

# Lingxiao Li

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## EDUCATION

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### **Ph.D. Candidate in Computer Science, MIT**

*Sep. 2019 – Present*

Geometric Data Processing Group

Advisor: Justin Solomon

GPA: 5.0/5.0

### **Master of Science in Mathematics, Stanford University**

*Sep. 2018 – Jun. 2019*

GPA: 4.05/4.3

### **Bachelor of Science, Stanford University**

*Sep. 2014 – Jun. 2018*

Double major in Computer Science and Mathematics (with Honors)

Advisor: Daniel Bump

GPA: 4.05/4.3

### **University of Oxford, Stanford Bing Overseas Studies Program**

*Sep. 2016 – Dec. 2016*

## PUBLICATIONS

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### **Self-Consistent Velocity Matching of Probability Flows**

[Lingxiao Li](#), Samuel Hurault, Justin Solomon

Conference on Neural Information Processing Systems (NeurIPS), 2023

### **Sampling with Mollified Interaction Energy Descent**

[Lingxiao Li](#), Qiang Liu, Anna Korba, Mikhail Yurochkin, Justin Solomon

Conference on Learning Representations (ICLR), 2023

### **Learning Proximal Operators to Discover Multiple Optima**

[Lingxiao Li](#), Noam Aigerman, Vladimir G. Kim, Jiajin Li, Kristjan Greenewald, Mikhail Yurochkin, Justin Solomon

Conference on Learning Representations (ICLR), 2023

### **Wasserstein Iterative Networks for Barycenter Estimation**

Alexander Korotin, Vage Egiazarian, [Lingxiao Li](#), Evgeny Burnaev

Conference on Neural Information Processing Systems (NeurIPS), 2022

### **Do Neural Optimal Transport Solvers Work? A Continuous Wasserstein-2 Benchmark**

Alexander Korotin, [Lingxiao Li](#), Aude Genevay, Justin Solomon, Alexander Filippov, Evgeny Burnaev

Conference on Neural Information Processing Systems (NeurIPS), 2021

### **Large-Scale Wasserstein Gradient Flows**

Petr Mokrov, Alexander Korotin, [Lingxiao Li](#), Aude Genevay, Justin Solomon, Evgeny Burnaev

Conference on Neural Information Processing Systems (NeurIPS), 2021

### **Interactive All-Hex Meshing via Cuboid Decomposition**

[Lingxiao Li](#), Paul Zhang, Dmitriy Smirnov, S Mazdak Abulnaga, Justin Solomon

SIGGRAPH Asia, 2021

### **Continuous Wasserstein-2 Barycenter Estimation without Minimax Optimization**

Alexander Korotin, [Lingxiao Li](#), Justin Solomon, Evgeny Burnaev

Conference on Learning Representations (ICLR), 2021

## Continuous Regularized Wasserstein Barycenters

Lingxiao Li, Aude Genevay, Mikhail Yurochkin, Justin Solomon

Conference on Neural Information Processing Systems (NeurIPS), 2020

## Supervised Fitting of Geometric Primitives to 3D Point Clouds

Lingxiao Li<sup>\*</sup>, Minhyuk Sung<sup>\*</sup>, Anastasia Dubrovina, Li Yi, and Leonidas Guibas (<sup>\*</sup> equal contribution)

Oral presentation at Computer Vision and Pattern Recognition (CVPR), 2019

## AWARDS

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<b>MIT EECS Frederick C. Hennie III Teaching Award</b>	<i>2021</i>
Recognition of outstanding contribution to departmental teaching	
<b>MIT EECS Great Educator Fellowship</b>	<i>2019-2020</i>
Twelve-month fellowship covering first-year Ph.D. tuition and living expenses	
<b>Stanford Frederick Emmons Terman Engineering Scholastic Award</b>	<i>2018</i>
Awarded to the top 5% graduating seniors in the engineering school	
<b>Stanford CS348B Rendering Competition, <i>Grand Prize</i></b>	<i>2016</i>
<b>International Collegiate Programming Contest</b>	<i>2014-2015</i>
<i>World finalist</i> representing Stanford, <i>second place</i> in Pacific Northwest regional contest	
<b>Stanford Larry Yung Scholarship</b>	<i>2014-2018</i>
Full tuition coverage for the undergraduate study at Stanford	
<b>Chinese National Olympiad in Informatics, <i>gold medalist</i></b>	<i>2012</i>
<b>Asia-Pacific Informatics Olympiad, <i>gold medalist</i></b>	<i>2012</i>

## WORK EXPERIENCE

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<b>Microsoft Research, Boston, MA, <i>Research Intern</i></b>	<i>2023 Summer</i>
Worked with Lester Mackey on compression and bias correction of samples.	
<b>Adobe Inc, San Francisco, CA, <i>Research Intern</i></b>	<i>2021 Summer</i>
Worked with Noam Aigerman and Vladmir G. Kim on implicit-function-based symmetry and recurring pattern detection methods.	
<b>MIT, Geometric Data Processing Group, Cambridge, MA, <i>Research Assistant</i></b>	<i>2019-now</i>
Develop geometric techniques for machine learning, computer vision and graphics.	
<b>Stanford, Geometry Processing Lab, CA, <i>Graduate Research Assistant</i></b>	<i>2018-2019</i>
Led a research team at Guibas Lab to develop novel methods for 3D surface reconstruction (shape completion via symmetric, geometric primitive fitting), in remote collaboration with a research team from Siemens Corporation.	
<b>Rubrik, Inc., Palo Alto, CA, <i>Software Engineering Intern</i></b>	<i>2017 Summer</i>
Developed a secure and persistent method to access MSSQL from other platforms via Samba and TLS tunnel.	
<b>Intentional Software Corporation, Bellevue, WA, <i>Software Engineering Intern</i></b>	<i>2016 Summer</i>
Developed a new threading model of the texture cache for the graphics team.	
<b>Facebook, Inc., Menlo Park, CA, <i>Software Engineering Intern</i></b>	<i>2015 Summer</i>
Redesigned and implemented “profile tiles” on the Facebook web platform to allow a more unified look and feel on the profile page.	
<b>Fangtsun Games, Chengdu, China, <i>Game Developer</i></b>	<i>2013-2014</i>
Supported the development of a detective story-based indie game rendered in ancient Chinese art style named “shadow play” as a founding member at a local game startup.	