

<p>Intern, Microsoft Research Host: Brendan Lucier, New England (Cambridge MA). Topics: data marketplaces; signalling in games.</p>	<p>Summer 2015</p>
<p>Intern, Google Research Host: Aranyak Mehta, Mountain View CA. Topics: approximation algorithms, auction design, online matching.</p>	<p>Summer 2013</p>
<p>Intern, Google Research Host: Aranyak Mehta, Mountain View CA. Topics: crowdsourcing and maximum-likelihood; online matching; auction theory.</p>	<p>Summer 2012</p>
<p>Research Assistant, Duke University Advisor: Vincent Conitzer Topic: false-name manipulations in voting settings.</p>	<p>Summer 2011</p>
<p>PRUV Fellow, Duke University Advisor: Elizabeth Bouzarth Topic: modeling the foot in motion. A model and simulation of the dynamics of impact, stance, and takeoff in barefoot running. (Senior thesis.)</p>	<p>Summer 2010 - Summer 2011</p>

*Publications**

Prophet Inequalities with Linear Correlations and Augmentations.

Nicole Immorlica, Sahil Singla, and Bo Waggoner.
Proceedings of the Twenty-Second ACM Conference on Economics and Computation (EC 2020).

Channel Auctions.

Eduardo M. Azavedo, David M. Pennock, Bo Waggoner, E. Glen Weyl.
Management Science, 2020.

Embedding Dimension of Polyhedral Losses.

Jessica Finocchiaro, Rafael Frongillo, and Bo Waggoner.
Proceedings of the Thirty-Third Annual Conference on Learning Theory (COLT 2020).

Preventing Arbitrage from Collusion When Eliciting Probabilities.

Rupert Freeman, David M. Pennock, Dominik Peters, and Bo Waggoner.
Proceedings of the Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI 2020).

Computing Equilibria of Prediction Markets via Persuasion.

Jerry Anunrojwong, Yiling Chen, Bo Waggoner, and Haifeng Xu.
Proceedings of the Fifteenth Conference on Web and Internet Economics (WINE 2019).

Toward a Characterization of Loss Functions for Distribution Learning

Nika Haghtalab, Cameron Musco, and Bo Waggoner.
Proceedings of the Thirty-Third Annual Conference on Neural Information Processing Systems (NeurIPS 2019).

An Embedding Framework for Consistent Polyhedral Surrogates

Jessie Finocchiaro, Rafael Frongillo, and Bo Waggoner.
Proceedings of the Thirty-Third Annual Conference on Neural Information Processing Systems (NeurIPS 2019).

Equal Opportunity in Online Classification with Partial Feedback

Yahav Bechavod, Katrina Ligett, Aaron Roth, Bo Waggoner, and Z. Steven Wu
Proceedings of the Thirty-Third Annual Conference on Neural Information Processing Systems (NeurIPS 2019).

Decentralized & Collaborative AI on Blockchain

Justin D. Harris and Bo Waggoner.
Proceedings of the Second IEEE International Conference on Blockchain (IEEE-Blockchain 2019).

Multi-Observation Regression.

Rafael Frongillo, Nishant Mehta, Tom Morgan, and Bo Waggoner.
Proceedings of the Twenty-Second International Conference on Artificial Intelligence and Statistics (AISTATS 2019).

Local Differential Privacy for Evolving Data.

Matthew Joseph, Aaron Roth, Jonathan Ullman, and Bo Waggoner.
Proceedings of the Thirty-Second Annual Conference on Neural Information Processing Systems (NeurIPS 2018).
full version in Journal of Privacy and Confidentiality, Vol. 10 No. 1 (2020).

A Smoothed Analysis of the Greedy Algorithm for the Linear Contextual Bandits Problem.

Sampath Kannan, Jamie Morgenstern, Aaron Roth, Bo Waggoner, and Z. Steven Wu.
Proceedings of the Thirty-Second Annual Conference on Neural Information Processing Systems (NeurIPS 2018).

Bounded-Loss Private Prediction Markets.

