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 Pittsburgh, PA

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

1. "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)

2. "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)

3. "Decision Making Under Strategic Responses"

CMU FATES Summer Series (August 2021)

4. "Stateful Strategic Regression"

 $2\mathrm{nd}$ 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

Professional Activities

Conference Reviewing:

- ACM Conference on Economics & Computation (EC) 2022
- 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

OTHER CONFERENCE SERVICE:

- Backup Session Chair: International Conference on Machine Learning (ICML) 2022
- Student Volunteer: Conference on Neural Information Processing Systems (NeurIPS) 2021
- Virtual Session Chair: ACM Conference on Economics & Computation (EC) 2022

SIGECOM:

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

University Service:

- CMU Graduate Application Support Program 2020
- CMU Machine Learning Ph.D. Admissions Committee 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