# Zhengqi Li | Curriculum Vitae

 $\boxtimes$  zhengqili@google.com

### Education

Cornell Tech, Cornell University Ph.D. in computer science, GPA: 4.00/4.00 Advisor: Prof. Noah Snavely University of Minnesota, Twin Cities

Bachelor of Computer Engineering with High Distinction, GPA: 3.99/4.00

New York, NY 2016–2021

Minneapolis, MN 2013–2016

## Publications

- o **Zhengqi Li**, Richard Tucker, Noah Snavely, Aleksander Holynsk. Generative Image Dynamics. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024) (**Oral**)
- o Qianqian Wang, Yen-Yu Chang, Ruojin Cai, Zhengqi Li, Bharath Hariharan, Aleksander Holynski, Noah Snavely. Tracking Everything Everywhere All at Once. International Conference on Computer Vision (ICCV), 2023 (Best Student Paper Award)
- o Zhengqi Li, Qianqian Wang, Forrester Cole, Richard Tucker, Noah Snavely. DynIBaR: Neural Dynamic Image-Based Rendering. Conference on Computer Vision and Pattern Recognition (CVPR), 2023 (Best Paper Honorable Mention Award)
- o Lucy Chai, Richard Tucker, **Zhengqi Li**, Phillip Isola, Noah Snavely. Persistent Nature: A Generative Model of Unbounded 3D Worlds. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023
- o Mohammed Suhail, Erika Lu, **Zhengqi Li**, Noah Snavely, Leonid Sigal, Forrester Cole. Associating Objects and their Effects in Unconstrained Monocular Video. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023
- o Zhengqi Li, Qianqian Wang, Noah Snavely, Angjoo Kanazawa. InfiniteNature-Zero: Learning Perpetual View Generation of Natural Scenes from Single Images. *European Conference on Computer Vision (ECCV)*, 2022 (Oral)
- o Zhoutong Zhang, Forrester Cole, **Zhengqi Li**, Michael Rubinstein, Noah Snavely, William T. Freeman . Structure and Motion for Casual Videos. *European Conference on Computer Vision (ECCV)*, 2022
- o Jiaming Sun, Xi Chen, Qianqian Wang, **Zhengqi Li**, Hadar Averbuch-Elor, Xiaowei Zhou, Noah Snavely. Neural 3D Reconstruction in the Wild. *International Conference on Computer Graphics and Interactive Technique (SIGGRAPH Conference Proceeding)*, 2022
- o Qianqian Wang, **Zhengqi Li**, David Salesin, Noah Snavely, Brian Curless, Janne Kontkanen. 3D Moments from Near-Duplicate Photos. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022
- o Vickie Ye, **Zhengqi Li**, Richard Tucker, Angjoo Kanazawa, Noah Snavely. Deformable Sprites for Unsupervised Video Decomposition. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022 (**Oral**)
- o Kai Zhang, Fujun Luan, **Zhengqi Li**, Noah Snavely. IRON: Inverse Rendering by Optimizing Neural SDFs and Materials from Photometric Images . *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022 (**Oral**)

- o **Zhengqi Li**, Simon Niklaus, Noah Snavely, Oliver Wang. Neural Scene Flow Fields for Space-Time View Synthesis of Dynamic Scenes. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021
- o **Zhengqi Li**, Wenqi Xian, Abe Davis, Noah Snavely. Crowdsampling the Plenoptic Function. *European Conference on Computer Vision (ECCV)*, 2020 (**Oral**)
- o Zhengqi Li, Tali Dekel, Forrester Cole, Richard Tucker, Noah Snavely, Ce Liu, William T. Freeman. MannequinChallenge: Learning the Depths of Moving People by Watching Frozen People. *IEEE Transactions* on Pattern Analysis and Machine Intelligence (TPAMI)
- o Wenqi Xian\*, **Zhengqi Li**\*, Matthew Fisher, Jonathan Eisenmann, Eli Shechtman, Noah Snavely. Upright-Net: Geometry-Aware Camera Orientation Estimation from Single Images. *International Conference on Computer Vision (ICCV)*, 2019 (\* equal contribution)
- o **Zhengqi Li**, Tali Dekel, Forrester Cole, Richard Tucker, Noah Snavely, Ce Liu, William T. Freeman. Learning the Depths of Moving People by Watching Frozen People. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019 (Best Paper Honorable Mention)
- o **Zhengqi Li**, Noah Snavely. CGINTRINSICS: Better Intrinsic Image Decomposition through Physically-Based Rendering. *European Conference on Computer Vision (ECCV)*, 2018
- o **Zhengqi Li**, Noah Snavely. Learning Intrinsic Image Decomposition from Watching the World. *Conference* on Computer Vision and Pattern Recognition (CVPR), 2018 (**Spotlight**)
- o Zhengqi Li, Noah Snavely. MegaDepth: Learning Single-View Depth Prediction from Internet Photos. *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018 (Invited to be presented at Bridges to 3D Workshop, CVPR 2018)
- o **Zhengqi Li**, Volkan Isler. Large Scale Image Mosaic Construction for Agricultural Applications. *IEEE Robotics and Automation Letters (RA-L)*, 2016
- o **Zhengqi Li**, Volkan Isler. Large Scale Image Mosaic Construction for Agricultural Applications. *IEEE International Conference on Robotics and Automation (ICRA)*, 2016

