

Computer Science & Engineering
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EDUCATION:

University of Washington, Seattle, WA 2014 – Present

Ph.D. Student in Computer Science and Engineering – GPA: 3.9

Masters in Computer Science and Engineering 2016

Advisor: Anna Karlin

Oberlin College, Oberlin, OH 2010 – 2014

Bachelor of Arts: Mathematics Major, Computer Science Minor – GPA: 3.85

Budapest Semesters in Mathematics, Budapest, Hungary Fall 2013

Honors, Study Abroad – GPA: 4.0

RESEARCH INTERESTS:

My interests lie in algorithmic mechanism design and approximation, in particular, in (1) mechanism design for social good, e.g. within health insurance and online labor markets, (2) maximizing revenue in settings that are motivated by practice, and (3) relaxing traditional assumptions (e.g. known priors or risk-neutrality).

AWARDS, SCHOLARSHIPS, AND DISTINCTIONS:

Microsoft Research PhD Fellowship 2017

Facebook Fellowship Finalist

UW Society for Women Engineers Evening with Industry Outstanding Female Award

Google Anita Borg Memorial Scholarship 2016

NSF Graduate Research Fellowship Program: Honorable Mention

National Defense in Science and Engineering Fellowship: Alternate Selectee

NSF Graduate Research Fellowship Program: Honorable Mention 2015

Phi Beta Kappa 2014

NSF S-STEM Scholar in Computation and Modeling at Oberlin College 2012

John F. Oberlin merit scholarship for \$25,000 annually for four years (top level awarded) 2010

PUBLICATIONS:

Optimal Mechanism Design for Single-Minded Agents, with Nikhil R. Devanur, Raghuvansh R. Saxena, Ariel Schwartzman, and S. Matthew Weinberg. In submission.

Simple and Approximately Optimal Pricing for Proportional Complementarities, with Yang Cai, Nikhil R. Devanur, and R. Preston McAfee. In submission.

Mechanism Design for Social Good, with Rediet Abebe. In *ACM SIGAI AI Matters*, 4.3, October 2018.

Interdependent Values without Single-Crossing, with Alon Eden, Michal Feldman, and Amos Fiat. In *Proceedings of the 19th ACM Conference on Economics and Computation* (EC 2018).

Revenue Maximization with an Uncertainty-Averse Buyer, with Shuchi Chawla, J. Benjamin Miller, and Emmanouil Pountourakis. In *Proceedings of the 29th ACM-SIAM Symposium on Discrete Algorithms* (SODA 2018).

A Report on the Workshop on Mechanism Design for Social Good, with Rediet Abebe. In *ACM SIGecom Exchanges*, 16.2, June 2018.

A Prior-Independent Revenue-Maximizing Auction for Multiple Additive Bidders, with Anna Karlin. In *Proceedings of the 12th Conference on Web and Internet Economics* (WINE 2016).

The FedEx Problem, with Amos Fiat, Anna Karlin, and Elias Koutsoupias. In *Proceedings of the 17th ACM Conference on Economics and Computation* (EC 2016).

Minimal Partial Languages and Automata, with F. Blanchet-Sadri and Aidan Shackleton. In *Proceedings of the 19th International Conference on Implementation and Applications of Automata* (CIAA 2014).

Different Optimal Solutions in Shared Path Graphs, with Sean McCulloch. In *Proceedings of the 2012 Midstates Conference for Undergraduate Research in Computer Science and Mathematics* (MCURCSM 2012).

WORKSHOP, TUTORIAL, AND RESEARCH GROUP ORGANIZATION:

Tutorial on the Menu Size of Precise and Approximate Revenue-Maximizing Auctions June 2018
Organizer and Presenter, with Yannai A. Gonczarowski at ACM-EC, Ithaca, NY

The 2nd Workshop on Mechanism Design for Social Good June 2018
Organizer and PC Chair, with Rediet Abebe at ACM-EC, Ithaca, NY

Tutorial on Mechanism Design for Social Good Dec. 2017
Organizer and Presenter, at WINE, Bangalore, India

The 1st Workshop on Mechanism Design for Social Good June 2017
Organizer and PC Chair, with Rediet Abebe at ACM-EC, Cambridge, MA

The Mechanism Design for Social Good research group and colloquium series 2016-2019
Organizer and Co-Founder, with Rediet Abebe (2016-2019) and Irene Lo (2018-2019)

RESEARCH INTERNSHIPS AND LONG-TERM VISITS:

Research Intern, Microsoft Research New England, hosted by Brendan Lucier Summer 2018

Visitor, Tel Aviv University, hosted by Michal Feldman and Amos Fiat Nov. 2017 – Mar. 2018

Visitor, Princeton University, hosted by Matt Weinberg Oct. – Nov. 2017

Research Intern, Microsoft Research Redmond, hosted by Nikhil Devanur Summer 2017

Visitor, Tel Aviv University, hosted by Michal Feldman and Amos Fiat Jan. – Feb. 2017

Visitor, University of Wisconsin-Madison, hosted by Shuchi Chawla Oct. – Nov. 2016

Visitor, The Simons Institute, hosted by the Algorithms & Uncertainty Semester Aug. – Sept. 2016

Visitor, The Simons Institute, hosted by the Economics & Computation Semester Fall 2015

Undergraduate Research Assistant, UNC Greensboro NSF REU, hosted by Francine Blanchet-Sadri Summer 2013

Undergraduate Research Assistant, Oberlin College, hosted by Robert Bosch Spring 2013

