

PETER POTAPTCHEK

peterpotaptcik.github.io

EDUCATION

University of Oxford <i>DPhil in Statistical Machine Learning</i> Supervised by George Deligiannidis and Yee Whye Teh Teaching Assistant: Probability, Statistical Learning Theory	Sep 2023 - Present
Harvard University <i>Fellow of the School of Engineering and Applied Sciences</i> Working with Michael Albergo	Jun 2025 - Present
University of Toronto <i>Honours Bachelor in Computer Science and Statistics - 4.0 (94.5%)</i> Supervised by Chris J. Maddison and Daniel M. Roy Teaching Assistant: Linear Algebra, Operating Systems	Sep 2018 - May 2023

SELECTED PUBLICATIONS

- T. Farghly*, **Peter Potaptcik***, S. Howard*, et al. Diffusion Models and the Manifold Hypothesis: Score Function Smoothing is Geometry Adaptive. *NeurIPS 2025*. arXiv:2510.02305.
- S. Howard, **Peter Potaptcik**, G. Deligiannidis. Schrödinger Bridge Matching for Tree-Structured Costs and Entropic Wasserstein Barycentres. *NeurIPS 2025*. arXiv:2506.17197.
- Peter Potaptcik***, I. Azangulov*, and G. Deligiannidis. Linear Convergence of Diffusion Models Under the Manifold Hypothesis. *COLT 2025*. arXiv:2410.09046.
- L. Zhang*, **Peter Potaptcik***, A. Doucet, et al. Generalized Parallel Tempering. *ICLR 2025 Workshop*. arXiv:2502.10328.
- K. Kapusniak, **Peter Potaptcik**, T. Reu, et al. Metric Flow Matching for Smooth Interpolations on the Data Manifold. *NeurIPS 2024*. arXiv:2405.14780.

WORK EXPERIENCE

D. E. Shaw - Software Developer Intern	<i>New York City, NY</i>	-	2022
Coinbase - Software Engineer Intern	<i>San Francisco, CA</i>	-	2021
Microsoft - Software Engineer Intern	<i>Redmond, WA</i>	-	2020
KPMG - Data Science Intern	<i>Toronto, ON</i>	-	2019

AWARDS AND HONOURS

Google PhD Fellowship	\$120,000	2025
NSERC Postgraduate Scholarship	\$120,000	2025
First Place Citadel PhD Research Showcase	£24,000	2025
Best Short Talk Award BAYSM	\$300	2023
U of Toronto Department of Computer Science Research Award	\$7,500	2021
U of Toronto Scholar In-Course Award	\$1,500	2019, 2020, 2021
Canadian Mathematical Olympiad (CMO)		2017