Art3D: Training-Free 3D Generation from Flat-Colored Illustration

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Do you still remember
what the world looked like when
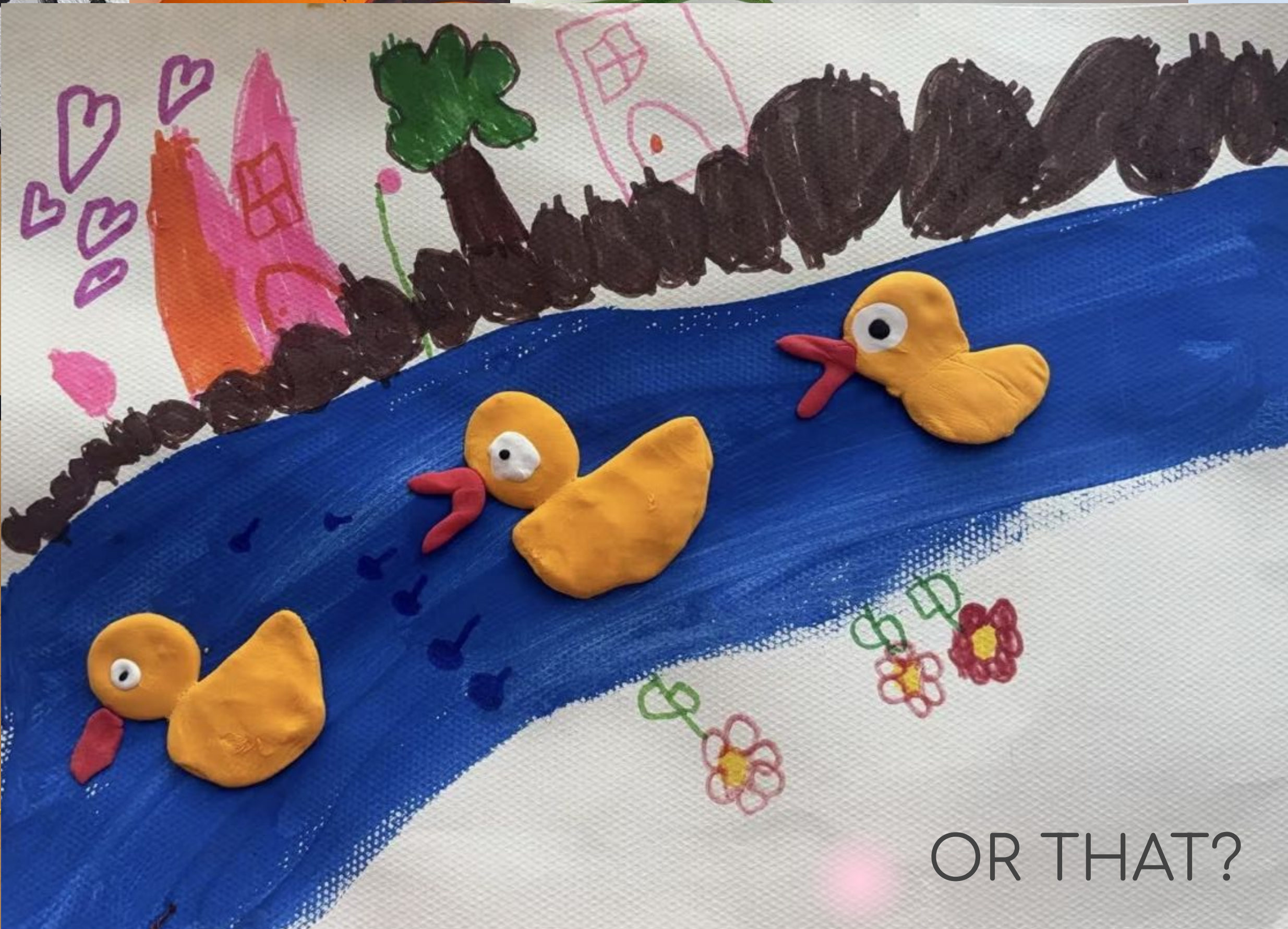you were a kid?
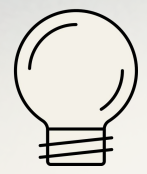
THAT?

THAT?

THAT?

THAT?

THAT?

OR THAT?

What if we bring it to life?

Here it comes!

