

FuncScene: Function-centric Indoor Scene Synthesis
via a Variational AutoEncoder Framework
Supplementary Material

Wenjie Min Wenming Wu Gaofeng Zhang Liping Zheng

Hefei University of Technology

Based on your experience, select the best indoor scenes based on the scene's plausibility and functional integrity.

To help make choices, here are some common furniture used in the indoor scene.

TV stand



Dining table
and chairs set



Coffee table



Cabinet



Sofa

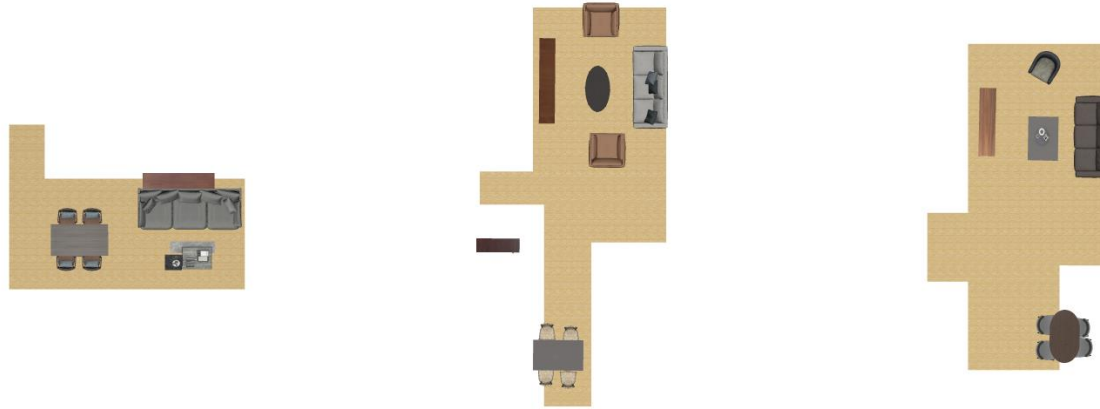


Chair

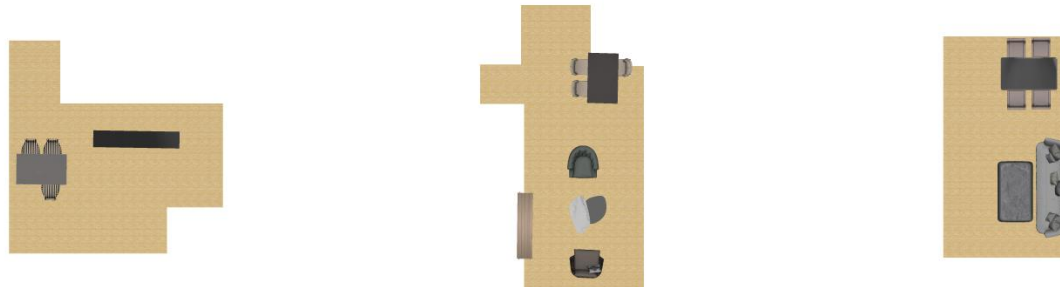


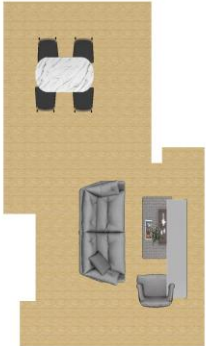
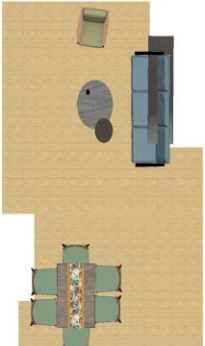
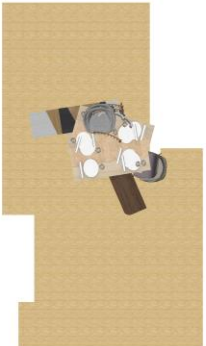
Here are the typical indoor scenes that lack plausibility and functional integrity.

Lack plausibility



Lack functional integrity



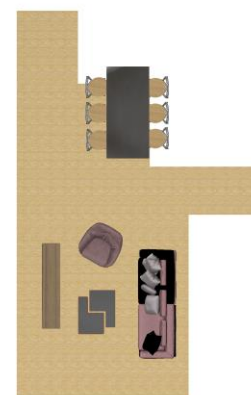
 A 3D rendering of a modern interior space. It features a dining table with a white tablecloth and two black chairs. A grey sofa and a matching armchair are positioned in the foreground. A small side table with a lamp is also visible.	 A 3D rendering of a modern interior space. It features a dining table with a white tablecloth and two black chairs. A grey sofa and a matching armchair are positioned in the foreground. A small side table with a lamp is also visible.	 A 3D rendering of a modern interior space. It features a dining table with a white tablecloth and two black chairs. A grey sofa and a matching armchair are positioned in the foreground. A small side table with a lamp is also visible.
1	2	3



