Jeremy Vollen
Curriculum Vitae

✉ *j.vollen@unsw.edu.au*
🌐 *j-vollen.github.io*

Education

2021-Present **PhD in Computer Science (intended thesis submission: April 2025)**
Department of Computer Science, University of New South Wales

2019-2020 **Graduate-level Coursework**, *Economics and Computation; Advanced Topics in EC*
Department of Informatics, University of Zürich

2013-2016 **BA in Computational & Applied Mathematics (magna cum laude)**
Department of Computational Applied Mathematics & Operations Research, Rice University

Research Interests

computational social choice, algorithmic game theory

Publications

📄 2024 **Proportionally Representative Clustering**, *Haris Aziz, Barton E. Lee, Sean Morota Chu, Jeremy Vollen, WINE*

📄 2024 **Maximum Flow is Fair: A Network Flow Approach to Committee Voting**, *Mashbat Suzuki, Jeremy Vollen, EC*

📄 2024 **Fair Lotteries for Participatory Budgeting**, *Haris Aziz, Xinhang Lu, Mashbat Suzuki, Jeremy Vollen, Toby Walsh, AAAI*

📄 2023 **Best-of-Both-Worlds Fairness in Committee Voting**, *Haris Aziz, Xinhang Lu, Mashbat Suzuki, Jeremy Vollen, Toby Walsh, WINE*

📄 2023 **Coordinating Monetary Contributions in Participatory Budgeting**, *Haris Aziz, Sujit Gujar, Manisha Padala, Mashbat Suzuki, Jeremy Vollen, SAGT*

Selected research talks

2022 **Multidisciplinary Workshop on Advances in Preference Handling Workshop**, *"Best-of-Both-Worlds Fairness in Committee Voting"*, *Macau, China*

2022 **Centre for Mathematical Social Sciences Summer Workshop**, *"Coordinating Monetary Contributions for Partipatory Budgeting"*, *University of Auckland*

2022 **AI-OPT: Workshop on AI-based Optimisation**, *"A Novel Tractable Case for the Set-Union Knapsack Problem"*, *University of Melbourne*

Service

Reviewer, *Social Choice and Welfare, JAIR, JAAMAS*
Subreviewer, *SODA, AAAI, AAMAS, ECAI*

Misc. Research

2020   **Family Life in Lockdown**, *Pietro Biroli, Steven Bosworth, Marina Della Giusta, Amalia Di Girolamo, Sylvia Jaworska, Frontiers in Psychology*

2018   **The Economic Potential for Energy Storage in Nevada**, *Ryan Hledik, Judy Chang, Roger Leuken, Johannes Pfeifenberger, John Imon Pedtke, Jeremy Vollen, prepared for Public Utilities Commission of Nevada and Nevada's Governor's Office of Energy*

Teaching Experience

2023-2024   **Game Theory**, *Teaching assistant*, UNSW Sydney

Professional Experience

2019-2021   **Pre-doctoral Research Fellow**, *Department of Economics, University of Zürich*
Survey design, data pipeline, econometrics, and causal inference in health economics.

2017-2019   **Research Analyst**, *Brattle Group*
Constrained optimization, power market simulation, project management.

Selected awards

2024   **Google Travel Grant**

2017   **BP Supply & Trading Scholarship**

Skills

Statistical analysis   Python, R

Experimental design   Experience with survey design and econometric analysis in economics research.

LaTeX

References

Dr. Haris Aziz, University of New South Wales, haris.aziz@unsw.edu.au

Dr. Toby Walsh, University of New South Wales, t.walsh@unsw.edu.au

Dr. Pietro Biroli, University of Bologna, pietro.biroli@unibo.it