Jamie Tucker-Foltz

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Yale School of Management

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EDUCATION

- **Harvard University (Google Fellowship, NSF Fellowship)** — Cambridge, MA
  PhD in Computer Science. Advisor: Ariel Procaccia — *Aug. 2020 - May 2025*

- **University of Cambridge (Churchill Scholar)** — Cambridge, UK
  Master's in CS, with Distinction. Advisor: Anuj Dawar — *Oct. 2019 - June 2020*

- **Amherst College (Schupf Scholar)** — Amherst, MA
  BA, double major in CS and Math, **Summa Cum Laude - first in class** — *Aug. 2015 - May 2019*

SELECTED HONORS AND AWARDS

- **Harvard CS Dissertation Award** — Harvard University
  Annual award for top PhD Dissertation in the Computer Science Department — *October 2025*

- **Google PhD Fellowship** — Google Research
  Research fellowship for select PhD students in CS and related fields — *July 2023*

- **Kleene Award for Best Student Paper** — LICS 2021
  An award given for the best student paper(s), as judged by the program committee — *April 2021*

- **NSF Graduate Research Fellowship** — National Science Foundation
  Research fellowship for outstanding STEM graduate students — *March 2021*

- **The Woods-Travis Prize** — Amherst College
  Awarded to the top student of the graduating class — *May 2019*

- **The Computer Science Prize** — Amherst College
  Top student in Computer Science, based on honors thesis and overall achievement — *May 2019*

- **Inducted Sigma Xi** — Amherst College
  National scientific honor society — *March 2019*

- **Churchill Scholarship** — Winston Churchill Foundation
  Awarded to 16 students each year for study at the Univ. of Cambridge — *January 2019*

- **Phi Beta Kappa** — Amherst College
  National honor society, elected as a junior — *October 2018*

- **The Walker Award in Mathematics and Statistics** — Amherst College
  Initiative, creativity, perseverance, and achievement in Mathematics and Statistics — *May 2018*

- **Honorable Mention - Outstanding Undergraduate Researcher Award** — C.R.A.
  Showed "outstanding research potential in an area of computing research" — *Dec. 2017*

Teaching

- **Yale University** New Haven, CT
  Instructor Jan. 2026 - Present
  - **MGMT 7405 / CPSC 7405 / ECON 5532 Algorithms For Democratic Decision-Making**: Designed and taught PhD class. Spring 2026.

- **Harvard University** Cambridge, MA
  Teaching Fellow Jan. 2021 - May 2023
  - **ECON 2070 / CS 237 A Computer Science Toolbox for Modern Economic Theory**: Advised research projects, graded problem sets, held weekly office hours. Spring 2023.
  - **CS 238 Optimized Democracy**: Graded and helped write problem sets, held weekly office hours, and designed and presented one lecture. Spring 2021.

- **Amherst College** Amherst, MA
  Teaching Assistant Aug. 2017 - Dec. 2018
  - **CS 311 Algorithms**: Individual/group instruction on problem solving and proof-writing skills. Fall 2017, Fall 2018.
  - **CS 211 Data Structures**: Individual help with coding projects and problem solving. Spring 2018.

Industry Experience

- **Google** Boulder, CO
  Software Engineering Intern May 2018 - Aug. 2018
  - **Sanctions Tool**: Designed and implemented massive-scale database and API service for new tool to help automate and expedite screening process for sanctioned parties. Migrated sanctions data to new storage format. Put into production for all Google Payments transactions.

Publications

- Correa, J., Gölz, P., Schmidt-Kraepelin, U., Tucker-Foltz, J., Verdugo, V. (2024). Monotone Randomized Apportionment. *EC - 25th ACM Conference on Economics and Computation.* July 2024. Minor revision at *Operations Research*.

- Halpern, D., Hossain, S., Tucker-Foltz, J. (2024). Computing Voting Rules with Elicited Incomplete Votes. *EC - 25th ACM Conference on Economics and Computation.* July 2024.

- Cannon, S., Pegden, W., Tucker-Foltz, J. (2024). Sampling Balanced Forests of Grids in Polynomial Time. *STOC - Symposium on Theory of Computing.* June 2024.

