Keegan W. Harris

Curriculum Vitae – October 2022

Website: keeganharris.github.io

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Link to Google Scholar

Email: keeganh@cs.cmu.edu

EDUCATION

Carnegie Mellon University

Machine Learning Ph.D. Student Master of Science - Machine Learning Advisors: Steven Wu and Hoda Heidari Pittsburgh, PA August 2020 - Present December 2022 (expected)

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

PUBLICATIONS

- 1. **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.
- 2. **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.
- 3. **Keegan Harris**, Hoda Heidari, and Zhiwei Steven Wu. *Stateful Strategic Regression*. Neural Information Processing Systems (NeurIPS), 2021.

PREPRINTS AND WORKING PAPERS

- 1. Maria-Florina Balcan, **Keegan Harris**, Mikhail Khodak, and Zhiwei Steven Wu. *Meta-Learning Adversarial Bandits*. https://arxiv.org/abs/2205.14128 (Alphabetical order)
- 2. **Keegan Harris***, Ioannis Anagnostides*, Gabriele Farina, Mikhail Khodak, Zhiwei Steven Wu, and Tuomas Sandholm. *Meta-Learning in Games*. https://arxiv.org/abs/2209.14110
- 3. **Keegan Harris**, Chara Podimata, and Zhiwei Steven Wu. *Strategy-Aware Contextual Bandits*. Manuscript available upon request.

AWARDS AND HONORS

NDSEG Fellowship

April 2022

Graduate fellowship covering 3 years of tuition and stipend

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

President Walker Award May 2017

Awarded to first-year Penn State students with a perfect GPA

Talks

 $1. \ \ ``Allocating \ Opportunities \ in \ a \ Dynamic \ Model \ of \ Intergenerational \ Mobility"$

IJCAI 2022 Best Papers from Sister Conferences Track (July 2022, talk given on behalf of Hoda Heidari and Jon Kleinberg)

2. "Strategic Instrumental Variable Regression: Recovering Causal Relationships From Strategic Responses"

ICML 2022 Spotlight (July 2022, Short Talk)

AAMAS Learning with Strategic Agents Workshop (May 2022, Oral Presentation)

ICML Workshop on Algorithmic Recourse (July 2021, Spotlight Presentation)

3. "Bayesian Persuasion for Algorithmic Recourse"

3nd Symposium on the Foundations of Responsible Computing (June 2022)

AAMAS Learning with Strategic Agents Workshop (May 2022, Oral Presentation)

NeurIPS Workshop on Human and Machine Decisions (December 2021, Oral Presentation

- 6% acceptance rate)
- 4. "Decision Making Under Strategic Responses"

CMU FATES Summer Series (August 2021)

5. "Stateful Strategic Regression"

2nd Symposium on the Foundations of Responsible Computing (June 2021) CMU FEAT Reading Group (March 2021)

Teaching

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

Coursework

- Advanced Introduction to Machine Learning (Fall 2020). Instructor: Nihar Shah
- Advanced Machine Learning: Theory and Methods (Spring 2021). Instructor: Pradeep Ravikumar
- Advanced Statistical Theory I (Spring 2022). Instructor: Sivaraman Balakrishnan
- Advanced Statistical Theory II (Fall 2021). Instructor: Alessandro Rinaldo
- Advanced Topics in Machine Learning and Game Theory (Fall 2020). Instructor: Fei Fang
- Computational Game Solving (Fall 2021). Instructor: Gabriele Farina and Tuomas Sandholm
- Foundations of Causal Inference (Fall 2022). Instructor: Edward Kennedy
- Graduate Algorithms (Spring 2021). Instructor: Anupam Gupta and Rashmi Vinayak
- Information Economics (Spring 2022). Instructor: James Best
- Intermediate Statistics (Fall 2021). Instructor: Sivaraman Balakrishnan
- Machine Learning in Practice (Fall 2022). Instructor: Rayid Ghani
- Modern Convex Optimization (Spring 2022). Instructor: Javier Peña

Professional Activities

Conference Reviewing:

- ACM Conference on Economics & Computation (EC) 2022
- Artificial Intelligence and Statistics (AISTATS) 2023
- Conference on Neural Information Processing Systems (NeurIPS) 2022, 2021
- Innovations in Theoretical Computer Science (ITCS) 2022
- International Conference on Machine Learning (ICML) 2022
- Symposium on Discrete Algorithms (SODA) 2022

SIGECOM:

- SIGecom Seminar Series Co-organizer 2022
- Student Member 2022, 2021

University Service:

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

WORKSHOP REVIEWING:

- Learning in Presence of Strategic Behavior (NeurIPS) 2021
- Learning and Decision Making with Strategic Feedback (NeurIPS) 2021