Hao Wu

GENERAL INFORMATION	Email: wu.hao10@northeastern.edu Homepage: hao-w.github.io	Phone: (+1) 206-369-8865 Github: hao-w

RESEARCH INTERESTS

Deep Probabilistic Models, Amortized Inference, Probabilistic Programming

EDUCATION

Ph.D, Computer Science — 2017 - Present
Northeastern University — Boston, MA
Supervisor: Jan-Willem van de Meent

M.Sc, Computer Science — 2015 - 2016
University of Virginia — Charlottesville, VA

M.Sc, Applied Mathematics — 2014 - 2015
University of Washington — Seattle, WA

B.Sc, Mathematics — 2010 - 2014
Sichuan University — Chengdu, China

PROFESSIONAL EXPERIENCE

Research Intern — Summer 2021
IBM Research — Cambridge, MA

Research Assistant Intern — Summer 2020
Oracle Labs — Burlington, MA

Research Assistant — 2017 - Present
Northeastern University — Boston, MA

Associate Software Engineer — 2017
MicroStrategy — Tysons, VA

PUBLICATIONS

Heiko Zimmermann, **Hao Wu**, Babak Esmaeili, Sam Stites, Jan-Willem van de Meent. Nested Variational Inference. *Conference on Neural Information Processing Systems, 2021*

Sam Stites*, Heiko Zimmermann*, **Hao Wu**, Eli Sennesh, Jan-Willem van de Meent. Learning Proposals for Probabilistic Programs with Inference Combinators. *Uncertainty in Artificial Intelligence, 2021.*

Hao Wu*, Babak Esmaeili*, Michael Wick, Jean-Baptiste Tristan, Jan-Willem van de Meent. Conjugate Energy-Based Models. *International Conference on Machine Learning, 2021.*

Hao Wu, Heiko Zimmermann, Eli Sennesh, Tuan-Anh Le, Jan-Willem van de Meent. Amortized Population Gibbs Samplers with Neural Sufficient Statistics. *International Conference on Machine Learning, 2020.*

Babak Esmaeili, **Hao Wu**, Sarthak Jain, Alican Bozkurt, N. Siddharth, Brooks Paige, Dana H. Brooks, Jennifer Dy, Jan-Willem van de Meent. Structured Disentangled Representations. *International Conference on Artificial Intelligence and Statistics, 2019.*

Eli Sennesh, Adam Ścibior, **Hao Wu**, Jan-Willem van de Meent. Composing Modeling and Inference Operations with Probabilistic Program Combinators. *NeurIPS Bayesian Nonparametrics Workshop*, 2018.

TEACHING EXPERIENCE	**Teaching Assistant** Northeastern University - Unsupervised Machine Learning and Data Mining	2018, 2021 Boston, MA
SKILLS	**Computer Programming**: Python, Java **Operating Systems**: Linux, Windows	