

CONTACT
INFORMATION

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CURRENT

University of California, Irvine (UCI)

Irvine, CA, US

Ph.D Student in Computer Science

Sept. 2016 – present

Advisor: [ZHAO Shuang](#)

Interests: Computer Graphics (Material Appearance Modeling & Physically-Based Rendering)

PREVIOUS
EDUCATION

University of Chinese Academy of Sciences (UCAS)

Beijing & Shenzhen, China

M.S. in Computer Science

Sept. 2010 – Jul. 2013

Thesis: GPU-based Soft Body Deformation with Nonlinear Finite Element Method.

Advisor: [HENG Pheng-Ann \(CUHK\)](#)

Major courses: Combinatorial Mathematics; Matrix Analysis; Stochastic Process; Computer Aided Geometric Design; Computer Graphics; Computer Vision; Visualization.

Central South University (CSU)

Changsha, China

B.S. in Mathematics and Applied Mathematics

Sept. 2006 – Jul. 2010

Thesis: Forces Distribution with Fractal Theory in High Velocity Compaction Technology.

Major courses: Mathematical Analysis; Linear Algebra; Spatial and Analytical Geometry; Real Analysis & Functional Analysis; Modern Algebra; Topology; Partial Differential Equation; Optimal Theory.

PREVIOUS
PUBLICATIONS

“Position-Free Monte Carlo Simulation for Arbitrary Layered BSDFs” by Yu Guo, Miloš Hašan and Shuang Zhao. *ACM Transactions on Graphics (TOG)*, 2018 (*SIGGRAPH Asia 2018*).

“A Virtual Try-on System for Prescription Eyeglasses” by Qian Zhang, Yu Guo, Pierre-Yves Laffont, Tobias Martin, and Markus Gross. *IEEE Computer Graphics and Applications (CG&A)*, 2017.

“3D Faces are Recognized More Accurately and Faster than 2D Faces, but with Similar Inversion Effects” by Derric Eng, Belle Yick, Yu Guo, Hong Xu, Miriam Reiner, Tat-Jen Cham, and Annabel Chen. *Vision Research*, 2017.

“Physically Based Video Editing” by Jean-Charles Bazin, Claudia Plüss (Kuster), Yu Guo, Tobias Martin, Alec Jacobson, and Markus Gross. *Computer Graphics Forum (CGF)*, 2016 (*Presented at PG'16*).

“GPU Accelerated CBCT Reconstruction from Few Views with SART and TV Regularization” by Ping Liu, Lin Shi, Defeng Wang, Yu Guo, Jianying Li, Jing Qin, and Pheng-Ann Heng. *International Workshop on High Performance Computing for Biomedical Image Analysis (HPC-MICCAI)*, 2013.

“Real-time Hand Detection Based on Multi-stage HOG-SVM Classifier” by Jiang Guo, Jun Cheng, Jianxin Pang, and Yu Guo. *International Conference on Image Processing (ICIP)*, 2013.

“A GPU-Accelerated Finite Element Solver for Simulation of Soft-Body Deformation” by Yu Guo, Jianying Li, Ping Liu, Qiong Wang, and Jing Qin. *International Conference on Information and Automation (ICIA)*, 2013.

“A Survey on Simulation of Soft Tissue Deformation in Virtual Surgery(In Chinese)” by Yu Guo, Jing Qin. *Journal of Integration Technology (JIT)*, 2013.

“Fall over or Sliding down?” by Yu Guo. *SIGGRAPH Asia (Poster)*, 2012.

“A Master-Slave Robotic Simulator Based on GPUDirect” by Jianying Li, Yu Guo, Heye Zhang, Yongming Xie. *International Conference on Intelligent Robots and Systems (IROS)*, 2012.

PREVIOUS
EXPERIENCES

Megvii(Face++) Research USA **Redmond, WA, US**
Research Intern **July. 2018 – Sept. 2018**
Working on Human face shadow/highlight removal and face relighting.
Advisor: [WANG Jue](#)

Autodesk, Inc **San Francisco, CA, US**
Research Intern at Core Rendering team **July. 2017 – Sept. 2017**
Working on efficient volumetric rendering of 3D-printing materials.
Advisor: [Miloš HAŠAN](#)

Nanyang Technological University (NTU) **Singapore**
Research Associate at BeingThere Centre (BTC), IMI **Oct. 2013 – Mar. 2016**
(BTC is a US\$18 million international research project on 3D Telepresence and Virtual Reality between ETH (Markus Gross), UNC (Henry Fuchs) and NTU (Nadia Magnenat Thalmann).)
Working on stereo rendering; physical-based video manipulation; virtual try-on system for prescription glasses.
Collaborators: [Miriam REINER](#), [Jean-Charles BAZIN](#), [Tobias MARTIN](#), [Claudia PLÜSS](#), [Pierre-Yves LAFFONT](#), [ZHANG Qian](#)
Advisor: [CHAM Tat-Jen](#)

Shenzhen Institutes of Advanced Technology (SIAT) **Shenzhen, China**
Research Assistant at HCI lab **Sept. 2011 – Jul. 2013**
Working on mesh processing; soft body simulation; virtual surgery; CUDA acceleration.
Collaborators: XIE Yongming, LI Jianying, LIU Ping.
Advisor: HENG Pheng-Ann

PREVIOUS
AWARDS

2nd class prize in 4th <i>ACM CSU Collegiate Programming Contest</i> .	CSU, China	2010
1st class prize in 3rd <i>CSU Mathematical Contest in Modeling</i> .	CSU, China	2008
1st class prize in National High School Student Mathematics Competition.	China	2005

COMPUTER
SKILLS

Programming Tools: C/C++, MATLAB, Python
Others: Mitsuba, PyTorch, L^AT_EX