Masatoshi   Uehara.

mu223@cornell.edu https://masatoshiuehara.com/

Education
2013-2017 Department of applied mathematics and information science, The University of Tokyo
2017- 2020 Department of Statistics, PHD program, Harvard University
2020- Department of Computer Science, PhD program, Cornell University

Research Interests
Reinforcement learning, Causal inference, Online learning

Publications (* indicates I am the corresponding author or co-first author)

Off-Policy Evaluation and Learning for External Validity under a Covariate Shift
Uehara, M. Kato, T. Yasui, Shota.
In Thirty-fourth Conference on Neural Information Processing Systems (NeurIPS 2020)

Doubly Robust Off-Policy Value and Gradient Estimation for Deterministic Policies
Kallus, N. Uehara, M*.
In Thirty-fourth Conference on Neural Information Processing Systems (NeurIPS 2020)

Statistically Efficient Off-Policy Policy Gradients
Kallus, N. Uehara, M*.
In Proceedings of the 33rd International Conference on International Conference (ICML 2020)

Minimax Weight and Q-Function Learning for Off-Policy Evaluation
Uehara, M. , Huang, J. Jiang, N.
In Proceedings of the 33rd International Conference on International Conference (ICML 2020)

Double Reinforcement Learning for Efficient Off-Policy Evaluation in Markov Decision Processes
Kallus, N. Uehara, M*.
In Proceedings of the 33rd International Conference on International Conference (ICML 2020)
Journal of Machine Learning Research(Longer Version)

Imputation Estimators for Unnormalized Models with Missing Data
Uehara, M. Matsuda, T. Kim, J.W.
In 23nd International Conference on Artificial Intelligence and Statistics *(AISTATS 2020)*

Unified Estimation Framework for Unnormalized Models with Statistical Efficiency
Uehara, M. Kanamori,T. Takenouchi, T. Matsuda, T.
In 23nd International Conference on Artificial Intelligence and Statistics *(AISTATS 2020)*

Intrinsically Efficient, Stable, and Bounded Off-Policy Evaluation for Reinforcement Learning
Kallus, N. Uehara, M*.
In Thirty-third Conference on Neural Information Processing Systems (NeurIPS 2019)

Preprints

Efficient Evaluation of Natural Stochastic Policies in Offline Reinforcement Learning
Kallus, N. Uehara, M*. https://arxiv.org/abs/2006.03886

Localized Debiased Machine Learning: Efficient Estimation of Quantile Treatment Effects, Conditional Value at Risk, and Beyond
Kallus, N. Mao, X. Uehara, M. https://arxiv.org/abs/1912.12945

Efficiently Breaking the Curse of Horizon: Double Reinforcement Learning in Infinite-Horizon Processes
Major revision in Operations research
Kallus, N. Uehara, M*.   https://arxiv.org/abs/1909.05850.pdf

Information Criteria for Non-normalized Models
Matsuda, T. Uehara, M. Hyvarinen, A.   https://arxiv.org/pdf/1905.05976.pdf

Semiparametric Response Model with Nonignorable Nonresponse
Uehara, M. Kim, J.W.   https://arxiv.org/pdf/1810.12519.pdf

Analysis of Noise Contrastive Estimation from the Perspective of Asymptotic Variance
Uehara, M. Matsuda, T. Komaki, F.   https://arxiv.org/abs/1808.07983.pdf

Generative Adversarial Nets from a Density Ratio Estimation Perspective,
Uehara, M. Sato, I. Suzuki, M. Nakayama, K. Matsuo, Y.   https://arxiv.org/abs/1610.02920.pdf

Coding skills
Python, C++, R