Qi Sun

www.qisun.me qisun0@gmail.com

WORK Research Scientist

June 2018 - Now

• Adobe Research, San Jose, CA

EDUCATION Doctor of Philosophy

Aug. 2013 - May 2018

 Center of Visual Computing, Computer Science, Stony Brook University Advisor: Distinguished Professor Arie Kaufman Dissertation: Computational Methods for Immersive Perception

Committee: Arie Kaufman, Hong Qin, Xiaojun Bi, David Luebke, Li-Yi Wei

Bachelor of Science Aug. 2013

• Mathematics

Taishan Honors College, Shandong University, China Sep. 2010 - Aug. 2013

• Computer Science Shandong University, China

Sep. 2009 - Sep. 2010

PUBLICATIONS

Reducing Simulator Sickness with Perceptual Camera Control

Ping Hu, **Qi Sun**, Piotr Didyk, Li-Yi Wei, Arie Kaufman SIGGRAPH Asia 2019

Learning to Reconstruct 3D Manhattan Wireframes from a Single Image Yichao Zhou, Haozhi Qi, Simon Zhai, Qi Sun, Zhili Chen, Li-Yi Wei, Yi Ma ICCV (Oral Presentation) 2019

A Transparent Display with Per-Pixel Color and Opacity Control

TJ Rhodes, Gavin Miller, Li-Yi Wei, **Qi Sun**, Daichi Ito SIGGRAPH 2019 Emerging Technologies

Towards Virtual Reality Infinite Walking: Dynamic Saccadic Redirection

Qi Sun, Anjul Patney, Li-Yi Wei, Omer Shapira, Jingwan Lu, Paul Asente, Suwen Zhu, Morgan McGuire, David Luebke, Arie Kaufman SIGGRAPH 2018

Perceptually-Guided Foveation for Light Field Displays

Qi Sun, Fu-Chung Huang, Joohwan Kim, Li-Yi Wei, David Luebke, Arie Kaufman SIGGRAPH Asia 2017

Perceptual Studies for Foveated Light Field Displays

Joohwan Kim, **Qi Sun**, Fu-Chung Huang, Li-Yi Wei, David Luebke, Arie Kaufman arXiv:1708.06034

Mapping Virtual and Physical Reality Qi Sun, Li-Yi Wei and Arie E. Kaufman SIGGRAPH 2016

Poster: Buyers Satisfaction in A Virtual Fitting Room Scenario Based on Realism of Avatar

Qi Sun, Seyedkoosha Mirhosseini, Ievgeniia Gutenko, Ji Hwan Park, Charilaos Papadopoulos, Bireswar Laha, and Arie E. Kaufman IEEE Symposium on 3D User Interfaces, 3DUI 2015

Benefits of 3D Immersion for Virtual Colonoscopy

Koosha Mirhosseini, **Qi Sun**, Krishna Gurijala, Bireswar Laha, Arie Kaufman IEEE Visualization Workshop on 3DVis 2014

Data-Driven Human Motion Synthesis Based on Angular Momentum Analysis

Ping Hu, Qi Sun, Xiangxu Meng, and Jingliang Peng

IEEE International Symposium on Circuits and Systems, IEEE-ISCAS 2013

Modeling 3D Faces from Samplings via Compressive Sensing

Qi Sun, Yanlong Tang, and Ping Hu

International Conference on Digital Image Processing, ICDIP 2013

Kinect-Based Automatic 3D High-Resolution Face Modeling

Qi Sun, Yanlong Tang, Ping Hu, and Jingliang Peng

International Conference on Image Analysis and Signal Processing, IEEE-IASP 2012

EXPERIENCE Research Intern

Jul. 2017 - Sep. 2017

April. 2017 - Jul. 2017

Adobe Research, Procedural Imaging Group (San Jose, CA)

- Augmented Reality
- With Paul Asente, Cynthia Lu and Li-Yi Wei

Research Intern

NVIDIA Research, New Experiences Group (Redmond, WA)

