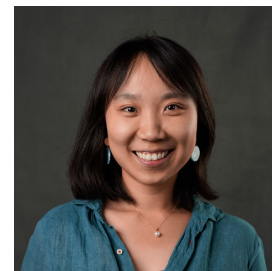


Xuaner (Cecilia) Zhang

🏠 <https://eecs.berkeley.edu/~cecilia77>

@ cezhangxer@gmail.com

🔗 <https://github.com/ceciliavision>



Employment

Adobe Inc **2020 - 2024**
Research Scientist San Jose, CA
Computational Photography, Generative AI, Image-based Rendering

Education

Ph.D. in Computer Science **University of California, Berkeley** **2015 - 2020**

- Thesis: Bridging Machine Learning and Computational Photography to Bring Professional Quality into Casual Photos and Videos
- Adviser: Ren Ng

B.S. in Electrical and Computer Engineering **Rice University** **2011 - 2015**

- Minor in Computational Applied Mathematics
- Graduated with **Summa Cum Laude** and **Distinction in Research**

Publications [\[Google Scholar\]](#)

Explorative Inbetweening of Time and Space 🏠

Haiwen Feng, Zheng Ding, Zhihao Xia, Simon Niklaus, Victoria Abrevaya, Michael Black, Xuaner Zhang
European Conference on Computer Vision (**ECCV**) 2024

Magic Fixup: Streamlining Photo Editing by Watching Dynamic Videos 🏠

Hadi Alzayer, Zhihao Xia, Xuaner Zhang, Eli Shechtman, Jia-Bin Huang, Michael Gharbi
arXiv2024

Restoration by Generation with Constrained Priors 🏠

Zheng Ding, Xuaner Zhang, Zhuowen Tu, Zhihao Xia
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2024

Holo-Relighting: Controllable Volumetric Portrait Relighting from a Single Image 🏠

Yiqun Mei, Yu Zeng, He Zhang, Zhixin Shu, Xuaner Zhang, Sai Bi, Jianming Zhang,

Hyunjoon Jung, Vishal Patel

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2024

Dr. Bokeh: DiffeRentiabLe Occlusion-aware Bokeh Rendering 🏠

Yichen Sheng, Zixun Yu, Lu Ling, Zhiwen Cao, Xuaner Zhang, Xin Lu,
Ke Xian, Haiting Lin, Bedrich Benes

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2024

Learning Lens Blur Fields 📄

Esther Y. H. Lin, Zhecheng Wang, Rebecca Lin, Daniel Miao, Florian Kainz, Jiawen Chen,
Xuaner Zhang, David B. Lindell, Kiriakos N. Kutulakos

arXiv 2023

SunStage: Portrait Reconstruction and Relighting using the Sun as a Light Stage 🏠

Yifan Wang, Aleksander Holynski, Xiuming Zhang, Xuaner Zhang

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023

DiffusionRig: Learning Personalized Priors for Facial Appearance Editing 🏠

Zheng Ding, Xuaner Zhang, Zhihao Xia, Lars Jebe, Zhuowen Tu, Xiuming Zhang

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023

Automatic High Resolution Wire Segmentation and Removal 🏠

Mangtik Chu, Xuaner Zhang, Zijun Wei, , Eli Shechtman, Connelly Barnes, Zhe Lin, Florian Kainz,
Yuqian Zhou, Humphrey Shi

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023

LightPainter: Interactive Portrait Relighting with Freehand Scribble 🏠

Yiquan Mei, He Zhang, Xuaner Zhang, Jianming Zhang, Zhixin Shu, Yilin Wang, Zijun Wei, Shi Yan,
Hyunjoon Jung, Vishal Patel

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023

Neural Photo Finishing 🏠

Ethan Tseng, Yuxuan Zhang, Lars Jebe, Xuaner Zhang, Zhihao Xia, Yifei Fan, Felix Heide, Jiawen
Chen

ACM Transactions on Graphics (**TOG**) 2022 (Proc. SIGGRAPH Asia)

Handheld Multi-Frame Neural Depth Refinement

Ilya Chugunov, Yuxuan Zhang, Zhihao Xia, Xuaner Zhang, Jiawen Chen, Felix Heide
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2022 **Oral**

Time-travel rephotography

Xuan Luo, Xuaner Zhang, Paul Yoo, Ricardo Martin-Brualla, Jason Lawrence, Steve Seitz
ACM Transactions on Graphics (**TOG**) 2021 (Proc. SIGGRAPH Asia)

