

# Keegan W. Harris

Curriculum Vitae – August 2022

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[Link to Google Scholar](#)

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## EDUCATION

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### Carnegie Mellon University

*Machine Learning Ph.D. Student*

Advisors: [Hoda Heidari](#) and [Steven Wu](#)

Research interests: machine learning, game theory, econometrics

### The Pennsylvania State University

*Bachelor of Science - Computer Science (Mathematics minor)*

*Bachelor of Science - Physics*

Graduated *summa cum laude*

Pittsburgh, PA

*August 2020 - Present*

State College, PA

*May 2019*

*May 2019*

## EMPLOYMENT

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### Vitable Health

*Machine Learning Consultant*

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

Philadelphia, PA

*January 2022 - Present*

## PUBLICATIONS

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

## PREPRINTS

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1. Maria-Florina Balcan, **Keegan Harris**, Mikhail Khodak, and Zhiwei Steven Wu. *Meta-Learning Adversarial Bandits*. ICML Workshop on Adaptive Experimental Design and Active Learning in the Real World, 2022.
2. **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. (Contributinal order)

## AWARDS AND HONORS

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### NDSEG Fellowship

Graduate fellowship covering 3 years of tuition and stipend

*April 2022*

### Evan Pugh Senior Scholar Award

Awarded to the top 0.5% of senior Penn State students

*May 2019*

### Phi Beta Kappa Junior Inductee

Awarded to the top 2% of junior Penn State students

*April 2018*

### President Walker Award

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

*May 2017*

## TALKS

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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*”  
3rd 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

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- 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

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### 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