

Dingzeyu Li

801 N 34th St
Seattle, WA 98103

dinli@adobe.com
<http://ding.fyi>

Current Employment

Adobe Research - Research Scientist 2018 - present

Education

Ph.D. in Computer Science 2018
Columbia University
Advisor: Changxi Zheng

B.Eng. in Computer Engineering, Honors Research Track 2013
The Hong Kong University of Science and Technology (HKUST)
First Class Honor & Academic Achievement Medal (top 1% of the graduates)
Advisor: Chi-Keung Tang

Exchange Student in Computer Science 2012
Eidgenössische Technische Hochschule Zürich (ETH Zurich)

Publications

Henrique T. Maia, **Dingzeyu Li**, Yuan Yang, Changxi Zheng
LayerCode: Optical Barcodes for 3D Printed Shapes
ACM Transactions on Graphics (SIGGRAPH), 2019

Haikun Huang, Michael Solah, **Dingzeyu Li**, Lap-Fai Yu
Audible Panorama: Automatic Spatial Audio Generation for Panorama Imagery
ACM Conference on Human Factors in Computing Systems (CHI), 2019

Dingzeyu Li, Timothy R. Langlois, Changxi Zheng
Scene-Aware Audio for 360° Videos
ACM Transactions on Graphics (SIGGRAPH), 2018

Dingzeyu Li, Avinash S. Nair, Shree K. Nayar, Changxi Zheng
AirCode: Unobtrusive Physical Tags for Digital Fabrication
ACM Symposium on User Interface Software and Technology (UIST), Papers, 2017

🌟 Best Paper Award
selected in the technical papers preview

Dingzeyu Li

Interacting with Acoustic Simulation and Fabrication
ACM Symposium on User Interface Software and Technology (UIST), Doctoral Symposium, 2017

Gabriel Cirio, **Dingzeyu Li**, Eitan Grinspun, Miguel A. Otaduy, Changxi Zheng
Crumpling Sound Synthesis
ACM Transactions on Graphics (SIGGRAPH Asia), 2016
selected in the technical papers trailer

Dingzeyu Li, David I.W. Levin, Wojciech Matusik, Changxi Zheng
Acoustic Voxels: Computational Optimization of Modular Acoustic Filters
ACM Transactions on Graphics (SIGGRAPH), 2016
selected in the technical papers trailer

Dingzeyu Li, Yun Fei, Changxi Zheng
Interactive Acoustic Transfer Approximation for Modal Sound
ACM Transactions on Graphics (presented at SIGGRAPH), 2016

Yin Yang, **Dingzeyu Li**, Weiwei Xu, Yuan Tian, Changxi Zheng
Expediting Precomputation for Reduced Deformable Simulation
ACM Transactions on Graphics (SIGGRAPH Asia), 2015

Dingzeyu Li, Qifeng Chen, Chi-Keung Tang
Motion-Aware KNN Laplacian for Video Matting
Proceedings of International Conference on Computer Vision (ICCV), 2013

Qifeng Chen, **Dingzeyu Li**, Chi-Keung Tang
KNN Matting
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2013

Qifeng Chen, **Dingzeyu Li**, Chi-Keung Tang
KNN Matting
Proceedings of Computer Vision and Pattern Recognition (CVPR), 2012

Awards and Honors

Outstanding Chinese Overseas Student Scholarship (top 0.1% of all overseas students)	2018
NVIDIA GTC Invited Poster	2018
ACM UIST Best Paper Award (3 awardees out of 324 submissions)	2017
ACM UIST Doctoral Symposium & Travel Grant	2017
Adobe Research Fellowship	2017
NVIDIA Graduate Fellowship Finalist	2017
Columbia CS Department Service Award	2017
Shapeways Education Grant on Computational Fabrication	2016
ICCV Student Travel Award	2013
HKUST Academic Achievement Medal	2013
HKUST CSE, ECE, and School of Engineering Scholarship	2009 - 2013
HKUST Dean's List	2009 - 2012
Best Idea Award and Mabuchi Motor Award in Asia-Pacific International Robocon, Thailand	2011
Champion in Asia-Pacific Robot Contest (ABU Robocon), Hong Kong	2011
HKUST University Scholarship	2009

Advising

Yapeng Tian, PhD student - University of Rochester	2019 - present
Yang Zhou, PhD student - University of Massachusetts, Amherst	2019 - present
Henrique Maia, PhD student - Columbia University project: robust tagging for 3D printing	2018 - 2019
Sebastian Cueva-Caro, undergrad - Columbia University project: mass optimization for 3D printing	2017 - 2018
Jingyu Qian, MS student - Columbia University project: acoustic lens design, simulation, and fabrication	2017 - 2018
Cheng Zhang, MS student - Columbia University next stop: PhD student at University of California, Irvine	2017

project: acoustic lens sensing and circuit design
 Brandon Cui, visiting undergrad - Stanford University 2016
 project: acoustic metamaterial design with Acoustic Voxels
 Vaibhav Siva Vavilala, undergrad (NSF REU Fellow) - Columbia University 2015
 project: computer-assisted spray paint fabrication
 next stop: Pixar

Talks

University of Washington Feb. 2019
Physical Hyperlinks for 3D Printing
 invited by Adriana Schulz

