XUANER (CECILIA) ZHANG

387 Soda Hall ◇ Berkeley, CA 94720
(713) · 471 · 3088 ◇ cecilia77@berkeley.edu

EDUCATION

University of California, Berkeley **expected Dec. 2020**
PhD in Computer Science, Computational Photography Berkeley, CA
Adviser: Ren Ng

Rice University **May 2015**
B.S. in Electrical and Computer Engineering Houston, TX
Minor in Computational Applied Mathematics
Graduated with **Summa Cum Laude** and **Distinction in Research**

RESEARCH INTERESTS

Computational Photography, Deep Learning I'm interested in the fusion of data-driven machine learning and physically-based modeling for computational photography and videography.

PUBLICATIONS

Zhang,X.,Nguyen,V.,Yao,D.,Matzen,K.,Ng,R.,Synthetic Defocus and Look-Ahead Autofocus for Casual Videography, 2018 (*Under Review*)

Zhang,X.,Chen,Q.,Ng,R.,Koltun,V, Zoom to Learn, Learn to Zoom. Computer Vision and Pattern Recognition (CVPR), 2019.

Zhang,X.,Ng,R.,Chen,Q., Single Image Reflection Separation with Perceptual Losses. Computer Vision and Pattern Recognition (CVPR), 2018.

Zhang,X.,Lee,J.Y.,Sunkavalli,K.,Wang,Z., Photometric Stabilization for Fastforward Videos. In Computer Graphics Forum (Vol. 36, No. 7, pp. 105-113), 2017.

Zhang,X.,Wong,L., VIRTUAL FITTING: Real-Time Garment Simulation for Online Clothes Shopping, Conference on Computer Animation and Social Agents (CASA), 2014.

PAST RESEARCH

Intelligent System Lab, Intel **6/2018- 11/2018**
Research Intern *Santa Clara, CA*

· Collaborate with Qifeng Chen and Vladlen Koltun on learning image demosaicing, superresolution and denoising from raw sensor data.

Computational Photography Group, Facebook **5/2017 - 8/2017**
Research Intern *Seattle, WA*

· Worked with Kevin Matzen on data-driven approach for photo-realistic video enhancement.

Imagination Lab, Adobe Research **5/2016 - 8/2016**
Research Scientist Intern *San Jose, CA*

· Collaborated with Joon-Young Lee, Kalyan Sunkavalli, Zhaowen Wang on hyperlapse video photometric stabilization.

Computer Vision and Computational Imaging Lab, Rice University **5/2013 - 5/2015**
Research Assistant *Houston, TX*

· Advised by Prof. Ashok Veeraraghavan and worked on *Phase Retrieval Microscopy* where we built a mobile microscopy system that achieves wide field-of-view and high-resolution microscopic images using fourier optics, and on *Mobile Image Stitching* where we built a mobile microscopy system and applied image panoramic stitching to achieve giga-pixel microscopic images.

Information System Group, Hochschule Pforzheim **5/2013 - 8/2013**
Research Assistant (DAAD RISE Scholar) *Pforzheim, Germany*

· Worked with Dr. Tobias Gehrke and worked on designing optimized coutourlet filters for high-gain image encoding. Research presented at the DAAD RISE conference 2013.

TEACHING EXPERIENCE

Graduate Student Instructor, EECS, UC Berkeley **8/2016 - 5/2018**
Taught weekly discussion session for "Computer Graphics".
Course Assistant, Rice University **8/2014 - 12/2015**
Taught weekly discussion session for "Fundamental of Electrical Engineering".
Coursera Forum Modulator, Rice University **8/2014 - 12/2014**
Modulated discussion forum and answered questions on Coursera for "Fundamental of Electrical Engineering".

PROFESSIONAL SERVICES

Paper Reviewer of: ICCV, CVPR, Transaction of Image Processing (TIP)

LANGUAGES

Computer Languages	Python, MATLAB, C++, HTML
Tools:	PyTorch, Tensorflow, Caffe, Caffe2, OpenCV, Linux Shell, Vim, LaTeX

AFFILIATIONS

UC Berkeley Women In Computer Science and Engineering, Industrial Liaison	**2016 - present**
ACM, Member	**2014 - present**
IEEE, Member	**2013 - present**
Phi Beta Kappa Honor Society, Member	**2015 - 2016**
Eta Kappa Nu Electrical Engineering Honor Society, Member	**2014 - 2016**
Rice University IEEE Student Chapter, Vice President	**2014 - 2015**

OTHER HONORS AND AWARDS

CRA-W (Computing Research Association) Grad Cohort Participant	**4/2016**
Willy Revolution Award for Innovative Design (grand prize for senior design)	**10/2014**
IEEEXtreme 24-Hour Programming Competition, ranked 156/1853 worldwide	**5/2014**