

Cheng'an HE

Curriculum Vitae

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Education

- Since 2019 **Yale University, New Haven, USA**
Ph.D. in Computer Science
Advisors: Prof. Julie Dorsey, Prof. Holly Rushmeier
- 2015 - 2019 **Zhejiang University, Hangzhou, China**
B.E. in Computer Science and Technology
Advisor: Prof. Hongzhi Wu
Thesis: *Image-based Reconstruction of High-precision 3D Geometry and Material*

Research Interests

My research interests lie in the area of computer graphics with some previous projects covering 3D reconstruction, reflectance capture, appearance modeling, and motion synthesis. Currently, my work focuses on implicit neural representation, which leverages emerging neural representations such as NeRF and SIREN to solve inverse rendering problems.

Publications

- Yiwei Hu, **Chengan He**, Valentin Deschaintre, Julie Dorsey, Holly Rushmeier. **An Inverse Procedural Modeling Pipeline for SVBRDF Maps**. arXiv 2021
- Kaizhang Kang, Cihui Xie, **Chengan He**, Mingqi Yi, Minyi Gu, Zimin Chen, Kun Zhou, Hongzhi Wu. **Learning Efficient Illumination Multiplexing for Joint Capture of Reflectance and Shape**. ACM Transactions on Graphics (SIGGRAPH Asia 2019), 38(6)

Research Experience

- Since 2019 **Ph.D. Candidate at Yale Computer Graphics Group, Yale University**
Advisors: Prof. Julie Dorsey, Prof. Holly Rushmeier
Topic: Implicit neural representation in computer graphics
- 2017 - 2019 **Research Assistant at State Key Lab of CAD&CG, Zhejiang University**
Advisor: Prof. Hongzhi Wu
Topic: Reflectance capture and shape reconstruction
- Summer 2018 **Research Assistant at University of California, Davis**
Advisor: Prof. Michael Neff
Topic: Real-time 3D scene reconstruction

Work Experience

- Summer 2021 **Research Intern at Adobe, San Jose, USA (Remote)**
Mentors: Dr. Yi Zhou, Dr. Jun Saito
Topic: Automatic character motion inbetweening
- Summer 2019 **Research Intern at miHoYo, Shanghai, China**
Mentor: Dr. Jun Xing
Topic: Stylized texture synthesis

Teaching Experience

Fall 2021 CPSC 446/546: Data and Information Visualization

Teaching Assistant

Selected Awards and Honors

National Scholarship, China Ministry of Education

2018

Scholarship for Academic Excellence, Zhejiang University

2016, 2018

Meritorious Winner, Interdisciplinary Contest in Modeling

2018