Adobe Global Tech Summit Feb. 2019
Immersive Audio: Progress and Challenges

Adobe Immersive Media Summit Dec. 2018
Immersive Audio: Progress and Challenges

ACM SIGGRAPH Aug. 2018
Scene-Aware Audio for 360° Videos

Facebook Reality Labs June 2018
Computational Algorithms for Emerging Hardware
 invited by Hrvoje Benko

Adobe Research June 2018
Computational Algorithms for Emerging Hardware
 invited by Jovan Popovic

ACM UIST Oct. 2017
AirCode: Unobtrusive Physical Tags for Digital Fabrication

ACM SIGGRAPH July 2016
Acoustic Voxels: Computational Optimization of Modular Acoustic Filters

ACM SIGGRAPH July 2016
Interactive Acoustic Transfer Approximation for Modal Sound

Workshops, Posters, & Demos

Dingzeyu Li, Timothy R. Langlois, Changxi Zheng
Scene-Aware Audio for 360° Videos
 NVIDIA GTC, Invited Poster, 2018

Dingzeyu Li, Timothy R. Langlois, Changxi Zheng
Scene-Aware Audio for 360° Videos
 Tristate Workshop on Imaging and Graphics (TWIG), Posters, 2018

Dingzeyu Li
Interacting with Acoustic Simulation and Fabrication
 ACM Symposium on User Interface Software and Technology (UIST), Doctoral Symposium, 2017

Dingzeyu Li, David I.W. Levin, Wojciech Matusik, Changxi Zheng
Acoustic Voxels: Computational Optimization of Modular Acoustic Filters

Tristate Workshop on Imaging and Graphics (TWIG), Posters, 2016

Dingzeyu Li, David I.W. Levin, Wojciech Matusik, Changxi Zheng
Acoustic Voxels: Computational Optimization of Modular Acoustic Filters
Symposium on Computational Fabrication (SCF), Posters, 2016

Dingzeyu Li, Yun Fei, Changxi Zheng
Interactive Acoustic Transfer Approximation for Modal Sound
ACM SIGGRAPH Exhibitor Tech Talks & Sessions, Intel Exhibitor Sessions, 2014

Previous Experience

Columbia University - graduate researcher & teaching assistant Advisor: Changxi Zheng	2013 - 2018
Adobe Research - research intern Manager: Timothy Langlois	2017
Columbia Makerspace - superuser Advisor: Ioannis Kymissis	2016 - 2018
Disney Research - research intern Managers: David I.W. Levin, Wojciech Matusik	2015
HKUST - undergraduate research assistant Advisor: Chi-Keung Tang	2010 - 2013
HKUST - robotic engineer & robotics team coordinator Advisors: Guyue Zhou, Zexiang Li	2009 - 2011

Selected Media Coverage

3D Printing Air Pockets Physical Tagging: Aircode [3D Printing Industry]
Columbia researchers' AirCode system uses 3D printed air pockets for physical object tagging [3Ders.org]
Boffins back bubbles for better bonding with beautiful belongings [The Register / Emerging Tech]
Manipulating Sound with Building Blocks [Columbia Engineering]
2016: A Year in Review [Columbia Engineering]
Detangling the Complexity of Waves with Acoustic Voxels [Engineering.com]
Researchers create audio counterpart of QR codes, RFID tags [ScienceBlog]
Hippopotamus that sounds like a trumpet key to acoustic tagging [INAVATE]
Noisy Information - Embedding Data in Sound [Engineering.com]
Researchers Use Acoustic Voxels to Embed Sound with Data [Science Newsline Technology] [phys.rg]
Looking Toward Cloaking & Acoustic Tagging [3DPrint.com]
Columbia Engineering Researchers Use Acoustic Voxels to Embed Sound with Data [Columbia Engineering News] [Eurek Alert]
Acoustic voxels: Manipulating sound waves makes possible acoustic tagging and encoding [Columbia Computer Science Department News]

Professional Service

International Program Committees:

ACM International Conference on Multimedia (MM)	2019
Eurographics, Short Papers	2019
CASA, International Conference on Computer Animation and Social Agents	2018

Reviewer for International Top Conferences & Journals:

ICCV, International Conference on Computer Vision	2015, 2017, 2019
CVPR, Conference on Computer Vision and Pattern Recognition	2016, 2017, 2018, 2019
CHI Technical Papers, Conference on Human Factors in Computing Systems	2018, 2019
IEEE Virtual Reality (TVCG) Technical Papers	2018, 2019
TEI Technical Papers, Conference on Tangible, Embedded, and Embodied Interactions	2019
SIGGRAPH Technical Papers	2016, 2017, 2018
SIGGRAPH Asia Technical Papers	2014, 2016, 2017, 2018
UIST Technical Papers, ACM Symposium on User Interface Software and Technology	2018
ECCV, European Conference on Computer Vision	2016, 2018
ACCV, Asian Conference on Computer Vision	2016, 2018
BMVC, British Machine Vision Conference	2017, 2018
CAWW, Computer Animation and Virtual Worlds	2018
ACM Transactions on Graphics	2017
CVIU, Computer Vision and Image Understanding	2017
VRST, Symposium on Virtual Reality Software and Technology, Posters & Demos	2017
JMIV, Journal of Mathematical Imaging and Vision	2016
Neurocomputing	2016
WSCG, World Society for Computer Graphics	2015
Eurographics	2014
Computers & Graphics	2013