Hanyuan Xiao

https://corneliushsiao.github.io/index.html

Introduction

I am a PhD student in Vision and Graphics Lab at Institute for Creative Technologies (ICT), an affiliated institution of University of Southern California. My research area includes interdisciplinary area of Computer Vision and Computer Graphics. My focus is on human performance capturing and neural rendering in particular.

EDUCATION

• University of Southern California (USC)

• Doctorate (PhD) in Computer Science; GPA: 3.87

Los Angeles, CA

May 2024

Email: hanyuanx@usc.edu

Mobile: (518)407-9398

University of Southern California (USC)

Los Angeles, CA

Master of Science (M.S.) in Data Science; GPA: 3.87

May 2021

Rensselaer Polytechnic Institute (RPI)

Troy, NY

Bachelor of Science (B.S.) in Computer Science and Electrical Engineering (dual major); GPA: 3.95

May 2019

o Honor: Dean's Honor List (2015-2018), Distinguished Student

PATENT & PUBLICATIONS

Systems and Methods for Physically-based Neural Face Shader via Volumetric Lightmaps U.S. Provisional Application Serial No. 63/183,497

2021-185. Topologically Consistent Multi-View Face Inference Using Volumetric Sampling

NP REF: 065715-000125US00

Related Research & Projects

_	\mathbf{High}	Resc	olution	Relightable	Volumetric	Capturing	of Humans
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Los Angeles, CA

Research project

January 2022 — present

MVS-PERF: Multiview SMPL-X and Clothes Performance Capture using NeRF

Los Angeles, CA

Internship project
FaceReal: Physically-based Neural Face Shader via Volumetric Lightmaps

May 2021 — December 2021 Los Angeles, CA

Research project

October 2020 — May 2022

3D Scene Segmentation and Reconstruction

Los Angeles, CA

Research project

May 2020 — October 2020

3D Stitching and Reconstruction

 ${\rm Los\ Angeles,\ CA} \\ September\ 2019\ --\ March\ 2020$

Research project

Los Angeles, CA

• Food Method GAN

Course project

 $September\ 2019\ --\ December\ 2019$

Water Freezing Simulation

Los Angeles, CA

Course project

November 2019 — December 2019

VR Acquisition & Application Development for School of Engineering Research

Troy, NY

Undergraduate Researcher

January 2018 — Spring 2019

RECENT RELATED COURSES

• Differential Geometry	2022 Spring
• Numerical Analysis	2022 Spring
• Advanced Computer Vision	2020 Fall
• Deep Learning and its Applications	2019 Fall
• 3-D Graphics and Rendering	2019 Fall
Machine Learning From Data	2018 Fall
Digital Signal Processing	2018 Fall

SKILLS

- Programming Languages: Python, C++, C, Matlab, LaTeX, HTML
- Software: Blender, Autodesk Maya, OpenCV, PyTorch, Tensorflow, Meshlab, SteamVR, MS Office
- Hardware: Arduino, AutoCAD, PSpice
- OS: Windows, Linux, Mac OS

WORK EXPERIENCE

Teaching Assistant

Los Angeles, CA

Introduction to Artificial Intelligence

January 2022 — May 2023

Teaching Assistant

Los Angeles, CA

Picconta Mathodo in Computer Science

Contamber 2002 Proceeding 2002

Discrete Methods in Computer Science September 2022 — December 2022

Intern Researcher
San Jose, CA
Sony R&D Center
May 2021 — December 2021

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Teaching Assistant

Los Angeles, CA

Data Structures and Object Oriented Design

January 2021 — December 2021

Teaching Assistant Troy, NY

Laboratory Introduction to Embedded Control

September 2016 — May 2019

LANGUAGES

Chinese (Mandarin)

5 - Native fluency

English

• 5 - Bilingual fluency