Qi Sun

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EDUCATION

PhD Candidate

Aug. 2013 - present

• Center of Visual Computing, Computer Science Department, Stony Brook University

Advisor: Distinguished Professor Arie E. Kaufman

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

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

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

INVITED TALKS

Computational Methods for Immersive Perception

Adobe Research 2017 games-cn Webinar 2017

SERVICE

Reviewer

SIGGRAPH, IEEE VIS, Computer Graphics Forum (CGF), 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