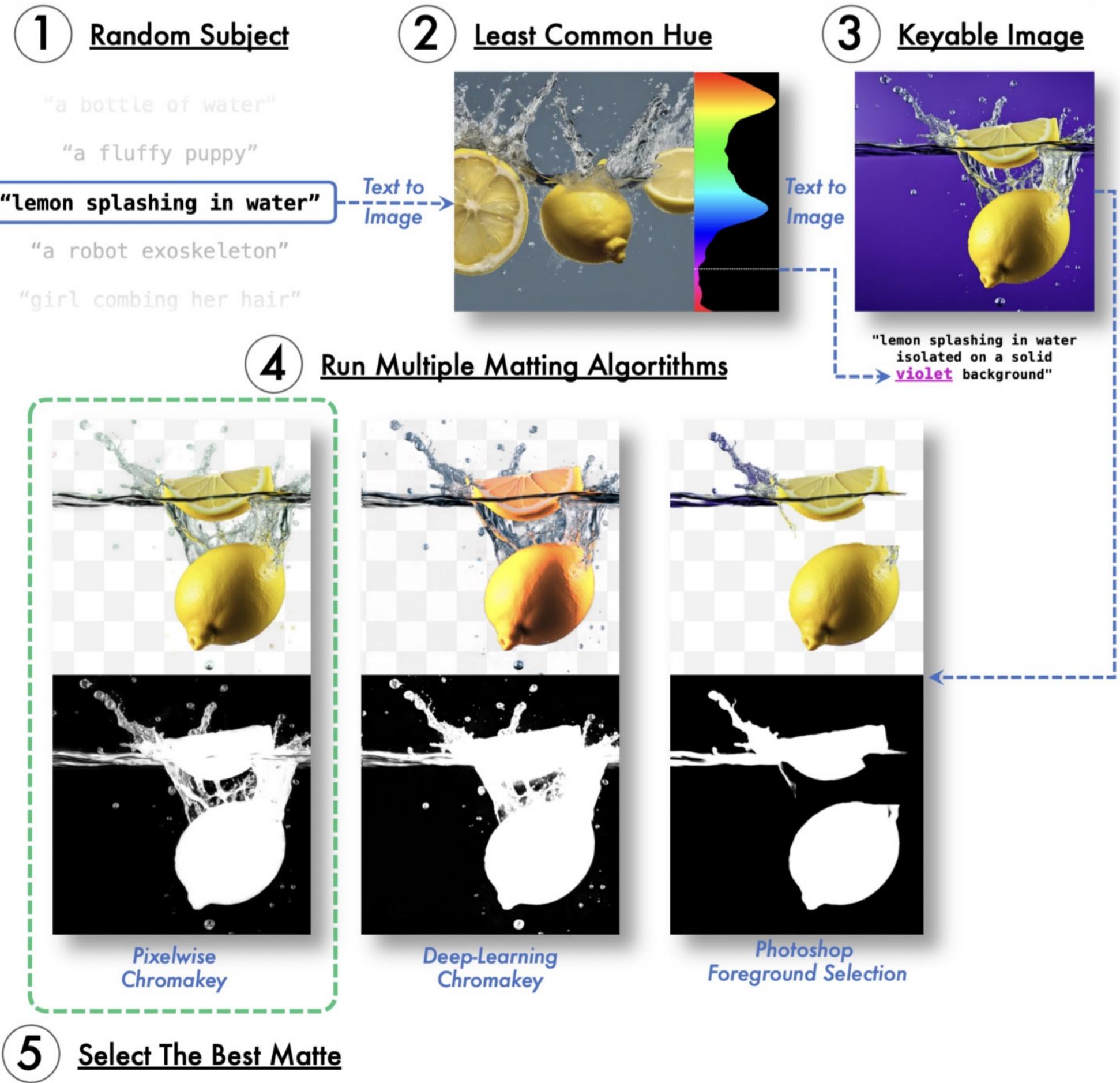


CVPR
SEATTLE, WA JUNE 17-21, 2024

MAGICK is a giant **RGBA** image dataset: over 150,000 images
It contains complex alpha mattes and text captions at 1k resolution



MAGICK is synthetic – it uses chroma-keying (i.e. greenscreen)



