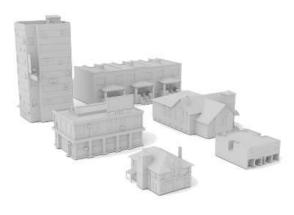
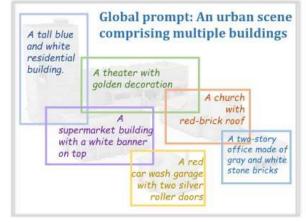
## InstanceTex: Instance-level Controllable Texture Synthesis for 3D Scenes via Diffusion Priors (Rebuttal for Siggraph Asia)







**3D** Mesh without texture

Generate 2D layouts in multiple views

**Texture Generation from InstanceTex** 

**Texture Editing by editing the prompts** 

A bedroom with wooden furniture, comprising a red fluffy sofa chair with pillows, a long white cabinet shelf desk with golden edging pattern, a wooden vintage bench, two brown double-layer nightstand beside the bed, a double bed with red pillows and a blue carnation patterns bed sheets on it, and a wooden cabinet with four drawers, a solid wooden wardrobe, a wooden stool with red velvet surface, and a beige zabuton cushion.



An urban scene comprising multiple buildings, a gray supermarket with a white banner on top, a church with red-brick roof and white wall, a gray car wash garage with two silver roller doors, a theater with golden decoration, a two-story office made of gray and white stone bricks, and a tall brown and white residential building.



## Self-supervised fragment alignment with gaps (Accepted by TVCG 23)

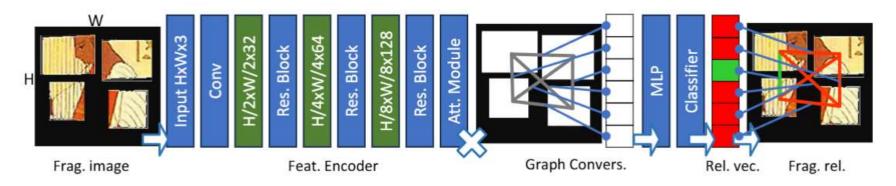
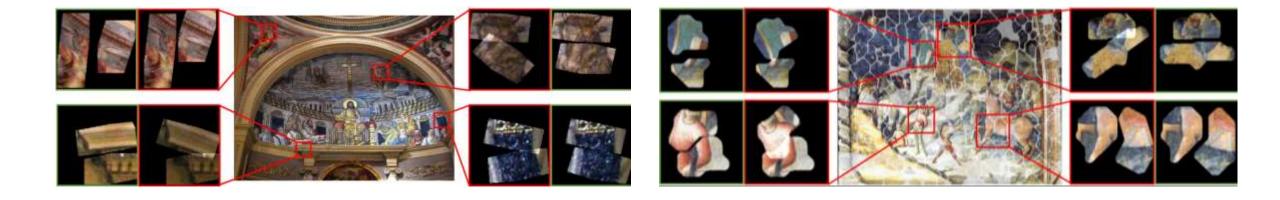


Fig. 3. Discriminator network. Left-to-right, the input fragments, image feature extractor as a CNN combined with self-attention modules (common to generator), a graph conversion mask module from image features to graph edge features and an MLP edge classifier.



## VRTree: Example-Based 3D Interactive Tree Modeling in Virtual Reality (Submitted to PG 2024)

