

YICHUN HU

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(+1)607-262-2847◇ yh767@cornell.edu

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

RESEARCH INTERESTS

Data-driven decision making; bandit/RL; sequential decision making; causal inference; operation research.

RESEARCH PAPERS

Publications

- 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.**
- 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 at *Mathematics of Operations Research*.

Under Review/Revision

- Y. Hu, N. Kallus, X. Mao. Fast Rates for Contextual Linear Optimization. *Revised and Resubmitted to Management Science*, 2020.
- Y. Hu, N. Kallus. DTR Bandit: Learning to Make Response-Adaptive Decisions with Low Regret. *Under review at Journal of the American Statistical Association*, 2020.
- 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. *Submitted*, 2021.

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

SKILLS

Programming: Python (PyTorch), R, Julia.

PRESENTATIONS

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

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*