#### Awards

o Best Student Paper Award, ICCV 2023	2023
o Best Paper Honorable Mention Award, CVPR 2023	2023
o Baidu Al Top 100 New Researchers, Baidu	2021
o Google PhD Fellowship, Google	2020
o Adobe Research Fellowship, Adobe Research	2020
o Best Paper Honorable Mention Award, CVPR 2019	2019
o TA Outstanding Award, Cornell University	2017
$\circ$ Outstanding Undergraduate Researchers Honorable Mention,	
Computing Research Association	2016
o National Scholarship of China, Ministry of Education of China,	2012

#### Experience

Senior Research Scientist	Google Research, NYC
Parallax/VisCAM Research	10/2023–
Research Scientist	Google Research, NYC
Parallax/VisCAM Research	08/2021–10/2023

Cornell Graphics and Vision Group	<b>Cornell Tech</b>
Advisor: Prof. Noah Snavely	09/2016–05/2021
Research Intern, Adobe Research	Seattle & NYC
Collaborators: Oliver Wang, Simon Niklaus	05/2020–11/2020
Research Intern, Facebook Reality Lab	<b>MPK</b>
Collaborator: Prof. Fernando De la Torre	<i>05/2019–08/2019</i>
Intern, Google Research	Cambridge & NYC
Mentor: Tali Dekel. Teams: Prof. William T. Freeman	05/2018-02/2019
Project Tango, Google	
Multiple Autonomous Robotic Systems (MARS) Laboratory	UMN
Advisor: Prof. Stergios Roumeliotis	08/2014–05/2016
Precision Agriculture	
Robotic Sensor Networks (RSN) Laboratory	UMN
Advisor: Prof. Volkan Isler	02/2015-09/2015

#### Patent

- Oliver Wang, Simon Niklaus, Zhengqi Li. View synthesis of a dynamic scene. US Patent App. 17/204,571, 2022
- o Tali Dekel, Cole Forrester, Ce Liu, William Freeman, Richard Tucker, Noah Snavely, **Zhengqi Li**. Depth Determination for Images Captured with a Moving Camera and Representing Moving Features . *US Patent App. 16 / 578,215, 2021*
- o Volkan Isler and **Zhengqi Li**. Large scale image mosaic construction for agricultural applications. US Patent App. 15/415,347, 2018

#### **Invited Talks**

- o 4D Dynamic Reconstruction Workshop, CVPR 2023
- o Peking University Computer Vision and Graphics Seminar, 2022
- o China Society of Image and Graphics (CSIG) 3DV, 2021
- o Sun Yat-Sen University Computer Vision and Graphics Seminar, 2021
- o MIT 3D Representations Seminar, 2021
- o UCSD Computer Vision and Graphics Seminar, 2021
- o NVIDIA GPU Technology Conference (GTC), 2020
- o GAMES: Graphics And Mixed Environment Seminar (GAMES), 2019

#### **Other Services**

- o Area Chair
  - Computer Vision and Pattern Recognition (CVPR)
- o Technical paper reviewer
  - Computer Vision and Pattern Recognition (CVPR)
  - European Conference on Computer Vision (ECCV)
  - International Conference on Computer Vision (ICCV)

- International Conference on 3D Vision (3DV)
- Asian Conference on Computer Vision (ACCV)
- British Machine Vision Conference (BMVC)
- International Journal of Computer Vision (IJCV)
- ACM SIGGRAPH
- ACM SIGGRAPH Asia
- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- IEEE Robotics and Automation Letters (RA-L)
- International Conference on Robotics and Automation (ICRA)
- International Conference on Intelligent Robots and Systems (IROS)
- IEEE Transactions on Image Processing (TIP)
- IEEE VR
- o Teaching Assistant
  - CS5787: Deep Learning, Cornell Tech
  - CS5670: Introduction to Computer Vision, Cornell University
  - CS4750/5750: Foundations of Robotics, Cornell University

Spring 2019-2020 Spring 2017 Fall 2016