

Zhixin Shu

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EDUCATION

Doctor of Philosophy, Computer Science, [August 2013, -]
Stony Brook University, State University of New York, Stony Brook, NY, USA

Master of Engineering, Computer Science, [September 2010, June 2013]
Institute of Automation, University of Chinese Academy of Sciences, Beijing, China

Bachelor of Science, Measurement and Control, [September 2006, June 2010]
Dalian University of Technology, Dalian, Liaoning, China

RESEARCH INTEREST

Computer Vision, Computer Graphics, Machine Learning, Image Editing.

PROFESSIONAL EXPERIENCE

Research Intern at Adobe Research, San Jose, California, USA. [Fall 2017]
– Unsupervised 3D face reconstruction.
Research Intern at Center for Visual Computing, CentraleSupélec, France. [Spring 2017]
– Shape analysis with deep learning.
Research Intern at Adobe Research, San Jose, California, USA. [Fall 2016]
– Face image analysis and editing with deep learning.
Research Assistant at Stony Brook University [Spring 2016]
Teaching Assistant at Stony Brook University [Fall 2015]
– CSE 373, Analysis of Algorithms.
Research Intern at Adobe Research, San Jose, California, USA. [Summer 2015]
– Algorithm design for portrait relighting.
Research Assistant at Stony Brook University [Fall 2014, Spring 2015]
Research Intern at Adobe Research, San Jose, California, USA. [Summer 2014]
– Algorithms and system design for eyes editing.
Teaching Assistant at Stony Brook University [Spring 2014]
Teaching Assistant at Stony Brook University [Fall 2013]
Research Intern at Hanvon Technology, Beijing, China. [Fall 2011, Fall 2012]
– 3D face modeling and facial expression synthesis.

TECHNICAL SKILLS

Python, Torch(Lua), MATLAB, C/C++, Java, Octave, HTML, \LaTeX , etc.

PUBLICATION

Deforming Autoencoders: Unsupervised Disentangling of Shape and Appearance, Zhixin Shu, Mihir Sahasrabudhe, Alp Guler, Dimitris Samaras, Nikos Paragios, Iasonas Kokkinos. *Under Review at ECCV 2018*

An Adversarial Neuro-Tensorial Approach For Learning Disentangled Representations, Mengjiao Wang, Zhixin Shu, Shiyang Cheng, Yannis Panagakis, Dimitris Samaras, Stefanos Zafeiriou. *Under Review at International Journal of Computer Vision*

DocUNet: Document Image Unwarping via A Stacked U-Net, Ke Ma, Zhixin Shu, Dimitris Samaras, Xue Bai, Jue Wang. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2018)*.

Portrait Lighting Transfer using a Mass Transport Approach, Zhixin Shu, Sunil Hadap, Eli Shechtman, Kalyan Sunkavalli, Sylvain Paris, and Dimitris Samaras. *ACM Transactions on Graphics (TOG)*, to appear.

Neural Face Editing with Intrinsic Image Disentangling, Zhixin Shu, Ersin Yumer, Sunil Hadap, Kalyan Sunkavalli, Eli Shechtman, and Dimitris Samaras. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2017) (oral)*.

EyeOpener: Editing Eyes in the Wild, Zhixin Shu, Eli Shechtman, Dimitris Samaras, and Sunil Hadap, *ACM Transactions on Graphics (TOG)*, Volume 36, Issue 1, September 2016, Article No. 1. (presented at SIGGRAPH 2016).

Action Detection with Improved Dense Trajectories and Sliding Window, Zhixin Shu, Kiwon Yun, Dimitris Samaras, *European Conference on Computer Vision ChaLearn Looking at People workshop (ECCV workshop 2014)*.

3D Facial Expression Synthesis from a Single Image Using a Model Set, Zhixin Shu, Lei Huang, Changping Liu , *Asian Conference on Computer Vision Workshop (ACCV workshop 2012)*.

**ACADEMIC
SERVICE
AWARDS**

Reviewer: CVPR 2016, CVPR 2017, ICCV 2017, CVPR 2018, ECCV 2018.

3rd place in *ChaLearn 2014 Looking at People Challenge: Action Recognition*.