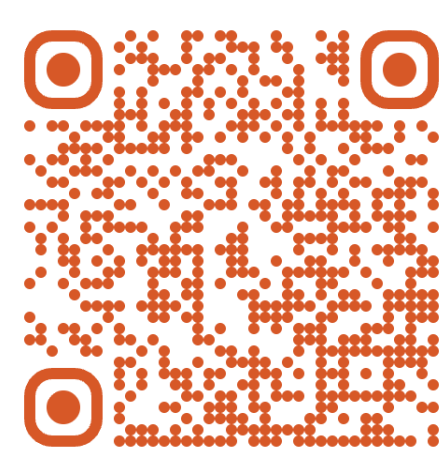




Code
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FreeOrbit4D: Training-Free Arbitrary Camera Redirection for Monocular Videos via Foreground-Complete 4D Reconstruction

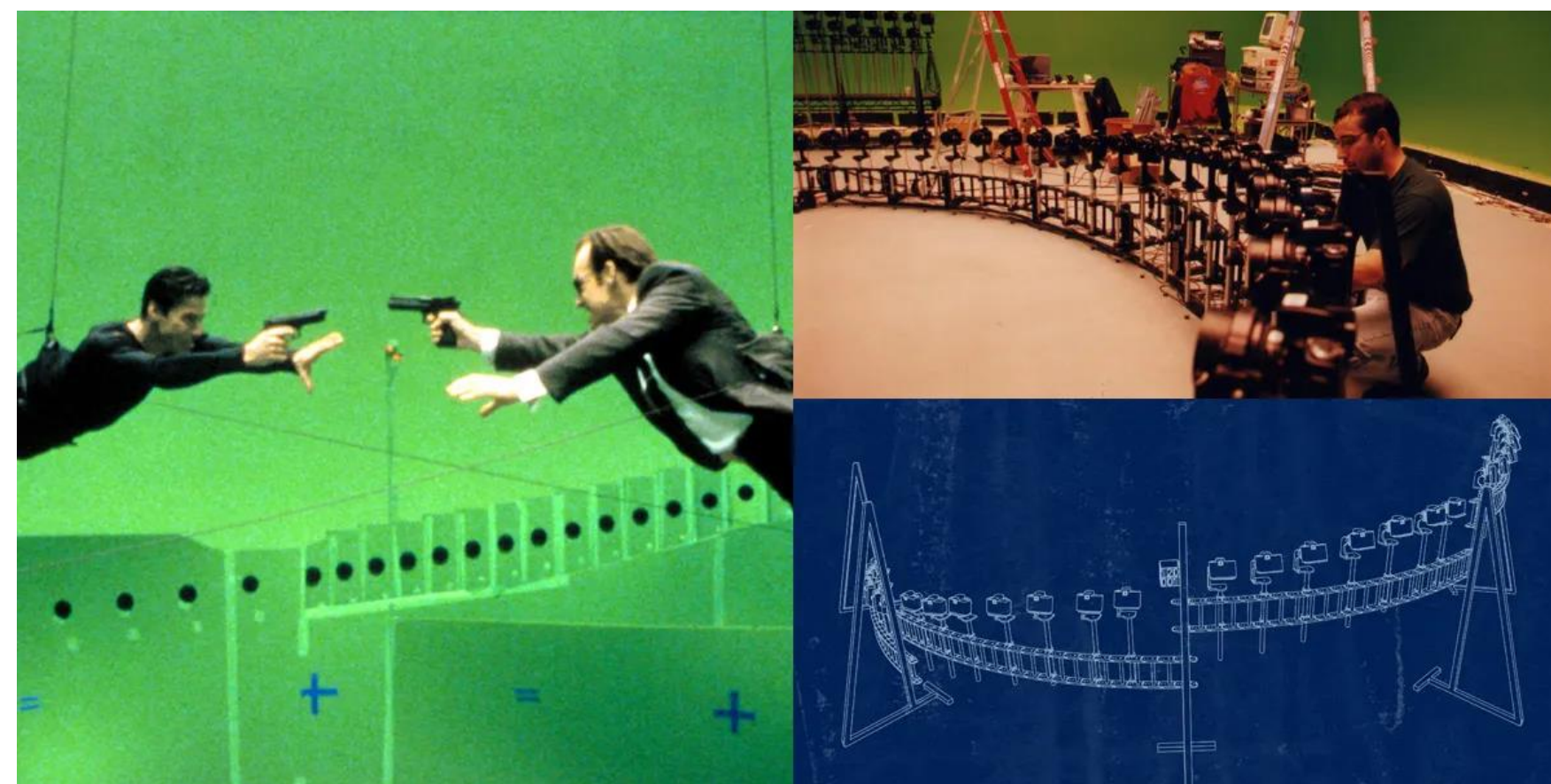
Wei Cao¹, Hao Zhang¹, Fengrui Tian², Yulun Wu¹, Yingying Li¹, Shenlong Wang¹, Ning Yu³, Yaoyao Liu¹

