

Keegan W. Harris

Curriculum Vitae – June 2023

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[Link to Google Scholar](#)

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EDUCATION

Carnegie Mellon University

Machine Learning Ph.D. Student

Master of Science - Machine Learning

Advisors: [Nina Balcan](#) and [Steven Wu](#)

Pittsburgh, PA

August 2020 - Present

December 2022

The Pennsylvania State University

Bachelor of Science - Computer Science (Mathematics minor)

Bachelor of Science - Physics

Graduated *summa cum laude*

State College, PA

May 2019

May 2019

EMPLOYMENT

Microsoft Research Lab - New England

Research Intern

Student researcher with the Economics and Computation group. Host: [Alex Slivkins](#)

Boston, MA

May 2023 - Present

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, Ameeta 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. Anish Agarwal*, **Keegan Harris***, Justin Whitehouse*, and Zhiwei Steven Wu*. *Adaptive Principal Component Regression with Applications to Panel Data*. Manuscript available upon request.
3. **Keegan Harris**, Chara Podimata, and Zhiwei Steven Wu. *Strategic Apple Tasting*. Manuscript available upon request.
4. **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

Awarded to top 10% of AISTATS 2023 reviewers

February 2023

NDSEG Fellowship

Graduate fellowship funded by the United States Department of Defense

April 2022

Evan Pugh Senior Scholar Award

Awarded to senior Penn State students in the top 0.5% of GPA

May 2019

Phi Beta Kappa

Penn State chapter, inducted as a junior

April 2018

*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](#)