## **Chandler Squires**

CONTACT Information 171 Thorndike Street Cambridge, MA, 02141  $chandler squires 18@gmail.com\\1-210-412-2105$ 

EDUCATION

M.Eng., Electrical Engineering and Computer Science

September 2019

Massachusetts Institute of Technology, Cambridge, MA, USA

Thesis Advisor: Prof. Caroline Uhler

G.P.A.: 5.0/5.0

B.S., Electrical Engineering and Computer Science

June 2018

Massachusetts Institute of Technology, Cambridge, MA, USA

G.P.A.: 4.9/5.0

EMPLOYMENT

Summer Researcher, IBM, Cambridge, MA, USA

June 2019-August 2019

Developed theoretical characterization of optimal experimental design strategies for learning causal graphical models.

Data Science Intern, nference, Cambridge, MA, USA

January 2018-August 2018

Led both frontend and backend development for two new apps aimed at protein annotation and alignment and patient segmentation; analyzed custom statistical models of protein sequences

Summer Researcher, NECSI, Cambridge, MA, USA

June 2017-August 2017

Analyzed 4 years of Twitter data using topic models to compare to simulations from the Axelrod model of cultural evolution, accepted as an extended abstract and oral presentation at the New England Regional Conference on Complex Systems (NERCCS)

RESEARCH INTERESTS Causal inference (learning causal DAGs from observational and interventional data, experimental design). Applied statistics/machine learning (healthcare, neuroscience, biology, economics, social systems).

TEACHING EXPERIENCE Massachusetts Institute of Technology

6.437 (Inference and Information) Teaching Assistant

Spring 2019

**6.438** (Algorithms for Inference) Teaching Assistant

Fall 2018

Leadershrip

Code for Good, Co-director

2017-2018

Supported 15-person organizing team in efforts such as recruiting 50+ members/year to consulting programs, raising \$2,000+/year to support programs, and contacting local nonprofits

Code for Good, Consulting program advisor

2016-2018

Mentored  $\sim$ 5 student teams of 2-4 students per semester through software development projects, from early-stage ideation and outlining to final implementation

COMPUTER SKILLS Languages—Proficient in Python, Javascript (ES6). Experience in C/C++, Java, Bash, Haskell; LaTeX, HTML, CSS.

Operating systems—Mac OS, Linux/\*nix.

Software—Most contributions can be found at https://github.com/csquires. Lead developer of causaldag, a Python package for the creation, manipulation, and learning of causal DAGs.

## Refereed **PUBLICATIONS**

- 3. Katz, D., Shanmugan, K., Squires, C., Uhler, C., (2019) Size of Interventional Markov Equivalence Classes in random DAG models, AISTATS 2019.
- 2. Agarwal, R., Squires, C., Yang, K., Uhler, C., (2019) ABCD-Strategy: Budgeted Experimental Design for Targeted Causal Structure Discovery, AISTATS 2019.
- 1. Wang, W., Squires, C., Belyaeva, A., Uhler, C. (2019) Direct Estimation of Differences in Causal Graphs, NeurIPS 2018 [arXiv:1802.05631].