

INTRODUCTION

I am a PhD candidate in Vision and Graphics Lab at Institute for Creative Technologies (ICT), an affiliated institution of University of Southern California. My current supervisor is Dr. Yajie Zhao. My research area is in 3D AIGC and interactive neural representation and rendering. Besides, I had some experience in human performance capture.

EDUCATION

- **University of Southern California (USC)** Los Angeles, CA
Doctorate (PhD) in Computer Science; GPA: 3.88 May 2026
- **University of Southern California (USC)** Los Angeles, CA
Master of Science (M.S.) in Data Science; GPA: 3.88 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
 - **Honor:** Dean's Honor List (2015-2018), Distinguished Student

PUBLICATIONS & PATENTS

- **SparseGS: Real-Time 360° Sparse View Synthesis using Gaussian Splatting**
Under review of 3DV 2025
- **Localized Gaussian Splatting Editing with Contextual Awareness**
WACV 2025
- **Light Sampling Field and BRDF Representation for Physically-Based Neural Rendering**
ICLR 2023 Poster
- **Multiview Neural Human Prediction Using Implicit Differentiable Renderer For Facial Expression, Body Pose Shape And Clothes Performance Capture**
US 2022/0319055 A1
- **Systems and Methods for Physically-based Neural Face Shader via Volumetric Lightmaps**
U.S. Provisional Application Serial No. 63/183,497

RELATED RESEARCH & PROJECTS

- **Authoring Materials for Physically-based Rendering**
Research project
- **Free-View Volumetric Human Body Capture via Sparse Representation**
Research project
- **MVS-PERF: Multiview SMPL-X and Clothes Performance Capture using NeRF**
Internship project
- **Light Sampling Field and BRDF Representation for Physically-Based Neural Rendering**
Research project
- **One-shot Aerial: 3D Scene Segmentation and Reconstruction from Aerial Viewpoint**
Research project
- **3D Reconstruction of Rigid Objects by Correspondence**
Research project
- **Food Method GAN**
Course project
- **Water Freezing Simulation**
Course project
- **VR Acquisition & Application Development for School of Engineering Research**
Undergraduate Researcher

WORK EXPERIENCE

- **Teaching Assistant** Los Angeles, CA
Introduction to Artificial Intelligence *January 2022 — Present*
- **Teaching Assistant** Los Angeles, CA
Discrete Methods in Computer Science *September 2022 — December 2022*
- **Research Intern** San Jose, CA
Sony R&D Center *May 2021 — December 2021*
 - **Mentor:** Qing Zhang
 - **Manager:** Kenji Tashiro
 - **Topic:** Multi-view Neural Human Performance Capture
- **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*

RELATED COURSEWORKS

- **Differential Geometry** 2023 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
- **Software:** Blender, Autodesk Maya, Matlab

LANGUAGES

- **Chinese (Mandarin)**
Native
- **English**
Bilingual fluency

HOBBIES

- **Fitness Enthusiast**
A 5-year commitment to a workout routine at gym or at home (during pandemic)