

ANSON KAHNG

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RESEARCH INTERESTS

Computational Social Choice, Theoretical Computer Science, Artificial Intelligence, Economics.

ACADEMIC POSITIONS

University of Rochester, Rochester, NY *Starting July 2022*
Assistant Professor in Computer Science (CS) and Data Science (GIDS)

University of Toronto, Toronto, ON *August 2021 - August 2022*
Postdoctoral Fellow in Computer Science
Advisor: Nisarg Shah

EDUCATION

Carnegie Mellon University, Pittsburgh, PA *August 2016 - August 2021*
Ph.D. in Computer Science
Advisor: Ariel Procaccia

Harvard University, Cambridge, MA *August 2012 - May 2016*
Bachelor of Arts in Computer Science, *cum laude*
Advisor: David Parkes

INDUSTRY EXPERIENCE

Microsoft Research, New York, NY *May 2019 - August 2019*
Graduate Research Intern
Supervised by David Pennock and Rupert Freeman. Worked on multi-winner elections and pari-mutuel wagering mechanisms.

Google, Mountain View, CA *June 2014 - August 2014*
Software Engineering Intern
Worked on datacenter software and repairs accuracy. Ran large-scale data mining and developed machine learning algorithms on fleet-wide datacenter statistics.

PUBLICATIONS

Voting When the Stakes are High *Working Paper*
(α) Anson Kahng and Gregory Kehne

Liquid Democracy: An Algorithmic Perspective *JAIR 2021*
(α) Anson Kahng, Simon Mackenzie, and Ariel D. Procaccia
Supersedes AAAI 2018.

District-Fair Participatory Budgeting *AAAI 2021*
(α) D Ellis Hershkowitz, Anson Kahng, Dominik Peters, and Ariel D. Procaccia

The Fluid Dynamics of Liquid Democracy *TEAC 2021*
(α) Paul Gözl, Anson Kahng, Simon Mackenzie, and Ariel D. Procaccia
Forthcoming. Supersedes WINE 2018.

Mean Estimation from Multiple-Choice Questions *ICML 2020*
(α) Anson Kahng, Gregory Kehne, and Ariel D. Procaccia

Proportionality in Approval-Based Elections With a Variable Number of Winners *IJCAI 2020*

(α) Rupert Freeman, Anson Kahng, and David M. Pennock

HirePeer: *AAAI 2020*

Impartial Peer-Assessed Hiring at Scale in Expert Crowdsourcing Markets

Yasmine Kotturi, Anson Kahng, Ariel D. Procaccia, and Chinmay Kulkarni

Computationally-Aware Data Aggregation *ITCS 2020*

(α) Bernhard Haeupler, D Ellis Hershkowitz, Anson Kahng, and Ariel D. Procaccia

Paradoxes in Fair Machine Learning *NeurIPS 2019*

(α) Paul Gözl, Anson Kahng, and Ariel D. Procaccia

NeurIPS Spotlight Presentation (2.5% of submissions)

WeBuildAI: *CSCW 2019*

Participatory Framework for Fair and Efficient Algorithmic Governance

Min Kyung Lee, Daniel Kusbit, Anson Kahng, Ji Tae Kim, Xinran Yuan, Allissa Chan, Ritesh Noothigattu,

Daniel See, Siheon Lee, Alex Psomas, and Ariel D. Procaccia

Statistical Foundations of Virtual Democracy *ICML 2019*

(α) Anson Kahng, Min Kyung Lee, Ritesh Noothigattu, Ariel D. Procaccia, and Alex Psomas

The Fluid Dynamics of Liquid Democracy *WINE 2018*

(α) Paul Gözl, Anson Kahng, Simon Mackenzie, and Ariel D. Procaccia

Liquid Democracy: An Algorithmic Perspective *AAAI 2018*

(α) Anson Kahng, Simon Mackenzie, and Ariel D. Procaccia

Ranking Wily People Who Rank Each Other *AAAI 2018*

(α) Anson Kahng, Yasmine Kotturi, Chinmay Kulkarni, David Kurokawa, and Ariel D. Procaccia

