ZEKUN LI

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EDUCATION

Brown University   **Providence, RI, USA**
Ph.D. Student, Computer Science   August 2023 - June 2028 (expected)
Supervisor: Prof. Srinath Sridhar
Research Area: Character Animation, Human-Object Interaction

University of Electronic Science and Technology of China   **Chengdu, Sichuan, China**
Bachelor of Engineering with honor, Computer Science and Technology   September 2019 - July 2023
GPA: 3.78/4.0
UESTC Outstanding Thesis Awards

PUBLICATION

Learning Anchor Transformations for 3D Garment Animation
Accepted by IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) 2023
Fang Zhao, <u>Zekun Li</u>, Shaoli Huang, Junwu Weng, Tianfei Zhou, Guosen Xie, Jue Wang, Ying Shan
TL;DR: design adaptive anchors to predict 3D garment animation from a body motion sequence.

Eliminating Gradient Conflict in Reference-based Line-Art Colorization
Accepted by European Conference on Computer Vision (ECCV) 2022
<u>Zekun Li</u>, Zhengyang Geng, Zhao Kang, Wenyu Chen, and Yibo Yang
TL;DR: design a novel BP scheme to solve the gradient issue in Attention.

Surf-D: High-Quality Surface Generation for Arbitrary Topologies using Diffusion Models
CVPR2024 Under Review
Zhengming Yu, Zhiyang Dou, Xiaoxiao Long, Cheng Lin, <u>Zekun Li</u>, Yuan Liu, Norman Müller, Taku Komura, Marc Habermann, Christian Theobalt, Xin Li, Wenping Wang
TL;DR: design a novel UDF-based latent diffusion model for shape generation.

ARG-MAGS: Articulated 3D Gaussians for Markerless Grasp Capture
CVPR2024 Under Review
Chandradeep Pokhariya, Ishaan Nikhil Shah, Angela Xing, <u>Zekun Li</u>, Kefan Chen, Avinash Sharma, Srinath Sridhar.
TL;DR: provide a new multi-view grasping dataset with contact annotation and articulated Gaussian hand model for benchmark.

EXPERIENCE

AI Lab, Tencent   *Research Intern*
October 2022 - June 2023   Supervisor: Prof. Fang Zhao
◇ Project: Learning-based Garment Animation [repo]
  - Reproduced *VirtualBones* (SIGGRAPH'22) and *TailorNet* (CVPR'20) on virtual try-on dataset.
  - Proposed an anchor-based deformation model to predict 3D garment animation from a body motion sequence, which achieves the state-of-the-art performance, especially for loose-fitting garments.

Cognitive Computing and Intelligent Decision Lab, UESTC   *Research Assistant*
September 2020 - September 2022   Supervisor: Prof. Zhao Kang
◇ Project: Reference-based line-art colorization [repo]
  - Proposed a novel gradient backpropagating scheme for dot-product Attention to solve gradient conflicts.

- Attained significant improvements in Fréchet Inception Distance (FID, up to 27.21%) and structural similarity index measure (SSIM, up to 25.67%) on several benchmarks.

PaddlePaddle Open Source Community, Baidu *Contributor of PaddleVideo*

April 2022 - June 2022

◇ Group Project: Reproduced *2s-AGCN* (CVPR'19) for PaddleVideo (a video toolkit). [repo]
- Responsible for model implementation and merging the project into PaddleVideo's.
- Won the third prize (¥10,000) in *6th Paddle Reproduction Competition.*

SELECTED AWARDS

UESTC Outstanding Undergraduate Thesis	Top1%
UESTC Honor Undergraduate Student in Research	Top1%

SKILLS

Python: Pytorch; C/C++; Blender; LaTeX