

Lingxiao Li

Research Scientist at Netflix
✉ lingxiaol@netflix.com

EDUCATION

- Ph.D. Candidate in Computer Science, MIT** *Sep. 2019 – May 2024*
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)
GPA: 4.05/4.3

WORK EXPERIENCE

- Netflix, Los Gatos, CA, Research Scientist** *2024 Summer – Present*
Working on developing tools to enhance content creation for original series, movies, and video games.
- Microsoft Research, Boston, MA, Research Intern** *2023 Summer*
Worked with Lester Mackey on compression and bias correction of samples.
- Adobe Inc, San Francisco, CA, Research Intern** *2021 Summer*
Worked with Noam Aigerman and Vladmir G. Kim on implicit-function-based symmetry and recurring pattern detection methods.
- Stanford, Geometry Processing Lab, CA, Graduate Research Assistant** *2018-2019*
Led a research team at Guibas Lab on 3D surface reconstruction (shape completion via symmetric, geometric primitive fitting), in remote collaboration with a research team from Siemens Corporation.
- Rubrik, Inc., Palo Alto, CA, Software Engineering Intern** *2017 Summer*
Developed a secure and persistent method to access MSSQL from other platforms via Samba and TLS tunnel.
- Intentional Software Corporation, Bellevue, WA, Software Engineering Intern** *2016 Summer*
Developed a new threading model of the texture cache for the graphics team.
- Facebook, Inc., Menlo Park, CA, Software Engineering Intern** *2015 Summer*
Redesigned and implemented “profile tiles” on the Facebook web platform to allow a more unified look and feel on the profile page.
- Fangtsun Games, Chengdu, China, Game Developer** *2013-2014*
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.

PUBLICATIONS

- Correctness-Guaranteed Code Generation Via Constrained Decoding**
Lingxiao Li, Salar Rahili, Yiwei Zhao
Conference on Language Modeling (COLM), 2025
- Go-with-the-Flow: Motion-Controllable Video Diffusion Models Using Real-Time Warped Noise**
Ryan Burgert, Yuancheng Xu, Wenqi Xian, Oliver Pilarski, Pascal Clausen, Mingming He, Li Ma,

Yitong Deng, Lingxiao Li, Mohsen Mousavi, Michael Ryoo, Paul Debevec, Ning Yu
Computer Vision and Pattern Recognition (CVPR), 2025, **Oral presentation**

Infinite-Resolution Integral Noise Warping for Diffusion Models

Yitong Deng, Winnie Lin, Lingxiao Li, Dmitry Smirnov, Ryan Burgert, Ning Yu, Vincent Dedun,
Mohammad H. Taghavi
Conference on Learning Representations (ICLR), 2025

Debiased Distribution Compression

Lingxiao Li, Raaz Dwivedi, Lester Mackey
International Conference on Machine Learning (ICML), 2024

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, Dmitry 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*, Minhyuk Sung*, Anastasia Dubrovina, Li Yi, and Leonidas Guibas (* equal contribution)
Computer Vision and Pattern Recognition (CVPR), 2019, **Oral presentation**

AWARDS

MIT EECS Frederick C. Hennie III Teaching Award

2021

Recognition of outstanding contribution to departmental teaching

MIT EECS Great Educator Fellowship

2019-2020

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