Shuo Chen



EDUCATION

Tsinghua University Sept. 2020 - Jun. 2024

B.S. in Mathematics and Physics

Marslab, Tsinghua University

July. 2024 - Present

Internship in 3D generation, advised by Prof. Hang Zhao

TSAIL, Tsinghua University

Oct. 2023 - Jun. 2024

Internship in 3D generation, advised by Prof. Hang Su

Computational Cognition, Vision, and Learning, JHU Jun. 2023 - Dec. 2023

Internship in 3D VQA, advised by Prof. Alan L. Yuille

PUBLICATIONS

CRM: Single Image to 3D Textured Mesh with Convolutional Reconstruction Model

Oct. 2023 - Mar. 2024

Wang, Y Wang, Y Chen, C Xiang, S Chen, D Yu, C Li, H Su, J Zhu arXiv:2403.05034 (ECCV2024)

• CRM is a feed-forward model can generate a high-fidelity textured mesh from an image in just 10 seconds, without any test-time optimization.

Freeplane: Unlocking Free Lunch in Triplane-Based Sparse-View Reconstruction Models

Mar. 2024 - Jun. 2024

W Sun, Z Wang, S Chen, Y Wang, Z Chen, J Zhu, J Zhang arXiv:2406.00750

• We found that incorporating bilateral filtering into the triple in triplane-based feed-forward model(like LRM, CRM, InstantMesh) can mitigate reconstruction artifacts without losing to much details caused by inconsistencies in multi-view image generation.

Compositional 4D Dynamic Scenes Understanding with Physics Priors for Video Question Answering

Jun. 2023 - Jan. 2024

X Wang, W Ma, A Wang, S Chen, A Kortylewski, A Yuille arXiv:2406.00622

• Develop a physics simulation tool that generates realistic scene images and enables pose estimation and scene representation for relational and temporal reasoning.

Misc.

Teaching TA, Calculus A at Tsinghua University

Fall 2022, Fall 2023

Honors

• First Level Scholarship of Tsinghua University

October 2021

• Second Level Scholarship of Tsinghua University

October 2022

Reviewer CVPR2024, Neurips2024, AAAI2025, ICLR2025