Art3D

MOTIVATION

A common limitation of existing methods is their **inability** to handle **flat-colored** images that inherently lack a sense of 3D (hand drawings, painting, icons, cartoon-style designs). Yet, these types of images are among the most accessible and intuitive tools for users in visual art creation.
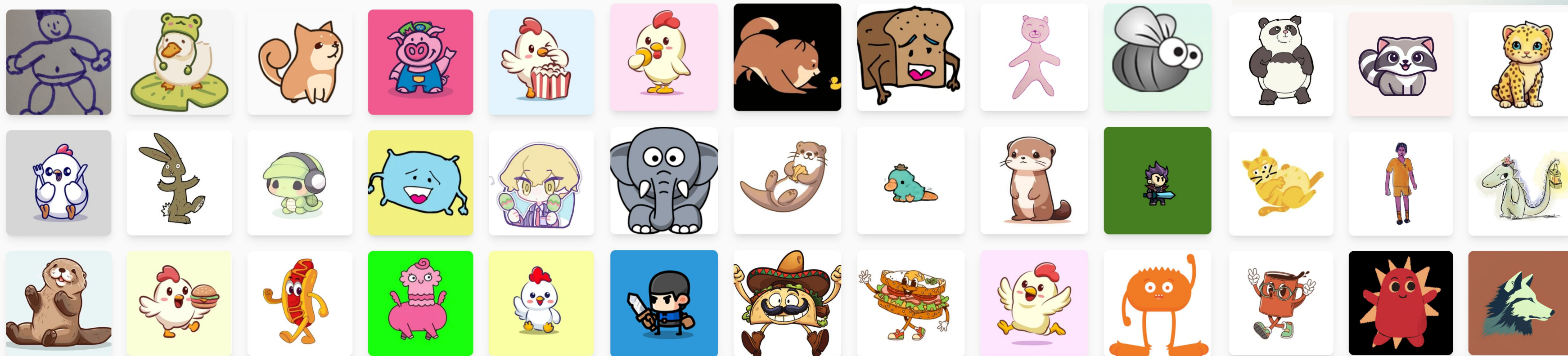

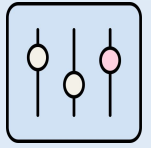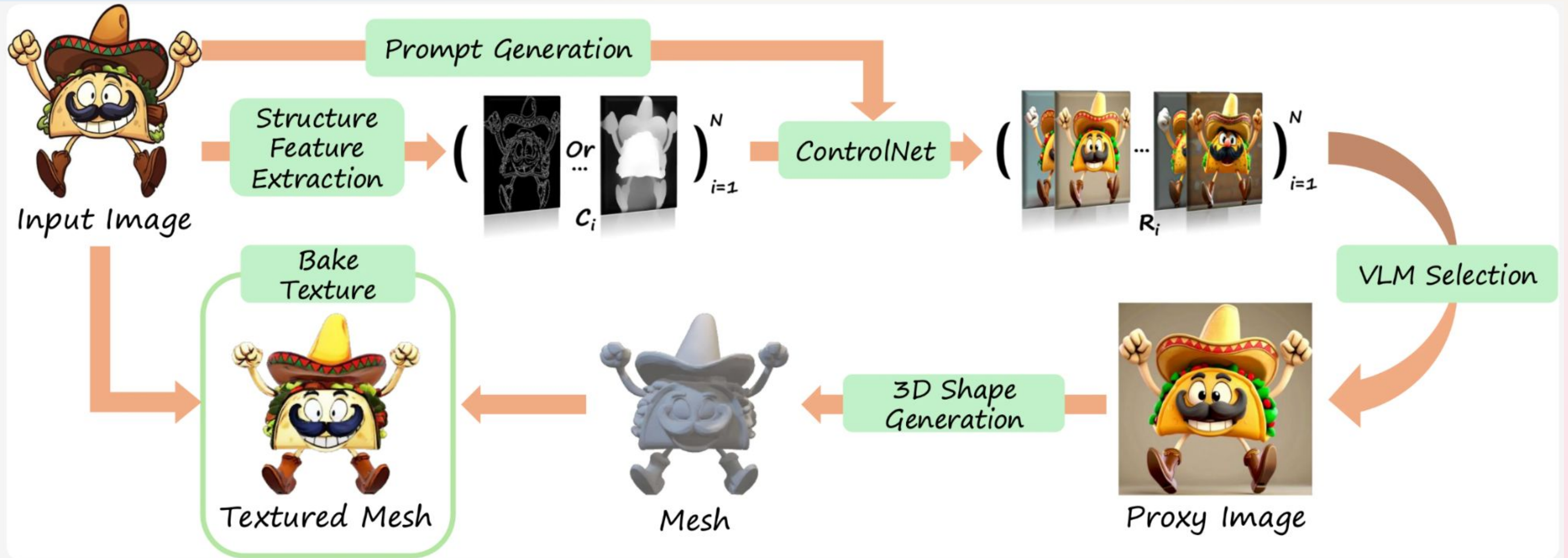Input   Result

