YICHUN HU

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EDUCATION

Cornell University *08/2017 - 05/2022*
Ph.D. Candidate in Operations Research, minor in Applied Mathematics
Advisor: Nathan Kallus

Peking University *09/2013 - 06/2017*
B.S. in Mathematics and Applied Mathematics, B.A. in Economics

SKILLS

- *Research Interests*: Data-driven decision making; bandit/RL; sequential decision making; causal inference.
- *Programming*: Python (PyTorch), R, Julia.

RESEARCH PAPERS

Publications

1. Y. Hu, N. Kallus, X. Mao. Fast Rates for Contextual Linear Optimization. ***Management Science**, accepted 2021.*
2. Y. Hu, N. Kallus, X. Mao. Smooth Contextual Bandits: Bridging the Parametric and Non-differentiable Regret Regimes. ***Operations Research**, accepted 2021.*
   - Preliminary version appeared in *33rd Conference on Learning Theory (**COLT 2020**).*
   - **Finalist, INFORMS Applied Probability Society 2020 Best Student Paper Competition.**
3. Y. Hu, N. Kallus, M. Uehara. Fast Rates for the Regret of Offline Reinforcement Learning. *34th Conference on Learning Theory (**COLT 2021**).*
   - Journal version under review.

Under Review/Revision

1. Y. Hu, N. Kallus. DTR Bandit: Learning to Make Response-Adaptive Decisions with Low Regret. *Under review.*

Workshop Papers

1. M. Garrard, H. Wang, B. Letham, S. Singh, A. Kazerouni, S. Tan, Z. Wang, M. Huang, Y. Hu, C. Zhou, N. Zhou, E. Bakshy. Practical Policy Optimization with Personalized Experimentation. *NeurIPS 2021 Workshop on Causal Inference Challenges in Sequential Decision Making: Bridging Theory and Practice.*

WORK EXPERIENCE

Facebook *Menlo Park, CA (Remote)*
Research Engineer Intern, Core Data Science (Adaptive Experimentation) *05/2021-08/2021*
- Researched on multi-objective contextual bandit learning and value model tuning in personalized experiments.

Google *Mountain View, CA (Remote)*
Data Scientist Intern, Google Play *05/2020-08/2020*
- Researched on causal methods to analyze the impact of app usage on the retention rate of Google Play Pass.

SELECTED HONORS

Finalist, Applied Probability Society Best Student Paper Competition, INFORMS *2020*
Sherri Koenig Stuewer Graduate Fellowship, Cornell University *2018*
Excellent Graduate Award, Peking University *2017*
Award for Academic Excellents, Peking University *2015,2016*
May Fourth Scholarship, Peking University *2016*
Kwuang-Hua Scholarship, Peking University *2015*

PRESENTATIONS

RL Theory Seminar, Virtual	*11/2021*
INFORMS Annual Meeting, Anaheim, CA	*10/2021*
16th INFORMS Workshop on Data Mining and Decision Analytics, Anaheim, CA	*10/2021*
34th Annual Conference on Learning Theory (COLT 2021), Boulder, CO	*08/2021*
INFORMS Annual Meeting, Virtual	*11/2020*
15th INFORMS Workshop on Data Mining and Decision Analytics, Virtual	*11/2020*
33rd Annual Conference on Learning Theory (COLT 2020), Virtual	*07/2020*
INFORMS Annual Meeting, Seattle, WA	*10/2019*
14th INFORMS Workshop on Data Mining and Decision Analytics, Seattle, WA	*10/2019*
Cornell ORIE Young Researchers Workshop, Ithaca, NY	*10/2019*

TEACHING EXPERIENCE

Cornell University, Teaching Assistant

- CS 5785: Applied Machine Learning *Fall 2019*
- ORIE 4360: A Mathematical Examination of Fair Representation *Fall 2018*
- ORIE 3510: Introduction to Engineering Stochastic Processes I *Spring 2018*
- ORIE 5600: Financial Engineering with Stochastic Calculus I *Fall 2017*

SERVICE

- Journal Reviewer: Operations Research
- Conference Reviewer: ICML 2020-2021, ICLR 2021, AISTATS 2021-2022, NeurIPS 2021
- Workshop Reviewer: NeurIPS 2021 Workshop on Causal Inference Challenges in Sequential Decision Making
- Session chair: INFORMS 2020 General Session (Stochastic Bandits)
- Cornell University ORGA (Operations Research Graduate Association) Tech Liaison *2019-2020*