Dingzeyu Li

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New York, NY 10027

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`https://dingzeyu.li`

Education

Ph.D. in Computer Science   *2018 (expected)*
M.S. in Computer Science   2015
Columbia University
Adobe Research Fellow
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
Eidgenössische Technische Hochschule Zürich (ETH Zurich)   2012

Peer-Reviewed Publications

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), 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

Workshops, Posters, & Demos

Dingzeyu Li
Interacting with Acoustic Simulation and Fabrication
ACM 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 Posters, 2016

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

Awards and Honors

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
Winner of Microsoft College Code Competition (msft3c) at Columbia	2014
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
HKUST Lee Hysan Foundation Exchange Scholarship (awarded to 2 students in CS department)	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

Experience

Adobe Research - research intern	May 2017 - Aug. 2017
Advisors: Timothy Langlois, Danny Kaufman	
Columbia University - super user @ Makerspace	Aug. 2016 - present
Disney Research - research intern	June 2015 - Aug. 2015
Advisors: David I.W. Levin, Wojciech Matusik	
Columbia University - graduate researcher & teaching assistant	Aug. 2013 - present
Advisor: Changxi Zheng	
HKUST - undergraduate research assistant	Aug. 2010 - May 2013
Advisor: Chi-Keung Tang	
HKUST - robotic engineer & robotics team coordinator	Sep. 2009 - Aug. 2011
Advisors: Guyue Zhou, Zexiang Li	

Selected Media Coverage

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]

Teaching

Teaching assistant, *Advanced Computer Graphics* - Columbia University	Spring 2016
Guest lecturer, *Computer Graphics* - Columbia University	Spring 2015
Teaching assistant, *Advanced Computer Graphics* - Columbia University	Fall 2014
Teaching assistant, *Computer Graphics* - Columbia University	Spring 2014
Instructor, *Basics for Robotics Competition* - HKUST	Fall 2011
Lab assistant, *Introduction to Electro-Robot Design* - HKUST	Fall 2010

Advising

Cheng Zhang, MS student - Columbia University next stop: PhD student at University of California, Irvine	2017
Brandon Cui, visiting undergrad - Stanford University	2016
Vaibhav Siva Vavilala, undergrad (NSF REU Fellow) - Columbia University next stop: Pixar	2015

Department Service

MS student admission reviewer	2014, 2017
Colloquium Czar	2014-2016
Tristate Workshop on Imaging and Graphics (TWIG) helper	2015

Professional Service

Program Committee: Workshop on Virtual Reality meets Physical Reality at SIGGRAPH Asia	2016
Treasurer: ACM SIGGRAPH / Eurographics Symposium on Computer Animation (SCA)	2017

Referee Service:

ACM SIGGRAPH	2016, 2017
ACM SIGGRAPH Asia	2014, 2016, 2017
ACM Transactions on Graphics	2017
CVPR, Conference on Computer Vision and Pattern Recognition	2016, 2017
ICCV, International Conference on Computer Vision	2015, 2017
BMVC, British Machine Vision Conference	2017

CVIU, Computer Vision and Image Understanding	2017
ECCV, European Conference on Computer Vision	2016
ACCV, Asian Conference on Computer Vision	2016
JMIV, Journal of Mathematical Imaging and Vision	2016
Neurocomputing	2016
WSCG, World Society for Computer Graphics	2015
Eurographics	2014
Computers & Graphics	2013

References

Changxi Zheng (PhD advisor, 2013 - present)
Assistant Professor, Department of Computer Science
Columbia University
cxz@cs.columbia.edu

David I.W. Levin (internship advisor, 2015)
Assistant Professor, Department of Computer Science
University of Toronto
diwlevin@cs.toronto.edu

Wojciech Matusik (internship advisor, 2015)
Associate Professor, Electrical Engineering and Computer Science
Massachusetts Institute of Technology
wojciech@mit.edu

Chi-Keung Tang (undergraduate research advisor, 2010 - 2013)
Professor, Department of Computer Science and Engineering
Hong Kong University of Science and Technology
cktang@cs.ust.hk