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*
  Proc. ***ICCV 2021****, pp. 5956-5965*

- **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

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

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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