¹University of Illinois Urbana-Champaign, ²University of Pennsylvania, ³Eyeline Labs



TL;DR: FreeOrbit4D is an effective training-free method for large-angle camera redirection via foreground-complete 4D proxy.

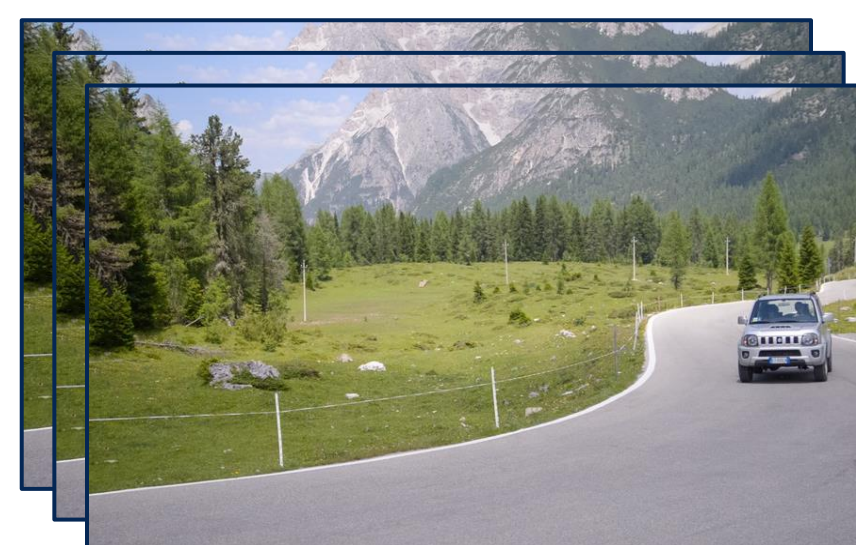
Motivation



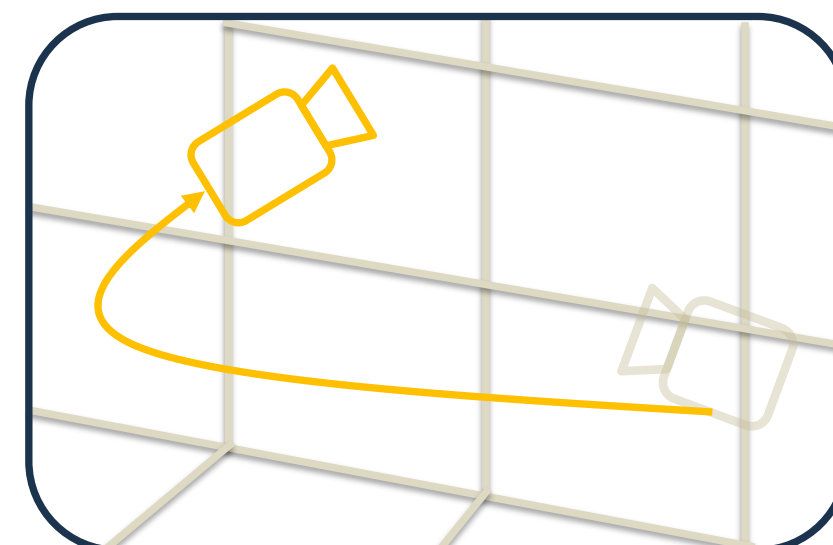
💰 Bullet-time camera rigs are expensive 💰

Can we turn a casual phone-shot video into a bullet-time style video?

