

## Cindy L., Congrui H., Chendi L., Ang C., Yihui H.

## Problem

This paper presents a novel method to generate textures for 3D models given text prompts and 3D meshes.



Method

Additional depth information is taken into account to perform the Score Distillation Sampling (SDS) process with depth conditional Stable Diffusion.



Texture

# **EucliDreamer: Fast and High-Quality Texturing** for 3D Models with Stable Diffusion Depth

## **Ablation Studies**





We studied how different factors affect generation quality, including sampling steps, guidance scale, negative prompts, data augmentation, elevation range, and alternatives to SDS.



Negative prompt = (())

"shadow"



View







3D mesh

SDS + SD-Depth (ours)

SDS + ControlNet Depth

VSD + SD-Depth





"shadow, green shadow, blue shadow, purple shadow, yellow shadow, red shadow"















## Results

We ran our model over the open-source dataset Objaverse and conducted a user study to compare the results with those of various 3D texturing methods.

Our model can generate more satisfactory results and produce various art styles for the same object. In addition, we achieved faster time when generating textures.