# DANIEL HALPERN

150 Western Ave, Allston, MA, O2134 | +1 (607) 227-4045 | dhalpern@g.harvard.edu | https://daniel-halpern.com

#### **EDUCATION**

Harvard University Cambridge, MA

Ph.D. in Computer Science

August 2020 to present

• Advisor: Ariel Procaccia

University of Toronto Toronto, ON

B.Sc. in Computer Science with High Distinction

September 2016 to June 2020

• Major GPA: 4.0/4.0, Cumulative GPA: 3.96/4.0

### **WORK EXPERIENCE**

Carnegie Mellon UniversityPittsburgh, PAResearch InternJune 2019 - August 2019

• Worked with Professor Ariel Procaccia

Research in topics related to Algorithmic Game Theory

CryptoNumerics Toronto, ON

Software Developer April 2018 - July 2020

- One of the first employees at start up working on machine learning and cryptography
- Leader of several projects in Python, Java, and Javascript

# **AWARDS**

Selected for the 9th Heidelberg Laureate Forum	2022
National Science Foundation Graduate Research Fellowship	2021
University of Toronto Computer Science Undergraduate Research Award	2020
Harold Willet Stewart Memorial Scholarship	2020
Anna And Alex Beverly Memorial Fellowship	2020
Samuel Beatty In Course Scholarship	2019
C. L. Burton Scholarship For Mathematics and Physical Sciences	2019
• Dr. James A. & Connie P. Dickson Scholarship in Science & Mathematics	2018
Alan Milne McCombie Scholarship	2017
University of Toronto President's Scholars of Excellence Program	2016

# **PUBLICATIONS**

- G. Benadè, D. Halpern, and A. Psomas. Dynamic Fair Division with Partial Information. Working Paper.
- M. Revel, D. Halpern, A. Berinsky, and A. Jadbabaie. Liquid Democracy in Practice: An Empirical Analysis of its Epistemic Performance. Working Paper.
- D. Halpern, J. Y. Halpern, A. Jadbabaie, E. Mossel, A. D. Procaccia, and M. Revel. In Defense of Fluid Democracy. Working Paper.
- D. Halpern and A. D. Procaccia. Unbiased Information Packets. Working Paper.
- A. Borodin, D. Halpern, M. Latifian, and N. Shah. *Distortion in Voting with Top-t Preferences*. Proc. of 31st International Joint Conference on Artificial Intelligence (IJCAI), 2022. Forthcoming.
- D. Halpern, G. Kehne, and J. Tucker-Foltz. *Can Buyers Reveal for a Better Deal?*. Proc. of 31st International Joint Conference on Artificial Intelligence (IJCAI), 2022. Forthcoming.
- M. Revel, T. Lin, and D. Halpern. How Many Representatives Do We Need? The Optimal Size of an Epistemic Congress. Proc. of 36th AAAI Conference on Artificial Intelligence (AAAI), 2022. Forthcoming.
- D. Halpern and N. Shah Fair and Efficient Resource Allocation with Partial Information. Proc. of 30th International Joint Conference on Artificial Intelligence (IJCAI), pp. 224-230, 2021.
- D. Halpern, G. Kehne, D. Peters, A. D. Procaccia, N. Shah, and P. Skowron. *Aggregating Binary Judgments Ranked By Accuracy*. Proc. of 35th AAAI Conference on Artificial Intelligence (**AAAI**), pp. 5456-5463, 2021.
- D. Halpern, A. D. Procaccia, A. Psomas, and N. Shah. *Fair Division with Binary Valuations: One Rule to Rule Them All*. Proc. of 16th Conference on Web and Internet Economics (**WINE**), pp. 370-383, 2020.
- V. Gkatzelis, D. Halpern, and N. Shah. Resolving the Optimal Metric Distortion Conjecture. Proc. of 61st Annual IEEE Symposium on Foundations of Computer Science (FOCS), pp. 1427-1438, 2020.
- D. Halpern and N. Shah. *Fair Division with Subsidy*. Proceedings of the 12th International Symposium on Algorithmic Game Theory (SAGT), pp. 374-389, 2019.