Keegan W. Harris

Website: keeganharris.github.io
Twitter: @keeganwharris

Curriculum Vitae – June 2023

Link to Google Scholar
Email: keeganh@cs.cmu.edu

EDUCATION

Carnegie Mellon University   Pittsburgh, PA
Machine Learning Ph.D. Student   *August 2020 - Present*
Master of Science - Machine Learning   *December 2022*
Advisors: Nina Balcan and Steven Wu

The Pennsylvania State University   State College, PA
Bachelor of Science - Computer Science (Mathematics minor)   *May 2019*
Bachelor of Science - Physics   *May 2019*
Graduated *summa cum laude*

EMPLOYMENT

Microsoft Research Lab - New England   Boston, MA
Research Intern   *May 2023 - Present*
Student researcher with the Economics and Computation group. Host: Alex Slivkins

PUBLICATIONS

CONFERENCE PROCEEDINGS:

1. **Keegan Harris***, Ioannis Anagnostides*, Gabriele Farina, Mikhail Khodak, Zhiwei Steven Wu, and Tuomas Sandholm. *Meta-Learning in Games.* International Conference on Learning Representations (ICLR), 2023.

2. **Keegan Harris**, Valerie Chen, Joon Sik Kim, Ameet Talwalkar, Hoda Heidari, and Zhiwei Steven Wu. *Bayesian Persuasion for Algorithmic Recourse.* Neural Information Processing Systems (NeurIPS), 2022.

3. **Keegan Harris**, Daniel Ngo*, Logan Stapleton*, Hoda Heidari, and Zhiwei Steven Wu. *Strategic Instrumental Variable Regression: Recovering Causal Relationships From Strategic Responses.* International Conference on Machine Learning (ICML), 2022.

4. **Keegan Harris**, Hoda Heidari, and Zhiwei Steven Wu. *Stateful Strategic Regression.* Neural Information Processing Systems (NeurIPS), 2021.

PREPRINTS:

1. Mikhail Khodak, Ilya Osadchiy, **Keegan Harris**, Maria-Florina Balcan, Kfir Levy, Ron Mier, and Zhiwei Steven Wu. *Meta-Learning Adversarial Bandit Algorithms.* https://arxiv.org/abs/2205.14128

2. **Keegan Harris**, Anish Agarwal, Chara Podimata, and Zhiwei Steven Wu. *Strategyproof Decision-Making in Panel Data Settings and Beyond.* https://arxiv.org/abs/2211.14236

WORKSHOP PAPERS:

1. **Keegan Harris**, Chara Podimata, and Zhiwei Steven Wu. *Strategy-Aware Contextual Bandits.* NeurIPS 2022 Workshop on Distribution Shifts.

AWARDS AND HONORS

AISTATS Top Reviewer   *February 2023*
Awarded to top 10% of AISTATS 2023 reviewers

NDSEG Fellowship   *April 2022*
Graduate fellowship funded by the United States Department of Defense

Evan Pugh Senior Scholar Award   *May 2019*
Awarded to senior Penn State students in the top 0.5% of GPA

Phi Beta Kappa   *April 2018*
Penn State chapter, inducted as a junior

---

*Denotes equal contribution and/or alphabetical ordering

TALKS

1. *"Strategyproof Decision-Making in Panel Data Settings and Beyond"*
   Online Causal Inference Seminar (May 2023)
   Carnegie Mellon University, FEAT Reading Group (November 2022)

2. *"Algorithmic Decision-Making Under Incentives: Apple Tasting Feedback and Multiclass Learnability"*
   Simons TOC For Fairness Seminar (May 2023)

3. *"Bayesian Persuasion for Algorithmic Recourse"*
   Tübingen University, Setareh Maghsudi's Group Meeting (February 2023)
   3rd Symposium on the Foundations of Responsible Computing (June 2022)
   AAMAS 2022, Learning with Strategic Agents Workshop (May 2022, **Oral Presentation**)
   NeurIPS 2021, Workshop on Human and Machine Decisions (December 2021, **Oral Presentation - 6% acceptance rate**)