- Procaccia, A. D., Robinson, I., Tucker-Foltz, J. (2024). School Redistricting: Wiping Unfairness Off the Map. *SODA - Symposium on Discrete Algorithms.* January 2024.

- Tucker-Foltz, J., Zeckhauser, R. (2024). Playing Divide-and-Choose Given Uncertain Preferences. *Management Science.* Also appeared in *EC - 24th ACM Conference on Economics and Computation.* July 2023.

- Benadè, G., Procaccia, A. D., Tucker-Foltz, J. (2023). You Can Have Your Cake and Redistrict It Too. *EC - 24th ACM Conference on Economics and Computation.* July 2023. Minor revision at *Operations Research*.

- Dreier, J., Tucker-Foltz, J. (2023). Pseudorandom Finite Models. *LICS - 38th Annual Symposium on Logic in Computer Science.* June 2023.

- Stade, J., Tucker-Foltz, J. (2023). Topological Universality of the Art Gallery Problem. *SoCG - 39th International Symposium on Computational Geometry.* June 2023. Dagstuhl Publishing, Germany.

- Halpern, D., Kehne, G., Procaccia, A. D., Tucker-Foltz, J., Wüthrich, M. (2023). Representation with Incomplete Votes. *Proceedings of the 37th AAAI Conference on Artificial Intelligence.* February 2023.

- Tucker-Foltz, J. (2022). Thou Shalt Covet The Average Of Thy Neighbors' Cakes. *Information Processing Letters.*

- Halpern, D., Kehne, G., Tucker-Foltz, J. (2022). Can Buyers Reveal for a Better Deal? *IJCAI - 31st International Joint Conference on Artificial Intelligence.* July 2022.

- Procaccia, A. D., Tucker-Foltz, J. (2022). Compact Redistricting Plans Have Many Spanning Trees. *SODA - Symposium on Discrete Algorithms.* January 2022.

- Tucker-Foltz, J. (2021). Inapproximability of Unique Games in Fixed-Point Logic with Counting. *LMCS - Logical Methods in Computer Science.* Also appeared in *LICS - 36th Annual Symposium on Logic in Computer Science.* June 2021.
    ★ **Best student paper**

- Alon, T., Dobson, M., Procaccia, A. D., Talgam-Cohen, I., Tucker-Foltz, J. (2020). Multiagent Evaluation Mechanisms. *Proceedings of the 34th AAAI Conference on Artificial Intelligence*, p. 1774–1781. NY, USA, February 2020.

- Grochow, J. A., Tucker-Foltz, J. (2018). Computational Topology and the Unique Games Conjecture. *SoCG - 34th International Symposium on Computational Geometry*, 43:1-43:16. Budapest, Hungary, June 2018. Dagstuhl Publishing, Germany.

Workshops / Theses / Non-Archival Conference Presentations

- Tucker-Foltz, J. (2025). Algorithms for Fair Redistricting. *Harvard University (doctoral thesis).* Cambridge, MA, USA, May 2020.

- Alon, T., Dobson, M., Procaccia, A. D., Talgam-Cohen, I., Tucker-Foltz, J. (2021). Multiagent Evaluation Mechanisms. *6th World Congress of the Game Theory Society.*

- Tucker-Foltz, J. (2020). Approximating Constraint Satisfaction Problems Symmetrically. *University of Cambridge (master's thesis).* Cambridge, UK, July 2020.

- Tucker-Foltz, J. (2019). Sparse Graph Minor Embedding. *Amherst College (undergraduate thesis).* Amherst, MA, USA, May 2019.

- Tucker-Foltz, J. (2018). A Cut-And-Choose Mechanism to Prevent Gerrymandering. *The 29th International Conference on Game Theory.* Stony Brook Center For Game Theory, Stony Brook, NY, USA, July 2018.

- Sanderson, N., Tucker-Foltz, J., Bradley, E., Meiss, J. D. (2017). Witness Complexes for Time Series Analysis. *SIAM Conference on Applications of Dynamical Systems.* Snow Bird, UT, USA, May 2017.