Input

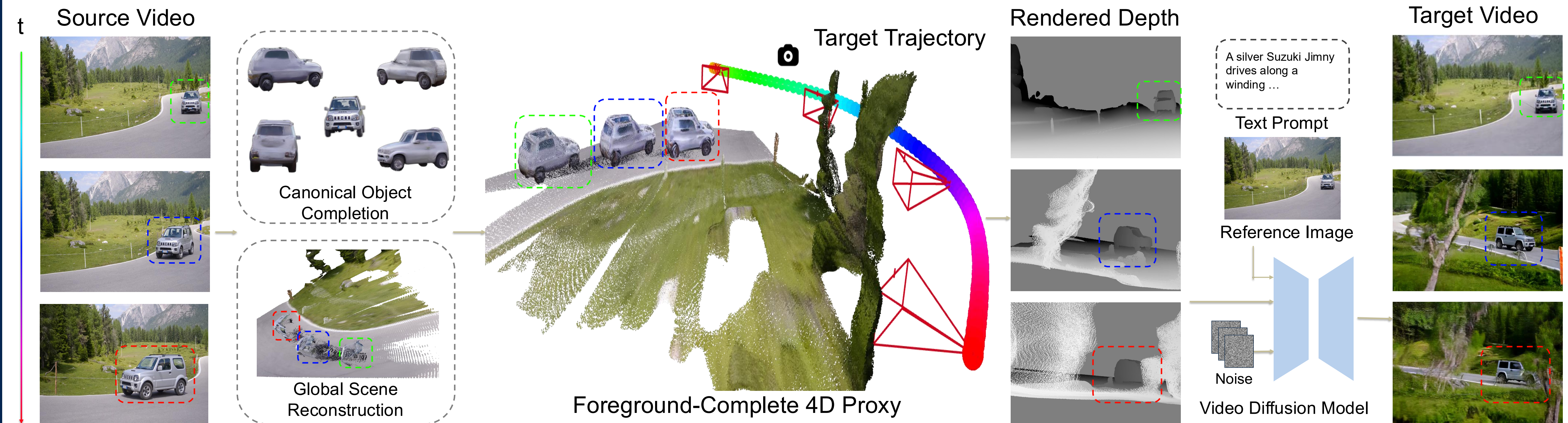


Video



Target Camera

Method

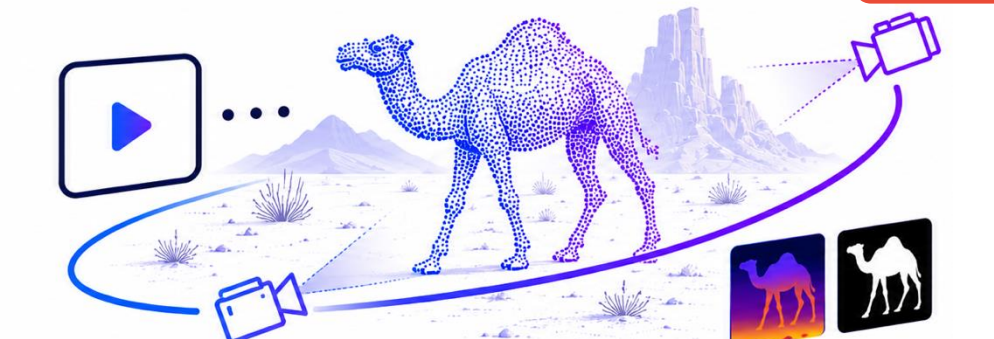


Results



Redirect4D-Bench

NEW



A Scalable Dataset and Benchmark for monocular video camera redirection:

Evaluates redirected videos by:

- Camera accuracy
- Object fidelity
- Subject localization

Code & Project Page