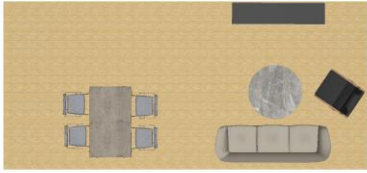
1



2



3




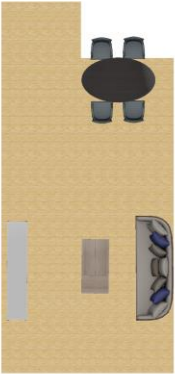
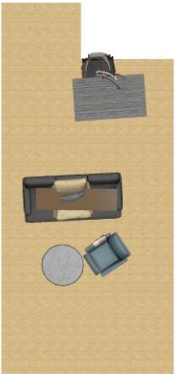
1

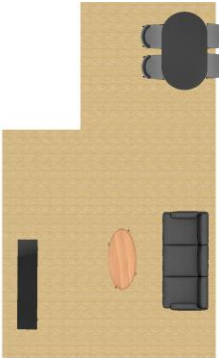

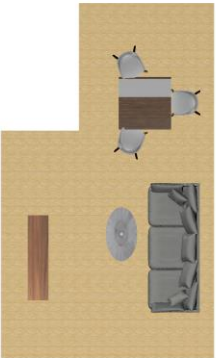


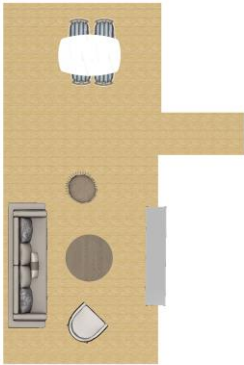
2



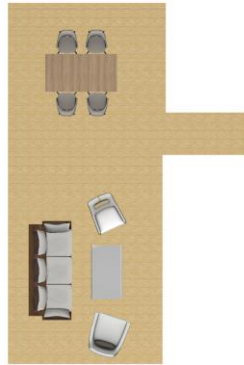
3

 A top-down view of a furniture arrangement on a tan carpet. At the top is a dark oval dining table with four chairs. Below it is a dark blue rectangular rug with a light blue sofa and two armchairs. To the right of the rug is a dark wood cabinet with a pink and white striped cushion. At the bottom are two light brown armchairs.	 A top-down view of a furniture arrangement on a tan carpet. At the top is a dark oval dining table with four chairs. Below it is a light gray rectangular rug with a light brown sofa and two armchairs. To the right of the rug is a dark wood cabinet with a blue and white striped cushion. At the bottom are two light brown armchairs.	 A top-down view of a furniture arrangement on a tan carpet. At the top is a dark oval dining table with four chairs. Below it is a dark blue rectangular rug with a light blue sofa and two armchairs. To the right of the rug is a dark wood cabinet with a pink and white striped cushion. At the bottom are two light brown armchairs.
1	2	3

		
1	2	3



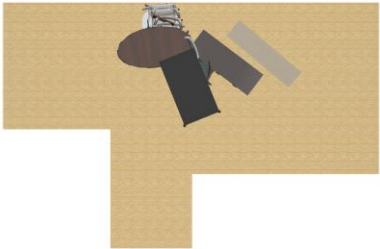
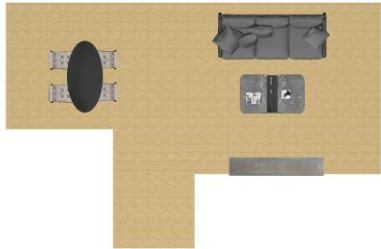
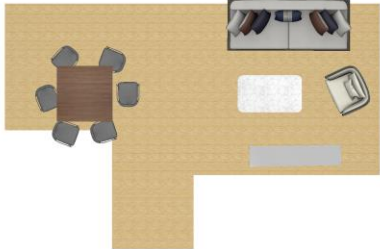
1



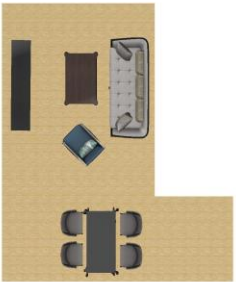


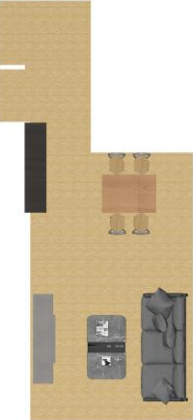
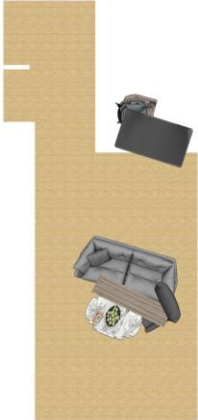

2



3

		
1	2	3

		
1	2	3

		
1	2	3



1



2



3