MENG- LI SHIH

Personal Website: https://shihmengli.github.io/

Email: mlshih@cs.washington.edu

EDUCATION Ph.D., University of Washington, Computer Science and Engineering

Date: Sep. 2021 – Present Advisor: Prof. Brian Curless

M.Sc. National Tsing Hua University, Electrical Engineering

Date: Sep. 2017 - Mar.2020

Thesis: "Dlwv2: a deep learning-based wearable vision-system with vibrotactile-feedback for visually impaired people to reach objects"

Advisor: Min Sun

B.Sc. National Tsing Hua University, Electrical Engineering

Date: Sep. 2013 – Jun.2017 Overall GPA: 3.98/4.30

RESEARCH & WORK EXPERIENCE

Visiting Student @ Virginia Tech

• 3D Photography using Context-aware Layered Depth Inpainting [Paper][Project Page][Code]

Student Intern @ MediaTek

• Work on multi-frame based image signal processing

Research Intern @ Google (June 2022 - June 2023)

• Work on video-based novel view synthesis

Research Intern @ Meta (June 2023 - Dec 2023)

• Work on novel view synthesis using Gaussian Splatting

TEACHING EXPERIENCE

Teaching Assistant

- Computer Vision, Fall 2018
- Signal and Systems, Spring 2018

Publications Conference Papers

- Meng-Li Shih, Jia-Bin Huang, Changil Kim, Rajvi Shah, Johannes Kopf, Chen Gao, "Modeling Ambient Scene Dynamics for Free-view Synthesis" Siggraph, 2024. [Paper]
- Meng-Li Shih, Wei-Chiu Ma, Lorenzo Boyice, Aleksander Holynski, Forrester Cole, Brian L. Curless, Janne Kontkanen, "ExtraNeRF: Visibility-Aware View Extrapolation of Neural Radiance Fields with Diffusion Models" CVPR, 2024. [Paper]
- Meng-Li Shih, Shih-Yang Su, Johannes Kopf, Jia-Bin Huang, "3D Photography using Context-aware Layered Depth Inpainting" CVPR, 2020. [Paper]
- Fu-En Wang, Hou-Ning Hu, Hsien-Tzu Cheng, Juan-Ting Lin, Shang-Ta Yang, **Meng-Li Shih**, Hung-Kuo Chu, Min Sun, "Self-supervised Learning of Depth and Camera Motion from 360 Videos" ACCV, 2018. [Paper]
- Meng-Li Shih, Yi-Chun Chen, Chia-Yu Tung, Cheng Sun, Ching-Ju Cheng, Liwei Chan, Srenivas Varadarajan, Min Sun, "DLWV2: a Deep Learning-based Wearable Vision-system with Vibrotactile-feedback for Visually Impaired People to Reach Objects." IROS, 2018. [Paper]
- Yen-Chen Lin, Zhang-Wei Hong, Yuan-Hong Liao, Meng-Li Shih, Ming-Yu Liu, and Min Sun, "Tactics of Adversarial Attack on Deep Reinforcement Learning Agent." IJCAI, 2017. [Paper]

TECHNICAL STRENGTH

Deep Learning Framework Programming Language Typesetting PyTorch C, C++, Python Latex