

# Qi Sun

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- 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, Joochwan 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**

**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, eurekaAlert, newsAtlas, Sohu.com (Chinese), Red-Shark News, VR Soldier, Stylus, InAVate, 4gamer (Japanese) Virtual Reality Magazine (German), Microsiervos (Spanish) etc.**

Towards Virtual Reality Infinite Walking

**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**  
Mapping Virtual and Physical Reality

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

**TEACHING/  
ADVISING**

**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**  
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/  
EXHIBITIONS**

**Towards Virtual Reality Infinite Walking, Talk & Live Demo**  
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**  
ACM SIGGRAPH, IEEE Visualization, Computer Graphics Forum (CGF), ACM Transaction on Graphics (TOG), ACM User Interface Software and Technology (UIST), IEEE 3D User Interfaces (3DUI), IEEE VR [both Conference and Journal tracks], IEEE Consumer Electronics Magazine

**AWARDS**

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