Learned Dual-View Reflection Removal

Simon Niklaus, Xuaner Zhang, Jonathan T. Barron, Neal Wadhwa, Rahul Garg, Feng Liu, Tianfan Xue
Winter Conference on Applications of Computer Vision (**WACV**) 2021

Portrait Shadow Manipulation

Xuaner Zhang, Jonathan T. Barron, Yun-Ta Tsai, Rohit Pandey, Xiuming Zhang, Ren Ng, David E. Jacobs
ACM Transactions on Graphics (**TOG**) 2020 (Proc. SIGGRAPH)

Synthetic Defocus and Look-Ahead Autofocus for Casual Videography

Xuaner Zhang, Kevin Matzen, Vivien Nguyen, Dillon Yao, You Zhang, Ren Ng
ACM Transactions on Graphics (**TOG**) 2019 (Proc. SIGGRAPH)

Zoom to Learn, Learn to Zoom

Xuaner Zhang, Qifeng Chen, Ren Ng, Vladlen Koltun
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2019

Single Image Reflection Separation with Perceptual Losses

Xuaner Zhang, Ren Ng, Qifeng Chen
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2018

Photometric Stabilization for Fastforward Videos

Xuaner Zhang, Joon-Young Lee, Zhaowen Wang, Kalyan Sunkavalli
Pacific Conference on Computer Graphics and Applications (**PG**) 2017

Internship Experience

- G-cam, Google**
Research Intern

· Advisor(s): David Jacobs, Yun-ta Tsai, Jonathan Barron

06/2019- 01/2020
Mountain View, CA
- Intelligent System Lab, Intel**
Research Intern

· Advisor(s): Qifeng Chen and Vladlen Koltun

06/2018- 11/2018
Santa Clara, CA
- Computational Photography Team, Facebook**
Research Intern

· Advisor(s): Kevin Matzen

05/2017 - 08/2017
Seattle, WA
- Imagination Lab, Adobe Research**
Research Scientist Intern

· Advisor(s): Joon-Young Lee, Kalyan Sunkavalli, Zhaowen Wang

05/2016 - 08/2016
San Jose, CA
- Information System Group, Hochschule Pforzheim**
Research Assistant (DAAD RISE Scholar)

· Advisors: Tobias Gehrke

05/2013 - 08/2013
Pforzheim, Germany

Professional Services

Program Committee of: SIGGRAPH 2024, SIGGRAPH ASIA 2021, 2022

Associate Editor of: TOG 2023

Paper Peer Reviewer of: SIGGRAPH, SIGGRAPH ASIA, ICCV, ECCV, CVPR, ICML, Neurips

Teaching and Mentorship Experience

BAIR Academic Mentor **2016 - 2020**

Mentored undergraduates members of Berkeley AI-Research on research and academic plans

TechX Academy Instructor, Shanghai, China **07/2019 - 08/2019**

Designed and taught a 10-day course on "Intro to Computer Vision"

Graduate Student Instructor, EECS, UC Berkeley **08/2016 - 05/2018**

Taught weekly discussion sessions on "Foundations of Computer Graphics"

Computer Vision for Global Challenges Ambassador **04/2019 - 06/2019**

Mentored researchers from developing countries to give presentation and make academic poster talk at CVPR2019 CV4GC Workshop

Course Assistant, "Fundamental of Electrical Engineering", Rice University **08/2014 - 12/2015**

Coursera Forum Modulator, "Fundamental of Electrical Engineering" **08/2014 - 12/2014**

Honors and Awards

Selected participant, Asian Dean's Forum - Rising Star Women in Engineering Workshop **10/2019**

Selected participant, Rising Stars in EECS **10/2019**

Selected participant, CRA-W (Computing Research Association) Grad Cohort **04/2016**

Willy Revolution Award for Innovative Design (grand prize for senior design) **10/2014**

IEEEExtreme 24-Hour Programming Competition, ranked 156/1853 worldwide **05/2014**

Leadership and Affiliation

UC Berkeley Women In Computer Science and Engineering, Co-President **2019 - 2020**

UC Berkeley Women In Computer Science and Engineering, Industrial Liaison **2016 - 2018**

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**

Programming Skills

Computer Languages Python, MATLAB, C++

Tools: PyTorch, Tensorflow, Caffe, Caffe2, OpenCV, Linux Shell, Vim, L^AT_EX