

DreamDrone

Hanyang Kong¹ Dongze Lian¹ Michael Bi Mi² Xinchao Wang¹✉

¹ National University of Singapore ² Huawei International Pte. Ltd.

<https://hyokong.github.io/dreamdrone-page/>



Backyards of Old Houses in Antwerp in the Snow, van Gogh.



the narrow path of a lush oasis in the midst of a vast desert. Palm trees and tropical plants surround a natural spring, creating a haven for wildlife. The golden sands of the desert stretch out in every direction, meeting the clear blue sky at the horizon.

Figure 1. **Visualization results of DreamDrone.** We visualize 30 continuous views for each prompt. The generated scenes are geometry-consistent across adjacent camera views and the details are added gradually when the camera is moving forward.

Abstract

We introduce *DreamDrone*, an innovative method for generating unbounded flythrough scenes from textual prompts. Central to our method is a novel feature-correspondence-guidance diffusion process, which utilizes the strong correspondence of intermediate features in the diffusion model. Leveraging this guidance strategy, we further propose an advanced technique for editing the inter-

mediate latent code, enabling the generation of subsequent novel views with geometric consistency. Extensive experiments reveal that *DreamDrone* significantly surpasses existing methods, delivering highly authentic scene generation with exceptional visual quality. This approach marks a significant step in zero-shot perpetual view generation from textual prompts, enabling the creation of diverse scenes, including natural landscapes like oases and caves, as well as complex urban settings such as Lego-style street views. Our code is publicly available.

✉ Corresponding author