# Keegan W. Harris

#### Curriculum Vitae – March 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: machine learning, game theory, econometrics

The Pennsylvania State University

State College, PA

June 2016 - May 2019 Bachelor of Science - Computer Science (Mathematics minor) June 2016 - May 2019 Bachelor of Science - Physics 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, Combinatorics & Optimization

- Combinatorial Optimization (Spring 2022). Instructor: Gerard Cornuejols
- Graduate Algorithms (Spring 2021). Instructor: Anupam Gupta and Rashmi Vinayak
- Modern Convex Optimization (Spring 2022). Instructor: Javier Peña

#### **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

#### 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 Committee

- CMU Machine Learning Ph.D. Admissions Committee (2022)

#### Conference 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)

#### Mentor

- CMU Graduate Application Support Program (2020)
- CMU SCS Mentoring Program (2022)
- CMU Undergraduate AI Mentoring Program (2021)

#### Workshop Reviewer

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