Kaizhang Kang

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Education

Sep. 2018 - June 2023 (expected) **Zhejiang University**

Ph.D. in Computer Science (Supervised by Hongzhi Wu)

Sep. 2014 - June 2018 **Zhejiang University**

B.S. in Computer Science
Honors Degree from Chu Kochen Honors College

Research Interests

My research interests include appearance/geometry acquisition & modeling. Based on the proposed differentiable acquisition framework, the published works mainly focus on how to efficiently and accurately digitize real objects.

Publications

- **Neural Reflectance Capture in the View-Illumination Domain**

  ***Kaizhang Kang**, Minyi Gu, Cihui Xie, Xuanda Yang, Hongzhi Wu and Kun Zhou*
  *accepted by **TVCG***

- **Learning Efficient Photometric Feature Transform for Multi-view Stereo**

  ***Kaizhang Kang**, Cihui Xie, Ruisheng Zhu, Xiaohe Ma, Ping Tan, Hongzhi Wu and Kun Zhou*
  ICCV 2021

- **Free-form Scanning of Non-planar Appearance with Neural Trace Photography**

  *Xiaohe Ma, **Kaizhang Kang**, Ruisheng Zhu, Hongzhi Wu and Kun Zhou*
  *ACM Trans. Graph. (Proc. **SIGGRAPH 2021**), 40, 4 (Aug. 2021), 124.*

- **Learning Efficient Illumination Multiplexing for Joint Capture of Reflectance and Shape**

  ***Kaizhang Kang**, Cihui Xie, Chengan He, Mingqi Yi, Minyi Gu, Zimin Chen, Kun Zhou and Hongzhi Wu*
  *ACM Trans. Graph. (Proc. **SIGGRAPH Asia 2019**), 38, 6 (Nov. 2019), 165.*

- **Efficient Reflectance Capture Using an Autoencoder**

  ***Kaizhang Kang**, Zimin Chen, Jiaping Wang, Kun Zhou and Hongzhi Wu*
  *ACM Trans. on Graphics (Proc. **SIGGRAPH 2018**), 37, 4 (Aug. 2018), 127.*

Honors & Awards

ACM SIGGRAPH Student Research Competition (2nd Place, Undergraduate Category) 2018

Microsoft Research Asia Fellowship 2021

Lu Zengyong CAD&CG High Technology Award (2nd Place) 2019

Work Experience

Aug. 2022 - Jan. 2023 Meta Reality Labs
Research Scientist Intern.

The project is to estimate apperance of human head with multi-view images under any lighting condition.

Skills

- **Deep learning.** I used deep learning in previous works to solve 3D modeling problems for both geometry and appearance, and the implementations are done with Pytorch and Tensorflow.
- **Computer vision & graphics.** My research in the past 4 years mainly focuses on Computer vision & graphics about how to digitize 3D objects in both high efficiency and high quality manner.
- **Hardware design.** I built hardware prototypes of lightstage and hand-held scanner from scratch, including PCB design, FPGA programming.

Languages

English	Proficient
Mandarin	Native
Japanese	Competent

Invited Talks

Nov. 2022
Computer Graphics Group (Julie Dorsey & Holly Rushmeier Lab), Yale
Differentiable Acquisition of Appearance & Shape

Mar. 2022
Smart Geometry Processing Group (Niloy Mitra Lab), UCL
Differentiable Acquisition of Appearance & Shape

Dec. 2019
Graphics And Mixed Environment Seminar (Online)
Learning Efficient Illumination Multiplexing for Joint Capture of Reflectance and Shape

Referees

Name	Hongzhi Wu
Affiliation	State Key Lab of CAD&CG, Zhejiang University
Position	Professor
Homepage	http://hongzhiwu.com
Contact	hwu@acm.org

Name	Kun Zhou
Affiliation	State Key Lab of CAD&CG, Zhejiang University
Position	Cheung Kong Professor, Director of State Key Lab of CAD&CG
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