RUILONG LI

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I'm currently a second-year Ph.D student in the Vision & Graphics Lab of USC, advised by Prof. Hao Li. My current research interests widely spread in Computer Vision & Graphics & Machine Learning, especially in representation learning of human body and motion.

EDUCATION

Ph.D - University of Southern California, Los Angeles, USA

Sept. 2019 - Present

Major: Computer Science

Research Group: Vision & Graphics Lab

Advisor: Prof. Hao Li

Research Topics: 3D human digitization and generation.

M.S. - Tsinghua University, Beijing, China

Sept. 2016 - July 2019

Major: Computer Science and Technology

Research Group: Graphics & Geometry Computing Group Co-Advisor: Prof. Shi-Min Hu and Prof. Song-Hai Zhang

Research Topics: Image detection, segmentation; Human pose estimation; Image generation.

B.S. - Tsinghua University, Beijing, China

Sept. 2012 - July 2016

Major: Mathematics and Physics

PULICATIONS

Ruilong Li, Kyle Olszewski, Yuliang Xiu, Shunsuke Saito, Zeng Huang and Hao Li. Volumetric Human Teleportation. Siggraph Real-time Live 2020. [Link] Best of Show Award

Ruilong Li*, Yuliang Xiu*, Shunsuke Saito, Zeng Huang, Kyle Olszewski and Hao Li. *Monocular Real-Time Volumetric Performance Capture.* ECCV 2020. [Link] (* equal contribution)

Ruilong Li*, Karl Bladin*, Yajie Zhao*, Chinmay Chinara, Owen Ingraham, Pengda Xiang, Xinglei Ren, Pratusha Prasad, Bipin Kishore, Jun Xing and Hao Li. *Learning Formation of Physically-Based Face Attributes*. CVPR 2020. [Link] (* equal contribution)

Miao Wang, Guo-Ye Yang, **Ruilong Li**, Run-Ze Liang, Song-Hai Zhang, Peter Hall and Shi-Min Hu. Example-Guided Image Synthesis using Adversarial Networks with Genre Consistency. **CVPR 2019**. [Link]

Song-Hai Zhang, Ruilong Li †, Xin Dong, Paul L. Rosin, Zixi Cai, Xi Han, Dingcheng Yang, Haozhi Huang and Shi-Min Hu. *Pose2Seg: Detection Free Human Instance Segmentation*. **CVPR 2019**. († first student author) [Link]

Xian Wu, Ruilong Li, Fang-Lue Zhang, Jian-Cheng Liu, Jue Wang, Ariel Shamir and Shi-Min Hu. Deep Portrait Image Completion and Extrapolation. IEEE Transactions on Image Processing (TIP) 2019. [Link]

Fang-Lue Zhang, Xian Wu, RuiLong Li, Zhao-Heng Zheng, Jue Wang and Shi-Min Hu. Detecting and Removing Visual Distractors for Video Aesthetic Enhancement. IEEE Transactions on Multimedia (TMM) 2018. [Link]

ACADEMIC SERVICES

Reviewer: CVPR20, CVPR21, ACCV20, WACV21.

INTERNSHIP

Google Research, Mountain View, CA, USA

May 2020 - Present

Research Intern

- · Group: Perception Team
- · Research topic: Conditional music 3D human motion generation.
- · Mentor: Shan Yang and Angjoo Kanazawa

Bytedance AI Lab, Beijing, China

June 2017 - Aug. 2017

Research Intern

- · Research topic: Real-time CNN on mobile device for hair matting and re-color.
- · Algorithm integrated into FaceU APP, becoming the top selfie filter most commonly used in the quarter.

AWARDS & HONORS

Best of Show Award, Siggraph Real-time Live!.	2020
6th/182, AIChallenger Global Competition, Human Pose Estimation Track.	2017
Kwang-Hua Scholarship, Tsinghua University	2014
Top 200 (0.04%), Chinese Physics Olympiad (CPhO)	2012

PATENTS IN CHINA

Tsinghua University, Multi-stage CNN-based portrait segmentation method and device. Shi-Min Hu, Song-Hai Zhang, Ruilong Li, Xin Dong. 201810724647.7. Patent Pending.

Tsinghua University, Real-time portrait segmentation method on mobile device. Shi-Min Hu, Song-Hai Zhang, Xin Dong, Ruilong Li. 201811204098.7. Patent Pending.

TEACHING ASSITANT

C++ Programming Design, Tsinghua University.

Spring 2017

SKILLS & TESTS

Skilled Knowledge: Python, Matlab

Basic Knowledge: JavaScript, Html, CSS, Linux

Techniques: OpenGL, OpenCV, Pytorch, Caffe, Tensorflow