Nate Gruver

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EDUCATION

PhD Computer Science, 2020-25
NYU Courant, advised by Andrew Gordon Wilson and Kyunghyun Cho

MS Computer Science, 2018-20
Stanford University, advised by Stefano Ermon

BS Computer Science, 2014-18
Stanford University, advised by Chris Piech

EXPERIENCE

Research Intern, Meta AI, Summer 2022
Diffusion generative models for protein design.

Research Intern, Waymo, Summer 2020
Machine learning for planning and control.

Research Intern, Apple Inc., Winter 2020
Language modeling for location-based search.

SWE Intern, Google, Fall 2019
Reinforcement learning for the Linux kernel virtual machine.

PUBLICATIONS

‡ **Nate Gruver***, Marc Finzi*, Micah Goldblum, Andrew Gordon Wilson. *The Lie Derivative for Measuring Learned Equivariance*. ICLR 2023.

‡ Pavel Izmailov*, Polina Kirichenko*, **Nate Gruver***, Andrew Gordon Wilson. *On Feature Learning in the Presence of Spurious Correlations*. NeurIPS 2022.

‡ Sam Stanton, Wesley Maddox, **Nate Gruver**, Andrew Gordon Wilson. *Accelerating Bayesian Optimization for Protein Design with Denoising Autoencoders*. ICML 2022.

‡ **Nate Gruver**, Marc Finzi, Samuel Stanton and Andrew Wilson. *Deconstructing the Inductive Biases of Hamiltonian Neural Networks*. ICLR 2022 (**spotlight**).

‡ **Nate Gruver**, Jiaming Song, Mykel Kochenderfer, Stefano Ermon *Multi-agent Adversarial Inverse Reinforcement Learning with Latent Variables*. AAMAS 2020.

‡ Shushman Choudhury*, **Nate Gruver***, Mykel Kochenderfer. *Adaptive Informative Path Planning with Multimodal Sensing*. ICAPS 2020.

WORKSHOP PAPERS

‡ **Nate Gruver**, Sanyam Kapoor, Miles Cranmer and Andrew Wilson. *Epistemic Uncertainty in Learning Chaotic Dynamical Systems*. ICML UDL (2021).

‡ **Nate Gruver**, Samuel Stanton,..., Peyton Greenside and Andrew Wilson. *Effective Surrogate Models for Protein Design with Bayesian Optimization*. ICML CompBio (2021).

TEACHING

New York University, 2021-2022
- Bayesian Machine Learning (Fall 2021 & Fall 2022)

Stanford University, 2019
- Probabilistic Graphical Models (CS228), Introduction to Probability (CS109)