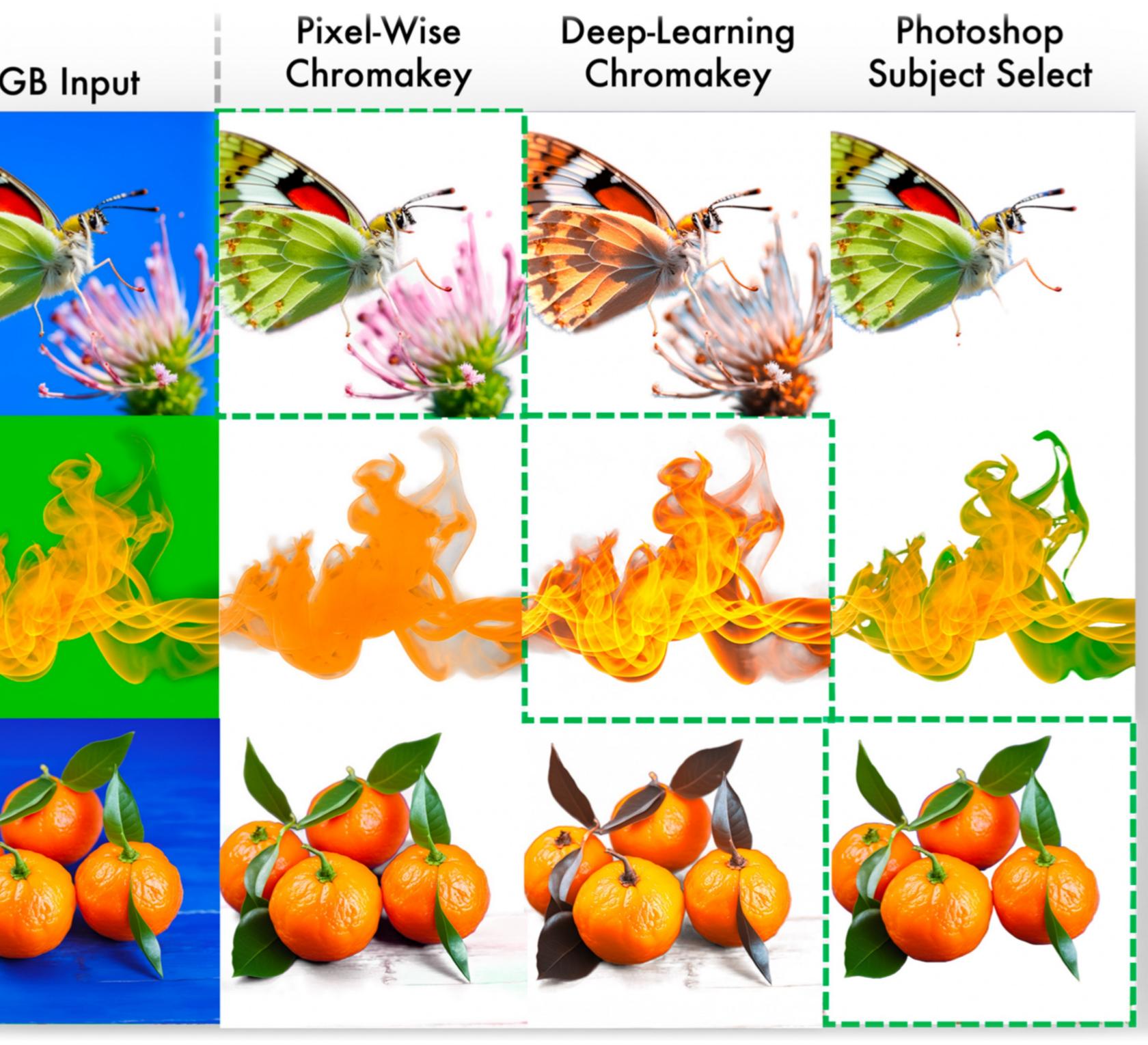
Many diffusion models fail at green-screening



Our pipeline ensures pure background colors *without* green-spill



Each image uses a different matting algorithm...



