XUANER (CECILIA) ZHANG

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EDUCATION

University of California, Berkeley **2015 - present**
PhD in Computer Science, Computer Graphics Berkeley, CA
Advised by Professor James O'Brien

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, Computer Graphics I'm interested in geometric and photometric image analysis, image synthesis, editing and understanding image realism.

PAST RESEARCH

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

· Collaborated with Joon-Young Lee, Kalyan Sunkavalli, Zhaowen Wang and worked on real-time hyperlapse video. We proposed a photometric stabilization framework that consists of optimal frame sampling and post-photometric smoothing. (Submitted paper is under review)

Visual Computing Lab, UC Berkeley **8/2015 - 12/2015**
Graduate Researcher *Berkeley, CA*

· Advised by Prof. Ren Ng and worked on building a pinhole-based vision correcting light field display that compensates for eye aberrations and allows free eye movements within a user-specified viewing zone. Project poster is presented at ICCP 2016.

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.

Senior Design - Virtual Fitting System, Rice University **8/2013 - 8/2014**

· Advised by Prof. Gary Woods and Prof. Ron Goldman and designed a virtual fitting system for online clothes shoppers. We built a 3D body shape database and applied MLP artificial neural network model to achieve real-time 3D garment simulation. We published a short paper in CASA 2014 and presented a poster in SIGGRAPH 2014.

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. I was chosen to present research results at the DAAD RISE conference 2013.

PUBLICATIONS AND POSTERS

CONFERENCE PAPERS

- **Zhang, Xuaner**, Lam Yuk Wong, VIRTUAL FITTING: REAL-TIME GARMENT SIMULATION FOR ONLINE CLOTHES SHOPPING, Proceedings of the 27th Conference on Computer Animation and Social Agents, 2014

POSTERS

- **Zhang, Xuaner***, Jinkyu Kim*, Laura Waller, Brian A. Barsky, Ren Ng. "Free Your Eyes: Retinal Image Deblurring Display with Enlarged Viewing Zone." Computational Photography (ICCP), 2015 IEEE International Conference on. IEEE, 2015.
- **Zhang, Xuaner**, and Lam Yuk Wong. "Virtual fitting: real-time garment simulation for online shopping." ACM SIGGRAPH 2014 Posters. ACM, 2014.

TEACHING EXPERIENCE

Graduate Student Instructor, EECS, UC Berkeley **8/2016 - present**
Taught weekly discussion session for the Computer Graphics (CS 184) course.

Course Assistant, Rice University **8/2014 - 12/2015**
Taught weekly discussion session for the Fundamental of Electrical Engineering (ELEC 241) course.

Coursera Forum Modulator, Rice University **8/2014 - 12/2014**
Modulated discussion forum and answered questions on Coursera for the course Fundamental of Electrical Engineering.

LANGUAGES

Computer Languages	MATLAB, Python, C++, LaTeX, HTML
Libraries:	OpenCV, OpenGL, and others
Operating Systems:	Unix/Linux Windows

AFFILIATIONS

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

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**