
CONTACT INFORMATION	Polytechnique Montréal Pavillon André-Aisenstadt, Office 5515 2920, Chemin de la Tour Montréal, QC H3T 1J4, Canada	Website: akazachk.github.io Email: akazachkov@ufl.edu Office: AA-5493 Phone: +1.514.340.5121 ext. 3384
RESEARCH INTERESTS	Discrete optimization , including theoretical, methodological, and applied aspects, with an emphasis on developing better <i>cutting plane</i> techniques and open-source computational contributions Computational social choice , particularly on the fair allocation of indivisible resources Social good applications , such as humanitarian logistics and donation distribution	
EDUCATION	Carnegie Mellon University , Tepper School of Business, Pittsburgh, PA, USA Ph.D. in Algorithms, Combinatorics, and Optimization under Egon Balas May 2018 Dissertation: <i>Non-Recursive Cut Generation</i> M.S. in Algorithms, Combinatorics, and Optimization May 2013 Cornell University , College of Engineering, Ithaca, NY, USA B.S. in Operations Research and Engineering with Honors, <i>Magna Cum Laude</i> May 2011	
EMPLOYMENT	University of Florida , Department of Industrial and Systems Engineering, Gainesville, FL, USA Courtesy Assistant Professor March 2020–Present Assistant Professor Starting January 2021 Polytechnique Montréal , Department of Mathematics and Industrial Engineering, Montréal, QC, Canada Postdoctoral Researcher under Andrea Lodi May 2018–Present	
PUBLICATIONS	<ol style="list-style-type: none">[1] P.I. Frazier and A.M. Kazachkov, “Guessing Preferences: A New Approach to Multi-Attribute Ranking and Selection”, <i>Winter Simulation Conference</i>, 2011.[2] J. Karp, A.M. Kazachkov, and A.D. Procaccia, “Envy-Free Division of Sellable Goods”, <i>AAAI Conference on Artificial Intelligence</i>, 2014.[3] J.P. Dickerson, A.M. Kazachkov, A.D. Procaccia, and T. Sandholm. “Small Representations of Big Kidney Exchange Graphs”, <i>AAAI Conference on Artificial Intelligence</i>, 2017. Also appears at:<ul style="list-style-type: none">• Workshop on AI and OR for Social Good (AIORSocGood), AAI 2017• Exploring Beyond the Worst Case in Computational Social Choice (EXPLORE) Workshop, AAMAS 2016[4] G. Benadè, A.M. Kazachkov, A.D. Procaccia, and C.-A. Psomas. “How to Make Envy Vanish Over Time”, <i>ACM Conference on Economics and Computation</i>, 2018.[5] A.M. Kazachkov and S. Vardi. “On Tanking and Competitive Balance”, <i>Conference on Algorithmic Decision Theory</i>, 2019. (Peer-reviewed submission to non-proceedings track.)[6] A.M. Kazachkov, S. Nadarajah, E. Balas, and F. Margot. “Partial Hyperplane Activation for Generalized Intersection Cuts”, <i>Mathematical Programming Computation</i>, 12(1), 69–107, 2020.	

- WORKING PAPERS
- [7] E. Balas and A.M. Kazachkov. " \mathcal{V} -Polyhedral Disjunctive Cuts".
 - [8] S.S. Dey, A.M. Kazachkov, A. Lodi, and G. Muñoz. "Sparse Cutting Planes for Nonconvex Quadratically-Constrained Quadratic Programs". (Working title; working paper not yet available)
 - [9] A.M. Kazachkov and S. Vardi. "On Tanking and Competitive Balance: Reconciling Conflicting Incentives". (Extensions to ADT 2019 paper.)
 - [10] "Strengthening \mathcal{V} -Polyhedral Disjunctive Cuts and a Correspondence with Lift-And-Project Cuts".

SELECTED HONORS AND AWARDS	GERAD Postdoctoral Fellowship	2019
	INFORMS Computing Society Student Paper Award for " \mathcal{V} -Polyhedral Disjunctive Cuts"	2018
	Honorable Mention Poster Prize at the Mixed Integer Programming Workshop 2016	2016
	Most Visionary Paper Award for "Small Representations of Big Kidney Exchange Graphs" (with Dickerson, Procaccia, and Sandholm) at the EXPLORE Workshop at AAMAS 2016	2016
	Best Poster Prize at the Mixed Integer Programming Workshop 2014	2014
	Zoltners Fellowship	2011–2013
	William Larimer Mellon Fellowship	2011–2016
	Omega Rho Honor Society	2010
	Engineering Global Fellow	2009
	Robert C. Byrd Scholarship	2007
	The New York State Society of Professional Engineers Scholarship	2007
	Toshiba ExploraVision National Competition Honorable Mention	2004