4. *"Allocating Opportunities in a Dynamic Model of Intergenerational Mobility"*
   IJCAI 2022, Best Papers from Sister Conferences Track (July 2022, talk given on behalf of Hoda Heidari and Jon Kleinberg)

5. *"Strategic Instrumental Variable Regression: Recovering Causal Relationships From Strategic Responses"*
   ICML 2022, Spotlight (July 2022, Short Talk)
   AAMAS 2022, Learning with Strategic Agents Workshop (May 2022, **Oral Presentation**)
   ICML 2021, Workshop on Algorithmic Recourse (July 2021, **Spotlight Presentation**)

6. *"Decision Making Under Strategic Responses"*
   Carnegie Mellon University, FATES Summer Series (August 2021)

7. *"Stateful Strategic Regression"*
   2nd Symposium on the Foundations of Responsible Computing (June 2021)
   Carnegie Mellon University, FEAT Reading Group (March 2021)

SERVICE

EXTERNAL REVIEWER:

- ACM Conference on Economics & Computation (EC) 2022
- Conference on Neural Information Processing Systems (NeurIPS) 2021
- Innovations in Theoretical Computer Science (ITCS) 2022
- Symposium on Discrete Algorithms (SODA) 2022

PROGRAM COMMITTEE:

- Conference on Artificial Intelligence and Statistics (AISTATS) 2023
- Conference on Neural Information Processing Systems (NeurIPS) 2023, 2022
- International Conference on Machine Learning (ICML) 2023, 2022

SIGECOM:

- SIGecom Seminar Series Co-organizer 2022

UNIVERSITY SERVICE:

- CMU Machine Learning Ph.D. Admissions Committee 2023, 2022
- CMU SCS Graduate Application Support Program 2022, 2020
- CMU Undergraduate AI Mentoring Program 2023, 2022, 2021

WORKSHOP PROGRAM COMMITTEE:

- Formal Verification of Machine Learning (ICML 2023)
- Learning and Decision Making with Strategic Feedback (NeurIPS 2021)
- Learning in Presence of Strategic Behavior (NeurIPS 2021)
- Trustworthy and Socially Responsible Machine Learning (NeurIPS 2022)

TEACHING

- Teaching Assistant: Advanced Topics in Machine Learning Theory (Fall 2022). Instructor: Nina Balcan

Graduate Coursework

- Advanced Algorithms (Spring 2023). Instructor: Anupam Gupta
- Advanced Introduction to Machine Learning (Fall 2020). Instructor: Nihar Shah
- Advanced Machine Learning (Spring 2021). Instructor: Pradeep Ravikumar
- Advanced Statistical Theory (Spring 2022). Instructor: Siva Balakrishnan
- Advanced Statistical Theory II (Fall 2021). Instructor: Alessandro Rinaldo
- Advanced Topics in Machine Learning and Game Theory (Fall 2020). Instructor: Fei Fang
- Applications of High-Dimensional Statistics (Spring 2023, mini course). Instructor: Andrew Li
- Computational Game Solving (Fall 2021). Instructor: Gabriele Farina and Tuomas Sandholm
- Convex Analysis (Spring 2023, mini course). Instructor: Javier Peña
- Economics of Information (Spring 2022, mini course). Instructor: James Best
- Foundations of Causal Inference (Fall 2022, mini course). Instructor: Edward Kennedy
- Graduate Algorithms (Spring 2021). Instructor: Anupam Gupta
- Intermediate Statistics (Fall 2021). Instructor: Siva Balakrishnan
- Machine Learning in Practice (Fall 2022). Instructor: Rayid Ghani
- Modern Causal Inference (Fall 2022, mini course). Instructor: Edward Kennedy
- Modern Convex Optimization (Spring 2022, mini course). Instructor: Javier Peña