Rafael Frongillo, Bo Waggoner.
Proceedings of the Thirty-Second Annual Conference on Neural Information Processing Systems (NeurIPS 2018).

Strategic Classification from Revealed Preferences.

Jinshuo Dong, Aaron Roth, Zachary Schutzman, Bo Waggoner, and Z. Steven Wu.
Proceedings of the Twentieth ACM Conference on Economics and Computation (EC 2018).

Active Information Acquisition for Linear Optimization.

Shuran Zheng, Bo Waggoner, Yang Liu, and Yiling Chen.
Proceedings of the Thirty-Fifth Conference on Uncertainty in Artificial Intelligence. (UAI 2018)

An Axiomatic Study of Scoring Rule Markets.

Rafael Frongillo and Bo Waggoner.

Proceedings of the Ninth Innovations in Theoretical Computer Science Conference (ITCS 2018).

Accuracy First: Selecting a Differential Privacy Level for Accuracy-Constrained ERM.

Katrina Ligett, Seth Neel, Aaron Roth, Bo Waggoner, and Z. Steven Wu.

Proceedings of the Thirty-First Annual Conference on Neural Information Processing Systems (NIPS 2017).

full version in Journal of Privacy and Confidentiality, Vol. 9 No. 2 (2019).

Multi-Observation Elicitation.

Sebastian Casalaina-Martin, Tom Morgan, Rafael Frongillo, and Bo Waggoner.

Proceedings of the Thirtieth Annual Conference on Learning Theory (COLT 2017).

The Complexity of Stable Matchings under Substitutable Preferences.

Yuan Deng, Debmalya Panigrahi, and Bo Waggoner.

Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence (AAAI 2017).

Informational Substitutes.

Yiling Chen and Bo Waggoner.

Proceedings of the Fifty-Sixth Annual IEEE Symposium on Foundations of Computer Science (FOCS 2016).

Descending Price Optimally Coordinates Search.

Robert Kleinberg, E. Glen Weyl, and Bo Waggoner.

Proceedings of the Seventeenth ACM Conference on Economics and Computation (EC 2015).

A Market Framework for Eliciting Private Data.

Bo Waggoner, Rafael Frongillo, and Jacob Abernethy.

Proceedings of the Twenty-Ninth Annual Conference on Neural Information Processing Systems (NIPS 2015).

Low-Cost Learning via Active Data Procurement.

Jacob Abernethy, Yiling Chen, Chien-Ju Ho, and Bo Waggoner.

Proceedings of the Sixteenth ACM Conference on Economics and Computation (EC 2015).

Fair Information Sharing for Treasure Hunting.

Yiling Chen, Kobbi Nissim, and Bo Waggoner.

Proceedings of the Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI 2015).

ℓ_p Testing and Learning of Discrete Distributions.

Bo Waggoner.

Proceedings of the Sixth Conference on Innovations in Theoretical Computer Science (ITCS 2015).

Online Stochastic Matching with Unequal Probabilities.

Aranyak Mehta, Bo Waggoner, and Morteza Zadimoghaddam.

Proceedings of the Twenty-Sixth Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2015).

Output Agreement Mechanisms and Common Knowledge.

Bo Waggoner and Yiling Chen.

Proceedings of the Second AAI Conference on Human Computation and Crowdsourcing (HCOMP 2014).

Designing Markets for Daily Deals.

Yang Cai, Mohammad Mahdian, Aranyak Mehta, and Bo Waggoner.

Proceedings of the Ninth Conference on Web and Internet Economics (WINE 2013).

Evaluating Resistance to False-Name Manipulation in Elections.

Bo Waggoner, Lirong Xia, and Vincent Conitzer.

Proceedings of the Twenty-Sixth AAI Conference on Artificial Intelligence (AAAI 2012).

** In most venues listed, author order is generally alphabetical by convention of the field.*

Conference proceedings listed above are considered full archival publications in Computer Science.

