Pengxiang Zhu

% JubSteven.github.io

■ zhu_peng_xiang@sjtu.edu.com

• https://github.com/JubSteven

EDUCATION

· Shanghai Jiao Tong University

Shanghai, China

Bachelor of Engineering, Computer Science and Engineering (IEEE honor class)

Sept 2021 - Current

- ▶ Overall GPA: 92.43/100.00, 4.04/4.30, (Rank 7/129)
- ▶ Selected Courses: Design and Analysis of Algorithms (A+), Principles and Methods of Program Design (A+), Programming Practice (A+), Computer Networking (A+), Mathematical Analysis (A+), Linear and Convex Optimization (A+), Probability and Statistics (A+), Discrete Mathematics (A+)

Publications

Multi-view Hand Reconstruction with a Point-Embedded Transformer

Lixin Yang, Licheng Zhong, Pengxiang Zhu, Xinyu Zhan, Junxiao Kong, Jian Xu, Cewu Lu

- o Arxiv | 🗷 Paper | 🤼 Code
- o POEM is a generalizable multi-view hand mesh reconstruction model which embeds a static basis point within the multi-view stereo space. To infer accurate 3D hand mesh from multi-view images, POEM introduce a point-embedded transformer decoder. POEM demonstrates superior generalization ability in real-world applications.
- FAVOR: Full-body AR-driven Virtual Object Rearrangement Guided by Textual Instructions
 Kailin Li, Lixin Yang, Zenan Lin, Jian Xu, Xinyu Zhan, Yifei Zhao, Pengxiang Zhu, Wenxiong Kang, Kejian Wu, Cewu Lu
 - 。 **AAAI 2024** | 🔁 Paper
 - o FAVOR presents a novel dataset for Full-body AR-driven Virtual Object Rearrangement. It also proposes a pipeline for producing digital human rearrangement motion sequences.

EXPERIENCE

Machine Vision and Intelligence Group, SJTU

Shanghai, China

Undergraduate research intern, supervised by Prof. Cewu Lu and Prof. Lixin Yang

Mar 2023 - Current

■ Computer Vision, 3D Reconstruction

• Department of Artificial Intelligence, bilibili

Shanghai, China

Algorithm intern, supervised by Dr. Jun Xu

Jun 2024 - Sept 2024

■ Computer Vision, Multi-modal Large Language Models

Projects

Chinese Slot Language Understanding

Shanghai, China

CS3602 Natural Language Understanding Course Project

December 2023

o In this project, we build a BERT-based pipeline for Chinese slot understanding. We incorporated Lexicon information into the BERT backbone and achieved descent result on the given noisy dataset. • Code Report

• CUT++: Image Style Transfer

Shanghai, China

AI3603 Artificial Intelligence - Theory and Practice Course Project

 $December\ 2023$

o In this project, we build our CUT++ structure for image style transfer on the renowned CUT model. By introducing attention into the GAN-based model and modifying the PatchNCE loss, we achieve decent result on the given dataset. • GitHub

Honors and Awards

• Academic Excellence Scholarship of SJTU (top 10%)

2021

• Academic Excellence Scholarship of SJTU (top 10%)

2022

• Long Hu scholarship (5000 ¥, Rank 7/129)

2021-2022

• Finalist of Mathematical Contest of Modeling(top 5% globally)

2022

MISCELLANEOUS

- Proficient: Python (PyTorch, NumPy, etc.), C/C++, Linux, Shell, LATEX
- Familiar: MATLAB, HTML/CSS, Verilog, etc.