Undergraduate Research Assistant, Ohio Wesleyan NSF REU, hosted by Sean McCulloch Summer 2012

INVITED WORKSHOPS:

Minisymposium on Algorithmic Game Theory at CANADAM, Vancouver, BC, Canada May. 2019

Plenary Speaker at Data Science for Social Good Workshop, Georgia Tech, Atlanta, GA Apr. 2019

Northwestern Quarterly Theory Workshop, Evanston, IL Nov. 2018

Bellairs Workshop on Algorithmic Game Theory, Holetown, Barbados	Apr. 2018
Heidelberg Laureate Forum, Heidelberg, Germany	Sept. 2017
Greece Economic and Algorithmic Theory Week, Ikaria, Greece	July 2017
Young Researcher Workshop on Economics and Computation, Tel Aviv University, Israel	Jan. 2017
Women in Theory Workshop, Berkeley, CA	May 2016
CRA-W Grad Cohort Conference, San Francisco, CA	Apr. 2015

INVITED TALKS:

Interdimensional Mechanism Design

Northwestern Quarterly Theory Workshop, Evanston, IL	Nov. 2018
UW Allen School Colloquium, Seattle, WA	Oct. 2018
AmosFest, Tel Aviv, Israel	Nov. 2017

Optimal Mechanism Design for Single-Minded Agents

INFORMS Annual Meeting, Phoenix, AZ	Nov. 2018
Georgia Tech ACO Student Seminar, Atlanta, GA	Apr. 2018
UW Theory Seminar, Seattle, WA	Apr. 2018
Hebrew University of Jerusalem Computation and Economics Seminar, Jerusalem, Israel	Jan. 2018
Tel Aviv University Algorithms Seminar, Tel Aviv, Israel	Dec. 2017

Simple and Approximately Optimal Pricing for Proportional Complementarities

INFORMS Annual Meeting, Phoenix, AZ	Nov. 2018
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Interdependent Values without Single-Crossing

Bellairs Workshop on Algorithmic Game Theory, Barbados	Apr. 2018
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The FedEx Problem

Princeton Mechanism Design Reading Group, Princeton, NJ	Oct. 2017
Conference of the International Federation of Operational Research Societies, Quebec, Canada	July 2017
STOC Workshop on Bayesian Mechanism Design, Montreal, Canada	June 2017
Hebrew University of Jerusalem Lo Letzot Seminar, Jerusalem, Israel	Jan. 2017
Weizmann Institute Foundations of Computer Science Seminar, Rehovot, Israel	Jan. 2017
Young Researcher Workshop on Economics and Computation, Tel Aviv, Israel	Jan. 2017
UW-Madison Theory Seminar, Madison, WI	Nov. 2016
Microsoft Research Theory Seminar, Redmond, WA	Oct. 2016
UC Berkeley Theory Lunch, Berkeley, CA	Sept. 2016
Stanford University Theory Lunch, Palo Alto, CA	Sept. 2016
ACM Conference on Economics and Computation, Maastricht, Netherlands	July 2016
Google Scholar's Retreat, Mountain View, CA	June 2016
UW Theory Seminar, Seattle, WA	May 2016

Revenue Maximization with an Uncertainty-Averse Buyer

Microsoft Research Theory Lunch, Redmond, WA	Sept. 2017
UW Theory Lunch, Seattle, WA	May 2017

A Prior-Independent Revenue-Maximizing Auction for Multiple Additive Bidders

Conference on Web and Internet Economics, Montreal, Canada	Dec. 2016
UW Theory Seminar, Seattle, WA	Jan. 2016

Incentives and the Bitcoin Protocol

Heidelberg Laureate Forum: Workshop on Transactions and Blockchains, Heidelberg, Germany	Sept. 2017
UW CSE Women's Day, Seattle, WA	Jan. 2016
UW CSE Women's Day, Seattle, WA	May 2015
CRA-W Grad Cohort, San Francisco, CA	Apr. 2015

Minimal Partial Language and Automata

Conference on Implementation and Application of Automata, Germany	July 2014
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Different Optimal Solutions in Shared Path Graphs

Midstates Conference for Undergraduate Research in Computer Science and Mathematics	Nov. 2012
5 Colleges of Ohio Summer Research Symposium	July 2012

SERVICE AND OUTREACH:

Program Committee for AIES '19	2018
External Reviewer for JACM, TEAC, SODA '19, WINE '18, ESA '18	2018
Member , PhD Admissions Committee, University of Washington CSE	2017 – 2018
External Reviewer for STOC '18, SODA '18, WINE '17, ESA '17, ICALP '17	2017
External Reviewer for IPCO '17, STACS '17, SODA '17, WINE '16, EC '16	2016
Co-Chair , Graduate Women's Organization, University of Washington CSE	2015 – 2016
Co-Chair , Graduate Prospective Student Committee, University of Washington CSE	
Founder and Mentor , Mentoring Program for Undergraduate Women, University of Washington CSE	
Member , Graduate Prospective Student Committee, University of Washington CSE	2014 – 2015
Founder and Co-Chair , Women in Math and Computer Science, Oberlin College	Spring 2014

TEACHING ASSISTANTSHIPS:

Applied Algorithms (Professional Masters Program), University of Washington	Spring 2015
Foundations of Computing II, University of Washington	Fall 2014
Theory of Computer Science, Oberlin College	Spring 2014
Introduction to Computer Science, Oberlin College	Spring 2013
Introduction to Computer Science, Oberlin College	Spring 2012