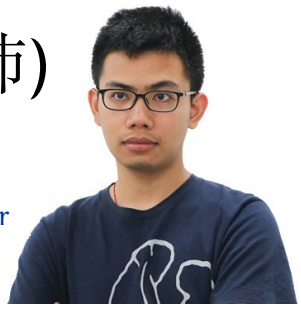
Anpei Chen (陈安沛)



EMAIL: chenap@shanghaitech.edu.cn

Homepage Github Google Scholar

Birthday: Jan 10 1994

About Me

I obtained my Ph.D. at ShanghaiTech University Visual Intelligent Center (VIC), working with Prof. Jingyi Yu. Before that, I received my Bachelor's degree in 2016 from Xidian University. My research interests lie at the intersection of computer graphics and computer vision, including image synthesis/editing, geometric modeling, and realistic rendering. I have a great passion for new things and ideas, my goal is to create magic and happiness. Outside my research, I love photography and movie appreciation.

Education

Jan 2022	PhD candidate of Computer Science at **ShanghaiTech University**, Shanghai, LAB
July 2018	Master of Computer Science at **Chinese Academy of Sciences**, Shanghai, China
	Major: Computer Vision & Graphics & Photography
	Course: Computer Vision I & II, Computer Graphics II, Machine Learning
	Deep Learning, SLAM, Convex Optimization, Computer Photography
	TA: Algorithm Analysis Fall 2016
July 2016	Bachelor Degree in Electronic Information Science and Technology
	Xidian University, China
	Awards: Special Prize of 26th Starfire Cup in Xidian University
	The 11th College Outstanding Students of Science and Technology
	Third Prize of 2015 National College Student Challenge Cup Academic Competition

Technical Skills

Language:	C/C++, Python, Matlab, Pytorch, 3DsMax, Blender, CUDA, OpenGL, OptiX
Research:	Face from Single Image; Light Field Rendering; Image Space Refocusing; Path Tracing; View Synthesis on face and object; Image Synthesis
System:	Dome and Light Stage system for **Object**, **Face** and **Body** geometric reconstruction

Patents

· An Anti-motion sickness seat and method for seat balance adjustment (CN104972932A)

· A wearable electromyography arm ring (CN104586391A)

· A deep learning based surface light field rendering method for mobile device (CN109829967A)

· Method for Real-Time Rendering of Giga-Pixel Images (US Patent: 16970632)

Academic Experience

Winter 2020
1 year

Research Assistant at UCSD SU Lab | Advisor: Hao Su and Zexiang Xu

Working on multi-view stereo reconstruction and neural rendering. More specifically, our gold is to design a fast generalizable radiance field reconstruction from Multi-View Stereo that we can reason new scenes just from a few sparse image samples.

Winter 2018
4 months

Intern at Disney Research LA, *Lab Associate* | Mentor: Kenny Mitchell

Worked on global illumination rendering and human-to-cartoon body reconstruction system. More specifically, attempt to peed up path tracing process via optimizing the light path sampling algorithm according to its' temporal ray samples. I also took part in a human-to-cartoon project and in charge of recovering dynamic facial wrinkles. We submitted two patents during the internship.

Summer 2016
3 months

Intern at DGene, *Engineer* | DGene

Worked on virtual reality device, object reconstruction and rendering. Stereo Video player on HTC Vive, fast refocusing algorithm with RGBD panorama input. And preparing a demo of digitalis products (Tang San Cai, bottle and handBag etc.) for Alibaba Buy+ Act. Our solution is demonstrated on the conference due to its' high data compression performance (2000 : 1) and we also published a paper on I3D'18.

Selected Publications

· MVSNeRF: Fast Generalizable Radiance Field Reconstruction from Multi-View Stereo
Anpei Chen*, Zexiang Xu*, Fuqiang Zhao, Xiaoshuai Zhang, Fanbo Xiang, Jingyi Yu, Hao Su
(ICCV'21) [project page] [paper] [code]

· GNeRF: GAN-based Neural Radiance Field without Posed Camera
Quan Meng, **Anpei Chen**, Haimin Luo, Minye Wu, Hao Su, Lan Xu, Xuming He, Jingyi Yu
(ICCV'21 (Oral)) [paper]

· SofGAN: A Portrait Image Generator with Dynamic Styling
Anpei Chen*, Ruiyang Liu*, Ling Xie, Zhang Chen, Hao Su and Jingyi Yu
(TOG) [project page] [code]

· A Neural Rendering Framework for Free-Viewpoint Relighting
Zhang Chen, **Anpei Chen**, Guli Zhang, Chengyuan Wang, Yu Ji, Kiriakos N. Kutulakos, Jingyi Yu
(CVPR'20) [paper] [code]

· Photo-Realistic Facial Details Synthesis From Single Image
Anpei Chen, Zhang Chen, Guli Zhang, Ziheng Zhang, Kenny Mitchell, Jingyi Yu
(ICCV'19 Oral) [paper] [code] [slides] [video]

· Learning Semantics-aware Distance Map with Semantics Layering Network for Amodal Instance Segmentation
Ziheng Zhang*, **Anpei Chen***, Ling Xie, Jingyi Yu, Shenghua Gao
(ACM MM'19) [paper] [code]

· Deep Surface Light Fields
Anpei Chen, Minye Wu, Yingliang Zhang, Nianyi Li, Jie Lu, Shenghua Gao and Jingyi Yu
(I3D'18) [paper] [video] [slides]