Keegan W. Harris

Curriculum Vitae – July 2022

Website: keeganharris.github.io

Twitter: @keeganwharris

Link to Google Scholar

Email: keeganh@cs.cmu.edu

EDUCATION

Carnegie Mellon University

Machine Learning Ph.D. Student

August 2020 - Present

Advisors: Hoda Heidari and Steven Wu

Research interests: machine learning, game theory, econometrics

The Pennsylvania State University

State College, PA

Bachelor of Science - Computer Science (Mathematics minor)

Bachelor of Science - Physics

May 2019

May 2019

Graduated summa cum laude

EMPLOYMENT

Vitable Health Philadelphia, PA

Machine Learning Consultant January 2022 - Present

Responsible for developing end-to-end data analysis and machine learning pipelines.

Publications

1. **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. (Contributional order)

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

Preprints

1. Maria-Florina Balcan, **Keegan Harris**, Mikhail Khodak, and Zhiwei Steven Wu. *Meta-Learning Adversarial Bandits*. ICML Workshop on New Frontiers in Adversarial Machine Learning, 2022.

 Keegan Harris, Valerie Chen, Joon Sik Kim, Ameet Talwalkar, Hoda Heidari, and Zhiwei Steven Wu. Bayesian Persuasion for Algorithmic Recourse. NeurIPS Workshop on Human and Machine Decisions, 2021. (Contributional order)

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 the top 0.5% of senior Penn State students

Phi Beta Kappa Junior Inductee April 2018

Awarded to the top 2% of junior Penn State students

President Walker Award May 2017

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

Talks

 "Allocating Opportunities in a Dynamic Model of Intergenerational Mobility"
 IJCAI 2022 Best Papers from Sister Conferences Track (to appear 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 (to appear 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)

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
- Graduate Algorithms (Spring 2021). Instructor: Anupam Gupta and Rashmi Vinayak
- Information Economics (Spring 2022). Instructor: James Best
- Intermediate Statistics (Fall 2021). Instructor: Sivaraman Balakrishnan
- Modern Convex Optimization (Spring 2022). Instructor: Javier Peña

ACADEMIC SERVICE

- CMU Graduate Application Support Program (2020)
- CMU Machine Learning Ph.D. Admissions Committee (2022)
- CMU Undergraduate AI Mentoring Program (2021)
- EC Virtual Session Chair (2022)
- NeurIPS Student Volunteer (2021)
- Reviewer: EC (2022), ICML (2022), ITCS (2022), NeurIPS (2022, 2021), SODA (2022)
- SIGecom Seminar Series Student Co-organizer (2022)
- Workshop PC: Learning in Presence of Strategic Behavior (NeurIPS 2021), Learning and Decision-Making with Strategic Feedback (NeurIPS 2021)