(there is no one-size-fits-all matting algorithm – all have failure modes)

Before Img2Img



After Img2Img

Alpha → RGB via ControlNet + MAGICK

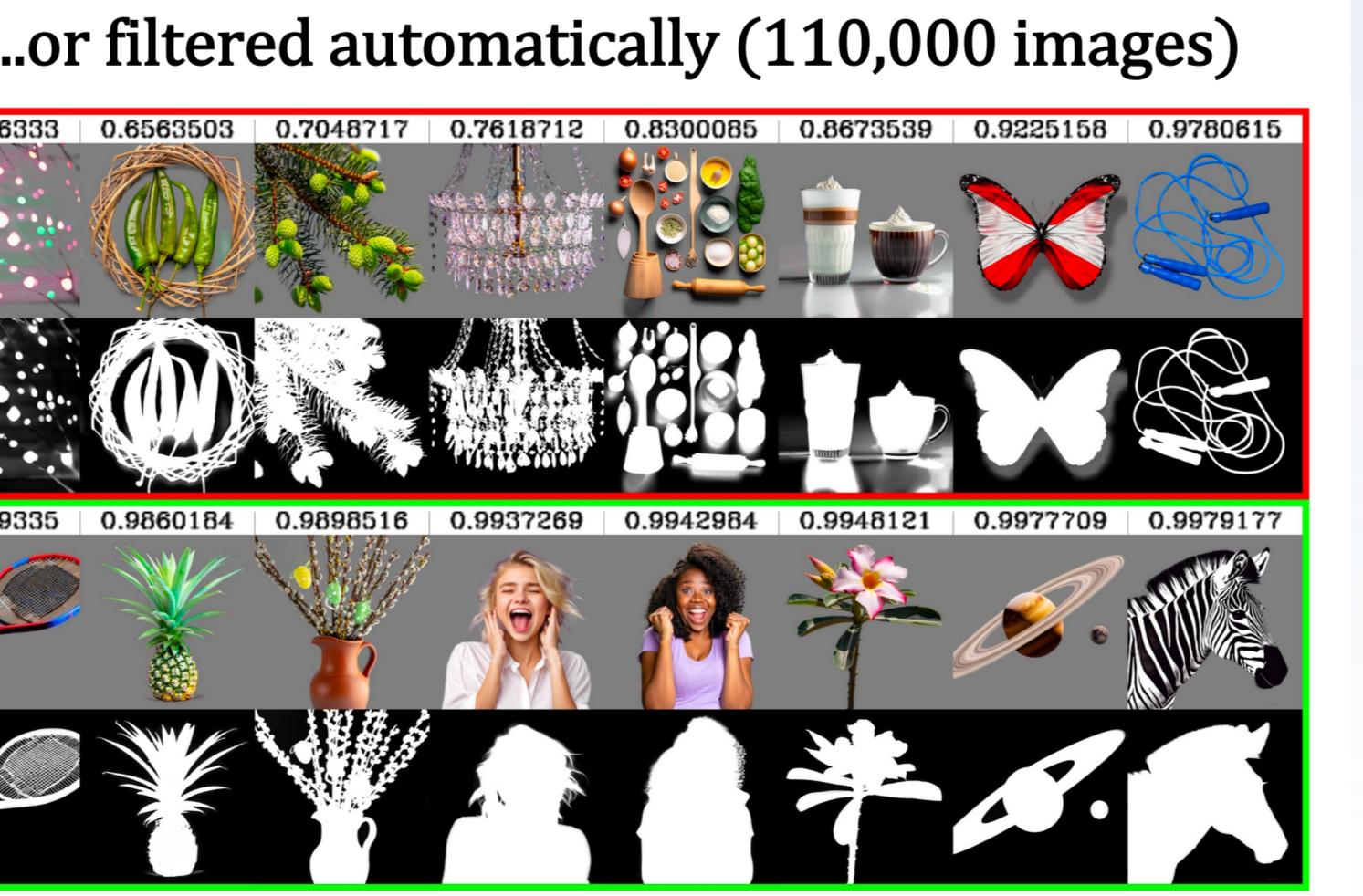
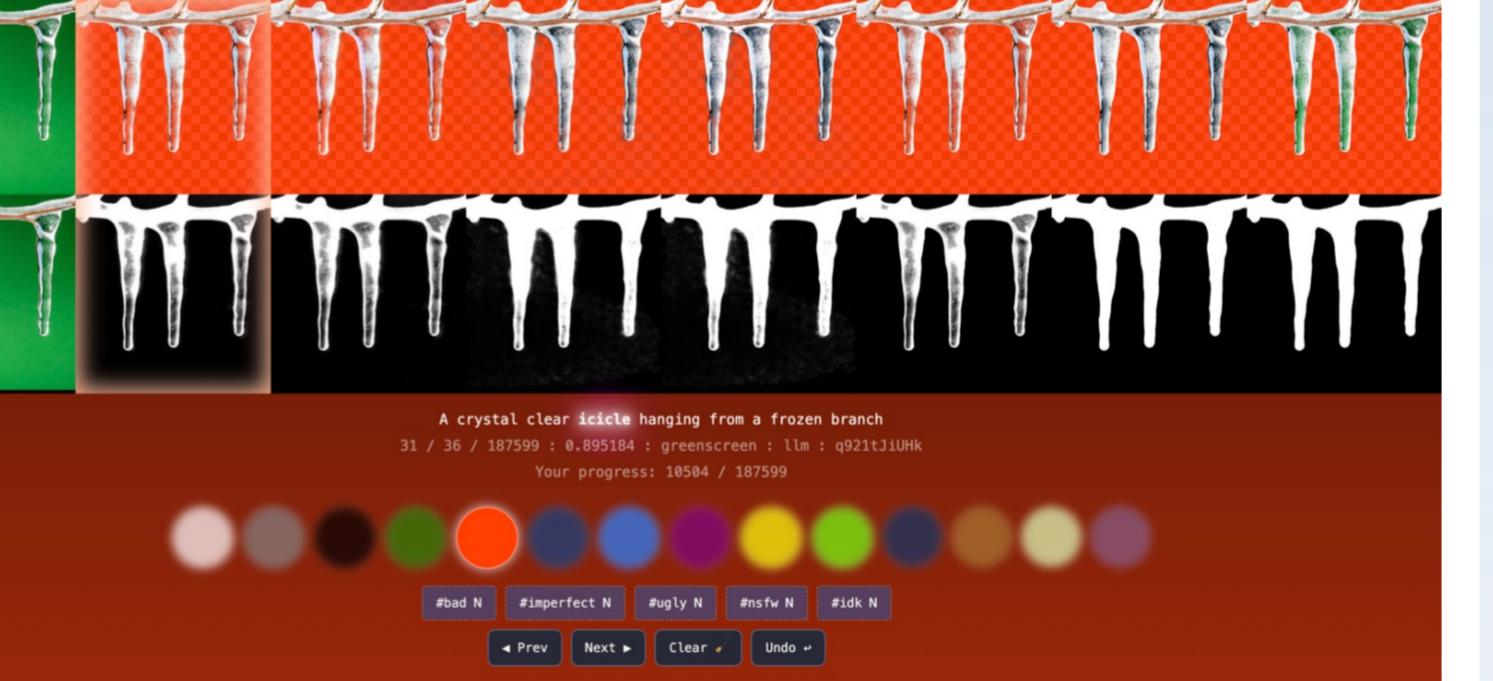


