Shuo Chen

 Github | 🌐 Homepage | 🌐 Scholar | ✉ Email

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

DimensionX: Create Any 3D and 4D Scenes from a Single Image with Controllable Video Diffusion *arXiv:2411.04928* GitHub ⭐: **735** — July. 2024 - Nov. 2024

Wenqiang Sun*, **Shuo Chen***, Fangfu Liu*, Zilong Chen, Yueqi Duan, Jun Zhang, Yikai Wang

- Create 3D and 4D scenes from a single image with controllable video diffusion.

DreamComposer++: Empowering Diffusion Models with Multi-View Conditions for 3D Content Generation — Jun. 2024 - Oct. 2024

Yunhan Yang*, **Shuo Chen***, Yukun Huang*, Xiaoyang Wu, Yuan-Chen Guo, Hengshuang Zhao, Tong He, Xihui Liu

- A flexible multi-view conditioning framework that enhances existing image and video diffusion models for scalable novel view synthesis.

CRM: Single Image to 3D Textured Mesh with Convolutional Reconstruction Model *arXiv:2403.05034* (ECCV2024) GitHub ⭐: **578** — Oct. 2023 - Mar. 2024

Wang, Y Wang, Y Chen, C Xiang, **S Chen**, D Yu, C Li, H Su, J Zhu

- A feed-forward model that generates high-quality textured meshes from an image in 10 seconds.

Freeplane: Unlocking Free Lunch in Triplane-Based Sparse-View Reconstruction Models *arXiv:2406.00750* — Mar. 2024 - Jun. 2024

W Sun, Z Wang, **S Chen**, Y Wang, Z Chen, J Zhu, J Zhang

Compositional 4D Dynamic Scenes Understanding with Physics Priors for Video Question Answering *arXiv:2406.00622* — Jun. 2023 - Jan. 2024

X Wang, W Ma, A Wang, **S Chen**, A Kortylewski, A Yuille

MISCELLANEOUS

Teaching TA, Calculus A at Tsinghua University — Fall 2022, Fall 2023

Honors

- **First Level Scholarship of Tsinghua University (Top5%)** — Oct. 2021
- **Second Level Scholarship of Tsinghua University (Top15%)** — Oct. 2022

Reviewer CVPR 2024, Neurips 2024, AAAI 2025, AISTATS 2025, ICLR 2025