Keegan W. Harris

Curriculum Vitae – February 2022

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Education

Carnegie Mellon University — Pittsburgh, PA
Machine Learning Ph.D. Student — *August 2020 - Present*
I am fortunate to be advised by Hoda Heidari and Steven Wu.
Research interests: algorithmic game theory, bandit algorithms, economics & computation

The Pennsylvania State University — State College, PA
Bachelor of Science - Computer Science (Mathematics minor) — *June 2016 - May 2019*
Bachelor of Science - Physics — *June 2016 - 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.

Conference Publications

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

Workshop Publications

1. **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.
2. **Keegan Harris**, Daniel Ngo, Logan Stapleton, Hoda Heidari, and Zhiwei Steven Wu. *Strategic Instrumental Variable Regression: Recovering Causal Relationships From Strategic Responses.* ICML Workshop on Algorithmic Recourse, 2021.

Talks

1. "*Bayesian Persuasion for Algorithmic Recourse*"
   Oral Presentation at the NeurIPS Workshop on Human and Machine Decisions (December 2021, **6% acceptance rate**)
2. "*Decision Making Under Strategic Responses*"
   Lightning Talk at the CMU FATES Summer Series (August 2021)
3. "*Strategic Instrumental Variable Regression: Recovering Causal Relationships From Strategic Responses*"
   Spotlight Presentation at the ICML Workshop on Algorithmic Recourse (July 2021)
4. "*Stateful Strategic Regression*"
   Presentation at the 2nd Symposium on the Foundations of Responsible Computing (June 2021)

Graduate Coursework

Algorithms

- Graduate Algorithms (Spring 2021). Instructor: Anupam Gupta and Rashmi Vinayak

Economics

- Information Economics (Spring 2022). Instructor: James Best

Machine Learning

- Advanced Introduction to Machine Learning (Fall 2020). Instructor: Nihar Shah
- Advanced Machine Learning: Theory and Methods (Spring 2021). Instructor: Pradeep Ravikumar
- Advanced Topics in Machine Learning and Game Theory (Fall 2020). Instructor: Fei Fang
- Computational Game Solving (Fall 2021). Instructor: Gabriele Farina and Tuomas Sandholm

Optimization

- Modern Convex Optimization (Spring 2022). Instructor: Javier Peña
- Special Topics in Combinatorial Optimization (Spring 2022). Instructor: Gerard Cornuejols

Statistics

- Advanced Statistical Theory I (Spring 2022). Instructor: Sivaraman Balakrishnan
- Advanced Statistical Theory II (Fall 2021). Instructor: Alessandro Rinaldo
- Intermediate Statistics (Fall 2021). Instructor: Sivaraman Balakrishnan

Academic Service

Admissions

- CMU Graduate Application Support Program (2020)
- CMU Machine Learning Ph.D. Admissions Committee (2022)

Mentoring

- CMU SCS Mentoring Program (2022)
- CMU Undergraduate AI Mentoring Program (2021)

Reviewer

- International Conference on Machine Learning (ICML 2022)
- Innovations in Theoretical Computer Science (ITCS 2022)
- Neural Information Processing Systems (NeurIPS 2021)
- Symposium on Discrete Algorithms (SODA 2022)

Workshop Program Committee

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