↓ Ours ↓
"elegant wood"

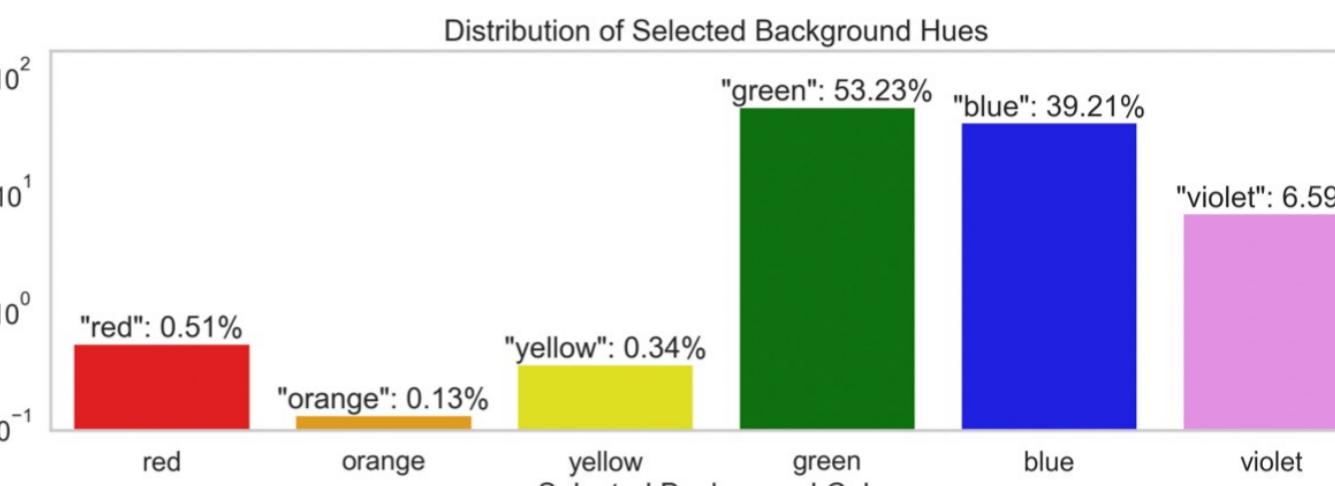
↓ Theirs ↓

Magick!
"denim jeans"
Magick!
"china plate"
Magick!
"corn on the cob"
Magick!
"cactus"
Magick!
"baguette"
Magick!
"amethyst"
Magick!
"swimming pool"
Magick!
"a rose bush"
Magick!
"a pumpkin"
Magick!
"a balloon"
Magick!
Magick!

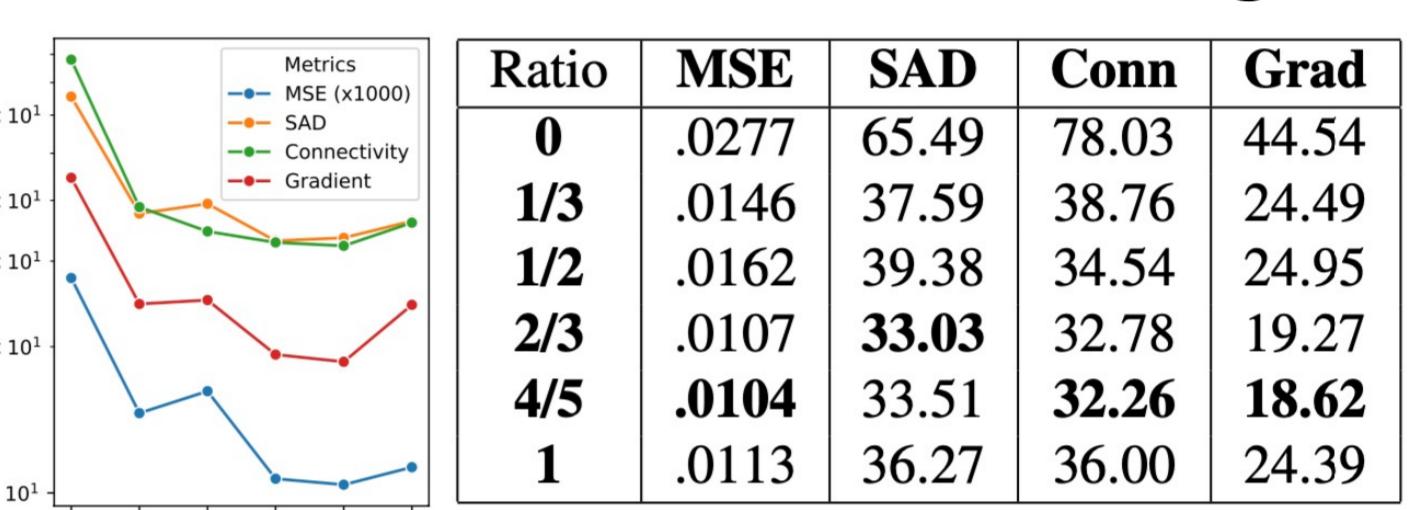
...either chosen by hand (40,000 images)



Keying Distribution:



Quantitative Results: Matting



Quantitative Results: User Study

