## ZEKUN LI

☑ kunkun0x0@gmail **?** https://kunkun0w0.github.io

#### **EDUCATION**

**Brown University** 

Providence, RI, USA

Ph.D. Student, Computer Science

August 2023 - June 2028 (expected)

Supervisor: Prof. Srinath Sridhar

Research Area: 3D Vision, Graphics, Physically-based Modeling

University of Electronic Science and Technology of China

Chengdu, Sichuan, China September 2019 - July 2023

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Bachelor of Engineering with honor, Computer Science and Technology

**GPA**: 3.78/4.0

UESTC Outstanding Thesis Awards

#### **PUBLICATION**

### Learning Anchor Transformations for 3D Garment Animation

Accepted by The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) 2023

Fang Zhao, Zekun Li, 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

Zekun Li, Zhengyang Geng, Zhao Kang, Wenyu Chen, and Yibo Yang.

TL;DR: design a novel BP scheme to solve the gradient issue in Attention.

#### RESEARCH EXPERIENCE

AI Lab, Tencent

Research Intern

October 2022 - June 2023

Supervisor: Prof. Fang Zhao

- ♦ Project(i): Learning-based Garment Simulation
  - 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.
- $\Diamond$  Project(ii): Single-view Garment Reconstruction
  - Proposing an image-based mesh reconstruction method that reconstructs the garment mesh from a single-view image and recovers the consistent finer details with the 2D perspective, like wrinkles.

# Cognitive Computing and Intelligent Decision Lab, UESTC

September 2020 - September 2022

Research Assistant

Supervisor: Prof. Zhao Kang

♦ Project: Reference-based line-art colorization

- 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.

#### SELECTED AWARDS

UESTC Outstanding Undergraduate Thesis	$ ext{Top}1\%$
UESTC Honor Undergraduate Student in Research	$ ext{Top1}\%$
UESTC Excellent Student Scholarship	$\mathrm{Top}12\%$

#### **SKILLS**

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