LUYANG ZHU

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EDUCATION

University of Washington, Seattle, WA, USA

Sept. 2018-June 2024

Ph.D. in Computer Science & Engineering

Advisor: Ira Kemelmacher-Shlizerman, Steve Seitz, Brian Curless

University of Washington, Seattle, WA, USA

Sept. 2018-March 2024

Master in Computer Science & Engineering

Advisor: Ira Kemelmacher-Shlizerman, Steve Seitz, Brian Curless

Peking University, Beijing, China

Sept. 2014-July 2018

B.S. in Computer Science, Summa Cum Laude

Advisor: Yizhou Wang

WORKING EXPERIENCE

Member of Technical staff, World Labs Technologies Inc

June. 2024 - Present

Manager: Fei-Fei Li

Generative AI for spatial intelligence.

Student Researcher, Google

June. 2022 - Feb 2024

Advisor: Dawei Yang, Ira Kemelmacher-Shlizerman

Diffusion Models for Virtual Try-On.

Research Intern, Adobe

June. 2021 - Sept 2021

Advisor: Ruben Villegas, Jimei Yang, Jun Saito, Aaron Hertzmann

Learning physics-based human motion prior with VAE.

Research Intern, NVIDIA

June. 2020 - Sept 2020

Advisor: Arsalan Mousavian, Yu Xiang, Dieter Fox

Neural implicit representation for depth completion of transparent objects.

PUBLICATIONS

- 1. Georgios Pavlakos, **Luyang Zhu**, Xiaowei Zhou, Kostas Daniilidis, Learning to Estimate 3D Human Pose and Shape from a Single Color Image, CVPR, 2018.
- 2. Luyang Zhu, Konstantinos Rematas, Brian Curless, Steve Seitz, and Ira Kemelmacher-Shlizerman, Reconstructing NBA players, ECCV, 2020. (Spotlight)
- 3. Luyang Zhu, Arsalan Mousavian, Yu Xiang, Hammad Mazhar, Jozef van Eenbergen, Shoubhik Debnath, Dieter Fox, RGB-D Local Implicit Function for Depth Completion of Transparent Objects, CVPR, 2021.
- 4. **Luyang Zhu**, Dawei Yang, Tyler Zhu, Fitsum Reda, William Chan, Chitwan Saharia, Mohammad Norouzi, Ira Kemelmacher-Shlizerman, TryOnDiffusion: A Tale of Two UNets, CVPR, 2023.
- 5. **Luyang Zhu**, Yingwei Li, Nan Liu, Hao Peng, Dawei Yang, Ira Kemelmacher-Shlizerman, M&M VTO: Multi-Garment Virtual Try-On and Editing, CVPR, 2024. (Highlight)
- 6. Johanna Karras, Yingwei Li, Nan Liu, **Luyang Zhu**, Innfarn Yoo, Andreas Lugmayr, Chris Lee, Ira Kemelmacher-Shlizerman, Fashion-VDM: Video Diffusion Model for Virtual Try-On, SIGGRAPH

RESEARCH EXPERIENCE

Research Assistant, University of Washington

Sept. 2018-June 2024

Advisor: Ira Kemelmacher-Shlizerman, Brian Curless, Steven Seitz

Reconstruct Basketball Players from a Single Image

Physics Based Neural Motion Reconstruction

Diffusion models for Virtual Try-on

Research Assistant, University of Pennsylvania

June 2017-Nov. 2017

Advisor: Kostas Daniilidis

Learning to Estimate 3D Human Pose and Shape from a Single Color Image

Shape and Pose Prediction with Multi-view Depth Representation

Research Assistant, Peking University

Sept. 2016-June 2017

Advisor: Yizhou Wang

Depth Estimation and Semantic Segmentation from a Single Image using Generative Adversarial Network (GAN)

SELECTED AWARDS AND HONORS

University of Washington Reality Lab Fellowship, University of Washington	2018-2022
B.S. degree with Summa Cum Laude, Peking University	2018
Excellent Graduate, Peking University	2018
MCM/ICM Interdisciplinary Contest in Modeling® Finalist(0.4%, 11/3663)	2017
Award for Excellent Research Performances, Peking University	2016-2017
Kwang-Hua Scholarship(Top 10%), Peking university	2016-2017
Award for Excellent Research Performances, Peking University	2015-2016
Kwang-Hua Scholarship(Top 10%), Peking university	2015-2016
Award for Excellent Academic Performances, Peking University	2014-2015
Kwang-Hua Scholarship(Top 10%), Peking university	2014-2015

OTHER PROJECTS

EconoExtract: An LLM-Powered Summarization Tool for Economics Research

Aurelia Di, Luyang Zhu

Received \$8,000 funding from the OpenAI Researcher Access Program (#ID: 0000008067)

TEACHING

Teaching Assistant, University of Washington

Autumn 2022

CSE490G1 Introduction to Deep Learning

Teaching Assistant, University of Washington

Spring 2021

CSE481V VR Capstone

ACADEMIC SERVICE

SKILLS

Programming languages: Python, C/C++, CUDA, HTML

Tools: Jax, Pytorch, Apache beam.