<i>Teaching</i>	CU Boulder CSCI 7000: Topics in Algorithmic Game Theory Seminar course based on readings and discussions.	Spring 2020
	CU Boulder CSCI 5454: Design and Analysis of Algorithms First-year graduate lecture-based course.	Fall 2019
	Penn NETS 412: Algorithmic Game Theory Advanced-undergraduate lecture-based course.	Spring 2018
<i>Service</i>	Co-Organizer, Tutorial on Information, Persuasion, and Decision Making at the 2018 ACM Conference on Economics and Computation (EC) with Haifeng Xu. https://www.haifeng-xu.com/information-ec18/	
	Co-Organizer, Workshop on Forecasting at the 2017 ACM Conference on Economics and Computation (EC) with Rafael Frongillo and David Rothschild. http://www.bowaggoner.com/ec-forecasting/	
	Co-Organizer, Tutorial on Elicitation at the 2016 ACM Conference on Economics and Computation (EC) with Rafael Frongillo. https://sites.google.com/site/informationelicitation/	

Technical Blog “The Tiger’s Stripes”

<https://www.bowaggoner.com/blog/>

Dedicated to accessible tutorials on research or fundamentals in math, computer science, and game theory.

Senior Program Committee

Economics and Computation (EC).

Program Committee

International Joint Conference on Artificial Intelligence (IJCAI), International Conference on Autonomous Agents and Multiagent Systems (AAMAS), AAAI Conference on Artificial Intelligence (AAAI), International Conference on Machine Learning (ICML), Advances in Neural Information Processing Systems (NIPS), International Conference on World Wide Web (WWW).

Referee/Reviewer

ACM-SIAM Symposium on Discrete Algorithms (SODA); ACM WSDM Conference; AAAI Conference on Artificial Intelligence (AAAI); International Symposium on Algorithmic Game Theory (SAGT); International Conference on Machine Learning (ICML); ACM Symposium on Theory of Computing (STOC); Conference on Learning Theory (COLT); International Joint Conference on Artificial Intelligence (IJCAI); International World Wide Web Conference (WWW); IEEE Symposium on Foundations of Computer Science (FOCS); Advances in Neural Information Processing Systems (NeurIPS); International Symposium on Information Theory (ISIT); Foundations and Trends in Theoretical Computer Science (Fn-TCS); Games and Economic Behavior; Journal of Artificial Intelligence; Transactions on Algorithms; Transactions on Economics and Computation; Information Processing Letters; Mathematics of Operations Research.

Grant Reviewer

National Science Foundation, 2019, 2020.

Online Computer Science Community

Regular contributor to question-and-answer sites {cs,cstheory,math}.stackexchange.com, mathoverflow.net.

Miscellanea

Doctoral Dissertation Award - Honorable Mention

Association for Computing Machinery’s Special Interest Group on Electronic Commerce (ACM-SIGecom).

Siebel Scholarship

Funded final year of doctoral studies via the Siebel Scholars Foundation.

Undergraduate Honors Thesis

Modeling the Foot in Motion.

Advisor: Elizabeth Bouzarth. A computational model/simulation of the motion of the foot and ankle in barefoot running, analyzing the impact of stride mechanics on internal forces and mechanics.

ACM International Collegiate Programming Competition (ICPC)

World Finalist, 2011. Member of 80th-place team from Duke University.

Competitive Distance Running

Qualifier, 2016 USA Olympic Trials, marathon, via 1:04:50 half-marathon performance.
Personal records: 4:06.8 mile, 14:06 5k, 29:14 10k.

Division I Athletics

Member and captain of three varsity athletic teams at Duke:

Cross-Country 4-time All-ACC, placing 5th as a senior;
team 21st place at the 2010 NCAA Championships.

Indoor Track All-ACC; Duke school records in 3000m and 5000m.

Outdoor Track NCAA Finalist and 21st place at the 2011 NCAA Championships
in the 10000m.

2010 COSIDA Academic All-America in Cross-Country/Track and Field.

2010 ACC Male Scholar-Athlete of the Year in Indoor Track and in Cross-Country.