Keegan W. Harris

Curriculum Vitae – January 2022

Website: keeganharris.github.io CMU Email: keeganh@cs.cmu.edu Twitter: @keeganwharris Vitable Email: keegan@vitablehealth.com

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 Graduated summa cum laude. June 2016 - May 2019

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

- 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

- CMU Graduate Application Support Program (2020)
- CMU Machine Learning Ph.D. Admissions Committee (2022)
- CMU Undergraduate AI Mentoring Program (2021),
- Reviewer: ICML (2022), ITCS (2022), NeurIPS (2021), SODA (2022)
- Workshop PC: Learning in Presence of Strategic Behavior (NeurIPS 2021), Learning and Decision-Making with Strategic Feedback (NeurIPS 2021)