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👍 CONTRIBUTION

- We introduce **Art3D**, a training-free 3D generation pipeline designed for flat-colored images, enhancing the 3D illusion of the flat inputs.
- We curated a dataset called **Flat-2D**, consisting of over 100 hand-picked flat-colored images.
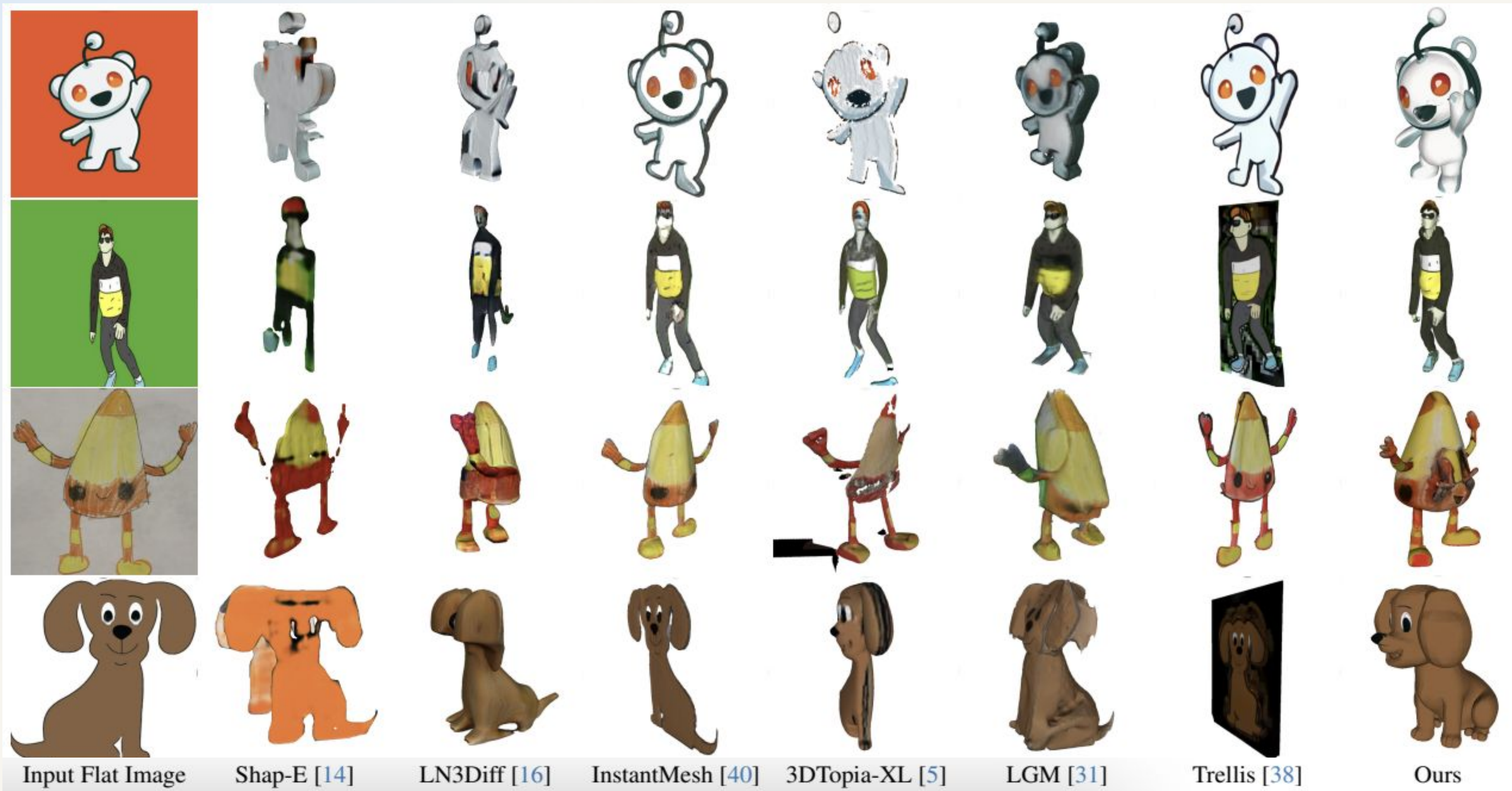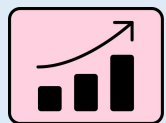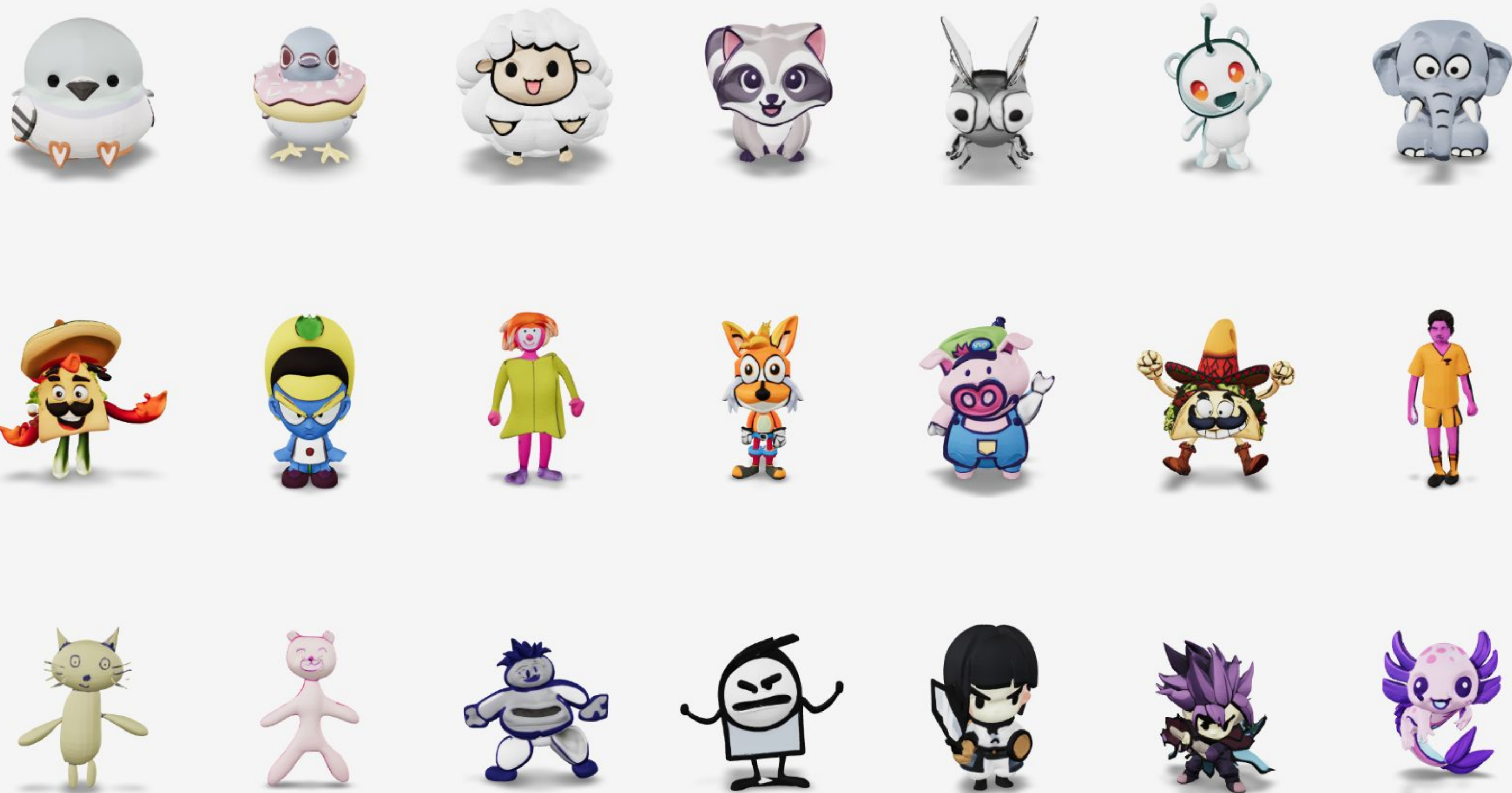
PIPELINE

| Input Flat Image | Shap-E [14] | LN3Diff [16] | InstantMesh [40] | 3DTopia-XL [5] | LGM [31] | Trellis [38] | Ours |

Input Flat Image   Shap-E [14]   LN3Diff [16]   InstantMesh [40]   3DTopia-XL [5]   LGM [31]   Trellis [38]   Ours

Interactive 3D Mesh Gallery

THANK YOU FOR LISTENING!

Crafted and presented by Jiayi Shen