- FUTURE PRESENTATIONS
- INFORMS 2020, National Harbor, MD, USA, Invited Talk, Title TBD
 - MIP 2021, Rutgers, NJ, USA, 2021, Invited Talk, Title TBD

- PRESENTATIONS
- University of Florida, Industrial and Systems Engineering, Gainesville, FL, USA, February 27, 2020, Invited Talk, "Better and Fairer Decisions: New Frontiers in Cutting Planes and Mechanism Design"
 - Concordia University, Mechanical, Aerospace, and Industrial Engineering, Montréal, QC, Canada, February 20, 2020, Invited Talk, "Better and Fairer Decisions: New Frontiers in Cutting Planes and Mechanism Design"
 - Arizona State University, Tempe, AZ, USA, February 18, 2020, Invited Talk, "Better and Fairer Decisions: New Frontiers in Cutting Planes and Mechanism Design"
 - University of Pittsburgh, Industrial Engineering, Pittsburgh, PA, USA, January 29, 2020, Invited Talk, "Better and Fairer Decisions: New Frontiers in Cutting Planes and Mechanism Design"
 - Bucknell University, Lewisburg, PA, USA, December 9, 2019, Invited Talk, "Better and Fairer Decisions: New Frontiers in Cutting Planes and Mechanism Design"
 - University of Waterloo, Combinatorics & Optimization, Waterloo, ON, Canada, November 22, 2019, Invited Talk, "Disjunctive Cuts Through the \mathcal{V} -Polyhedral Lens"
 - University of Toronto, Mechanical & Industrial Engineering OR Seminar, Toronto, ON, Canada, November 21, 2019, Invited Talk, "Disjunctive Cuts Through the \mathcal{V} -Polyhedral Lens"
 - Conference on Data Science and Optimization, Fields Institute, Toronto, ON, Canada, November 20, 2019, Invited Talk, "Sparse Cutting Planes for Nonconvex Quadratically-Constrained Quadratic Programs"
 - Egon Balas Memorial Symposium, Pittsburgh, PA, USA, October 27, 2019, Invited Talk, "Disjunctive Cuts in the 21st Century"

Conference on Algorithmic Decision Theory (ADT) 2019, Durham, NC, USA, Presentation of Accepted Paper, "On Tanking and Competitive Balance"

INFORMS 2019, Seattle, WA, USA, Invited Talk, "On Tanking and Competitive Balance"

INFORMS 2019, Seattle, WA, USA, Invited Talk, "Sparse Cutting Planes for Nonconvex Quadratically-Constrained Quadratic Programs"

MINLP 2019, Montréal, QC, Canada, "Sparse Cutting Planes for Nonconvex Quadratically-Constrained Quadratic Programs"

Universidad Adolfo Ibañez, Santiago, Chile, September 24, 2019, Invited Talk, " \mathcal{V} -Polyhedral Disjunctive Cuts"

First Discrete Optimization Day at Universidad de O'Higgins, Rancagua, Chile, September 23, 2019, Invited Talk, "Sparse Cutting Planes for Nonconvex Quadratically-Constrained Quadratic Programs"

Aussois Combinatorial Optimization Workshop 2019, Aussois, France, Short Presentation, "A Correspondence Between \mathcal{V} -Polyhedral Cuts and Lift-and-Project Cuts"

INFORMS 2018, Phoenix, AZ, USA, Invited Talk, " \mathcal{V} -Polyhedral Disjunctive Cuts"

Cornell Young Researchers Workshop, Ithaca, NY, USA, October 2018, Invited Talk, " \mathcal{V} -Polyhedral Disjunctive Cuts"

ISMP 2018, Bordeaux, France, Invited Talk, "Computational Results with \mathcal{V} -Polyhedral Cuts and Strengthening Approaches"

Lehigh University, Industrial and Systems Engineering, Bethlehem, PA, USA, June 12, 2018, Invited Talk, "Disjunctive Cuts Through the \mathcal{V} -Polyhedral Lens"

INFORMS 2017, Houston, TX, USA, Invited Talk, " \mathcal{V} -Polyhedral Cuts"

NemFest 2017, Atlanta, GA, USA, Poster, " \mathcal{V} -Polyhedral Cuts"