Making Right Decisions Based on Wrong Opinions *EC 2017*

(α) Gerdus Benadè, Anson Kahng, and Ariel D. Procaccia

Timing Objectives in Dynamic Kidney Exchange *Undergraduate Honors Thesis*

Advised by David Parkes

(α): alphabetical author ordering

TEACHING

Diversity, Equity, and Inclusion in Computer Science and Society (15-996B) *February 2021*

Carnegie Mellon, Pilot Course

Discussion Moderator and Graduate Teaching Assistant

Truth, Justice, and Algorithms (15-896), Carnegie Mellon *September 2018 - December 2018*

Graduate Teaching Assistant

Graduate Artificial Intelligence (15-780), Carnegie Mellon *January 2017 - May 2017*

Graduate Teaching Assistant

Networks (CS 134), Harvard University *August 2015 - December 2015*

Undergraduate Teaching Fellow

SERVICE

PC Member / Reviewer

Social Choice and Welfare, EC-21, IJCAI-21 (SPC), AAAI-21, NeurIPS-20, ICML-20, AAAI-20, SAGT-19

CMU CSD DEI Working Group *September 2020 - Present*

Member of working group designing a mandatory course on DEI for all CSD PhD students.

Mechanism Design for Social Good (MD4SG) <i>Civic Participation working group leader (with Paul Gözl)</i> <i>Member of the Online Labor Markets and Bias working groups</i>	<i>June 2018 - Present</i> <i>September 2020 - Present</i> <i>June 2018 - September 2020</i>
Harvard EconCS Seminar Organizer Joint with Mark York	<i>September 2020 - Present</i>
Data Analysis Chair <i>EC-20</i>	<i>February 2020 - June 2020</i>
Speakers Club , Carnegie Mellon University <i>Graduate Student Member</i> Evaluate PhD students' speaking skills requirements.	<i>March 2019 - Present</i>
CSD Doctoral Review Committee , Carnegie Mellon University <i>Graduate Student Member</i> Selected as a member of the Computer Science Department's doctoral program advisory committee.	<i>November 2017 - Present</i>
CSD Ph.D. Mentor , Carnegie Mellon University <i>Graduate Student Mentor</i> Mentor junior Ph.D. students in the Computer Science Department.	<i>September 2017 - Present</i>
Random Distance Run Organizer Organize an annual ~50-person track race for the school of computer science.	<i>April 2017 - Present</i>
Hack Harvard Organizer Organized the first annual Hack Harvard, with 500+ participants, \$25,000+ in sponsorship, and over 2,000 pounds of sponsored merchandise.	<i>January 2015- November 2015</i>

TALKS

District-Fair Participatory Budgeting <i>AAAI '21 Presentation</i> <i>Harvard EconCS Seminar</i>	<i>February 2021</i> <i>September 2020</i>
Proportionality in Approval-Based Elections With a Variable Number of Winners <i>IJCAI '20 Presentation</i> <i>GAIW workshop at AAMAS '20</i>	<i>January 2021</i> <i>May 2020</i>
Statistical Foundations of Virtual Democracy <i>CU Boulder, Guest lecture in CSCI 7000: Topics in Algorithmic Game Theory</i> <i>ICML '19 Presentation</i> <i>Computational Sustainability Open Graduate Seminar</i> <i>Carnegie Mellon University, AI Seminar</i>	<i>February 2020</i> <i>June 2019</i> <i>April 2019</i> <i>March 2019</i>
Paradoxes in Fair Machine Learning <i>MD4SG Bias Working Group</i> <i>NeurIPS '19 Spotlight Presentation (2.5% of submissions)</i>	<i>January 2020</i> <i>December 2019</i>
Incentivizing Effort in Impartial Ranking <i>MD4SG Online Labor Markets Working Group</i>	<i>November 2018</i>
Liquid Democracy: An Algorithmic Perspective <i>AAAI '18 Presentation</i>	<i>January 2018</i>
Impartial Rank Aggregation <i>AAAI '18 Presentation</i>	<i>January 2018</i>

Carnegie Mellon University, AI Seminar

December 2017

Making Right Decisions Based on Wrong Opinions

EC '17 Presentation

June 2017