

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 E. Kaufman
Thesis: Computational Methods for Immersive Perception
- Bachelor of Science** Aug. 2013
- Mathematics
Taishan Honors College, Shandong University, China Sep. 2010 - Aug. 2013
 - Computer Science and Technology
Shandong University, China Sep. 2009 - Sep. 2010
- PUBLICATIONS** **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

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

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

Research Intern

April. 2017 - Jul. 2017

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 Assistant

Jan. 2014 - present

Stony Brook University

Research Interests: parameterization, non-linear rendering, point cloud processing/modeling and their applications in virtual reality and scientific visualization.

Research Intern

Nov. 2012 - Feb. 2013

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

- Worked on an audio-visual fusion project for detecting Kinect users' attention in order to optimize the device's response.
- Developed a data set for camera-based gaze estimation in remote scenario.

Undergraduate Research Assistant

Sep. 2010 - Nov. 2012

Research Center for HCI and VR

Shandong University, Jinan, China

PRESS/MEDIA

Road to VR, Hackaday, VR Focus, VR World, Inverse, ScienceDaily, eurekaAlert, newsAtlas, SIGGRAPH blog, Sohu.com etc.

Towards Virtual Reality Infinite Walking

Business Wire (SIGGRAPH Technical Papers Preview), Seamless Virtual Reality News (Japanese), leiphone.com/sina.cn etc. (Chinese), Tencent gameinstitute

2016 white paper, Game II DOOSAN Gallery New York

Mapping Virtual and Physical Reality

Road to VR, Seamless Virtual Reality News (Japanese)
Perceptually-Guided Foveation for Light Field Displays

TEACHING/ MENTORING	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
INVITED TALKS	Towards Virtual Reality Infinite Walking GPU Technology Conference (GTC), San Jose 2018	
	Computational Methods for Immersive Perception Harvard University, Cambridge 2018 University of Florida, Gainesville 2018 Adobe Research, San Jose 2017 games-cn Webinar 2017	
SERVICE	Reviewer SIGGRAPH, IEEE VIS, Computer Graphics Forum (CGF), ACM Transaction on Graphics (TOG), UIST, IEEE 3DUI, IEEE VR, IEEE Consumer Electronics Magazine	
AWARDS	Stony Brook Computer Science Special Chair Fellowship	2013 - 2014
	Outstanding Bachelor Thesis Award of Shandong Province, China	2013
SKILLS	Programming Languages: C++, Python, Matlab, C#, C, Shell Libraries and Tools: OpenGL, GLSL, HLSL, Unity Engine, NVIDIA CUDA/OptiX, Numerical Optimization (Ceres, Mosek etc), CGAL, PCL, Kinect, \LaTeX	