Aussois Combinatorial Optimization Workshop 2017, Aussois, France, "From Final Point Cuts to \mathcal{V} -Polyhedral Cuts"

INFORMS 2016, Nashville, TN, USA, Invited Talk, "Final Point Generalized Intersection Cuts"

EURO 2016, Poznań, Poland, "Final Point Generalized Intersection Cuts"

MIP 2016, Miami, FL, USA, Poster, "Cutting Planes by Tilting"

IOS 2016, Princeton, NJ, USA, "Final Point Generalized Intersection Cuts"

INFORMS 2015, Philadelphia, PA, USA, Invited Talk, "Feasible Versus Infeasible Intersection Points for Cut Generation"

ISMP 2015, Pittsburgh, PA, USA, "Partial Hyperplane Activation for Generalized Intersection Cuts"

INFORMS 2014, Charlotte, NC, USA, Invited Talk, "Computational Investigation of Generalized Intersection Cuts"

MIP 2014, Columbus, OH, USA, Poster, "Computational Investigation of Generalized Intersection Cuts"

TEACHING
EXPERIENCE

Future Faculty Program, CMU 2018

Instructor

- ESI6417 Linear Programming and Network Optimization, graduate core course, UF *Spring 2021*
- 70-460 Mathematical Models for Consulting, undergraduate business elective, CMU *Fall 2014*

Teaching Assistant, CMU

- 47-830 Integer Programming, Ph.D. core course *2015, 2017*
- 47-831 Advanced Integer Programming, Ph.D. core course *2013, 2015, 2017*
- 47-861 Convex Polyhedra, Ph.D. elective *2016*
- 47-835 Graph Theory, Ph.D. core course *2012, 2015*

	<ul style="list-style-type: none"> • 47-836 Networks and Matchings, Ph.D. core course • 21-366 Combinatorial Optimization, mathematics undergraduate elective • 45-750 Probability and Statistics, MBA core course 	2015 2014 2013
	Recitation Leader, 45-751 Optimization, MBA core course, CMU	2012–2013
	Teaching Assistant, multiple core courses, Cornell ORIE	2010
	Facilitator, Academic Excellence Workshop for Calculus I for Engineers, Cornell	2008
SELECTED WORK EXPERIENCE	Operations Research Intern ZS Associates, Princeton, NJ, USA	Summer 2010
	IES Abroad Intern Office of International Relations, Siena, Italy	Spring 2009
SERVICE	Co-Founder/Organizer: Discrete Optimization Talks	2020
	Conference Chair and Founder: YinzOR Student Conference	2017
	Program Committee	
	<ul style="list-style-type: none"> • AI for Social Good (AI4SG) • Economics and Computation (EC) • Games, Agents, and Incentives Workshop (GAIW) at AAMAS • Egon Balas Memorial Symposium • AI³ Workshop at AAMAS-IJCAI • EXPLORE Workshop at AAMAS 	2020 2020 2019, 2020 2019 2018 2017
	Reviewer	
	<ul style="list-style-type: none"> • Mathematical Programming Computation • SN Operations Research Forum • IPCO • CPAIOR 	2016, 2019, 2020 2020 2019, 2020 2015
	INFORMS Education Outreach Committee	2018–2020
	INFORMS Annual Meeting, Session Chair	2017, 2019, 2020
	INFORMS Student Affairs Committee	2016–2018
	INFORMS Chapters/Fora Committee	2016
	INFORMS Subdivision Council, Student Chapter Representative	2015–2016
	<ul style="list-style-type: none"> • Subcommittees: Diversity (2015), INFORMS Connect (2016), Chapter Health (2016) 	
	ISMP in Pittsburgh, PA, Session Chair	2015
	ISMP in Pittsburgh, PA, Volunteer	2015
	CMU INFORMS Student Chapter, Founder	2014
	<ul style="list-style-type: none"> • President • Consulting Board • INFORMS Summa Cum Laude Recognition (for the Chapter) • INFORMS Magna Cum Laude Recognition (for the Chapter) 	2014–2015 2015–2018 2016 2017–2019
	Cornell Omega Rho Honor Society, President	2010–2011
	Cornell Jewish-Russian Club, Treasurer	2008–2011
OTHER	Technical Skills: C++, Python, Julia, Java, Matlab, Mathematica, Excel RiskSolver, AMPL, C, R Languages: English (fluent), Russian (native), Italian (intermediate), French (beginner) Professional Societies: INFORMS, MOS, ACM SIGecom Citizenship: USA	