- Computational perception in VR
- With Anjul Patney, Morgan McGuire, Omer Shapira, Aaron Lefohn and David Luebke

Research Intern

Jun. 2016 - Aug. 2016

NVIDIA Research, New Experiences Group (Santa Clara, CA)

- Computational display and perceptual rendering for next generation VR.
- With Fu-Chung Huang, Joohwan Kim and David Luebke

Research Intern

Nov. 2012 - Feb. 2013

Microsoft Research Asia, Hardware Computing Group (Beijing, China)

Audio-visual fused interaction.

PRESS/MEDIA Towards Virtual Reality Infinite Walking

BBC Click TV Program, SIGGRAPH blog, IEEE, Adobe News, NVIDIA Blog, Two Minute Papers, Stony Brook News, Road to VR, Hackaday, VR Focus, VR World, Inverse, ScienceDaily, eurekAlert, newsAtlas, Sohu.com (Chinese), RedShark News, VR Soldier, Stylus, InAVate, 4gamer (Japanese) Virtual Reality Magazine (German), Microsiervos (Spanish) etc.

Mapping Virtual and Physical Reality

SIGGRAPH Technical Papers Preview, Business Wire, Seamless Virtual Reality News (Japanese), leiphone.com/sina.cn etc. (Chinese), Tencent gameinstitute 2016 white paper, Game II DOOSAN Gallery New York

Perceptually-Guided Foveation for Light Field Displays

Road to VR, Seamless Virtual Reality News (Japanese)

TEACHING/	
ADVISTING	

Guest Lecturer

CSE 564: Visualization, Stony Brook University 2018 Spring

Teaching Assistant

CSE 214: Computer Science II, Stony Brook University 2013 Fall

Mentor

CSE 593: Independent Study in Computer Science,

Stony Brook University 2013 Fall, 2014 Spring

Advisees

Yuanming Hu, PhD student at MIT

Sandra Malpica, PhD student at University of Zaragoza

Yichao Zhou, PhD student at UC Berkeley

Dushyant Goyal, Masters student at Stony Brook University, Now Machine Learning Research Engineer at Element Inc

INVITED TALKS Human Learning: Understanding and Computing the Eyes and Brain in VR

Schloss Dagstuhl, Wadern, Germany	2019
Max-Planck-Institut für Informatik, Saarbrücken, Germany	2019
Peking University, Beijing, China	2019
Zhejiang University, Hangzhou, China	2019
USTC, Hefei, China	2019
Microsoft Research Asia, Beijing, China	2019
miHoYo Research, Shanghai, China	2019

Industrial Innovations in the Age of VR/AR

	O	
Wayfair Inc., Boston, MA		2019

Towards Virtual Reality Infinite Walking, Talk & Live Demo

Adobe Tech Summit, San Francisco, CA	2019
GPU Technology Conference (GTC), San Jose, CA	2018

Computational Methods for Immersive Perception

Harvard University, Cambridge, MA	2018
University of Florida, Gainesville, FL	2018
Adobe Research, San Jose, CA	2017
games-cn Webinar	2017

SERVICE Conference Committee

ACM SIGGRAPH Asia Technical Briefs and Posters	2019
ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (i3D)	2019
Reviewer	

ACM SIGGRAPH, IEEE Visualization, Computer Graphics Forum (CGF), ACM

Transaction on Graphics (TOG), ACM User Interface Software and Technology (UIST), ACM i3D, IEEE 3D User Interfaces (3DUI), IEEE VR [both Conference and Journal tracks], IEEE ISMAR, ACM Symposium on Applied Perception (SAP), IEEE Consumer Electronics Magazine

2018

Other

Adobe Research PhD fellowship committee

AWARDS Stony Brook Computer Science Special Chair Fellowship 2013 - 2014
Outstanding Bachelor Thesis Award of Shandong Province, China 2013