Optimization Workshop 2024

Universidad de los Andes

December 9th

Monday

	Event		Location
7:30 - 7:50 AM	Check-in		**Building B** - Room 202
7:50 - 8:00 AM	Opening		
8:00 - 10:00 AM	**Mateo Díaz:** Introduction to Continuous Optimization	MINICOURSE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 12:30	**Justin Goodson:** Stochastic Dynamic Programming	MINICOURSE	
12:30 - 2:00PM	Lunch Break		
2:00 - 4:00 PM	**José Walteros:** Introduction to Integer Optimization	MINICOURSE	
4:00 - 4:30 PM	Coffee Break		
4:30 AM - 5:30 PM	**Panel:** Applying to gradschool and life in academia		

December 10th

	Event		Location
8:00 - 8:30 AM	Check-in		**Building B** - Room 202
8:30 - 9:00 AM	Welcome remarks		
9:00 - 10:00 AM	**Claudia Sagastizábal:** Industrial Mathematics in Action: Full Wave Inversion	KEYNOTE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 11:10 AM	Computational Optimization at Google	Daniel Duque	
11:10 - 11:50 AM	The Role of Level-Set Geometry on the Performance of PDHG for Conic Convex Optimization	Robert Freund	
11:50 AM - 1:30 PM	Lunch Break		
1:30 - 2:10 PM	Data-driven bilevel optimization for inverse problems	Juan Carlos De los Reyes	
2:10 - 2:50 PM	Decision Diagram based approaches for discrete bilevel programming	Leonardo Lozano	
2:50 - 3:20 PM	Coffee Break		
3:20 - 4:00 PM	A Parametric Approach for Solving Convex Quadratic Optimization with Indicators Over Trees	Salar Fattahi	
4:00 - 6:00 PM	Adjourn		
4:00 - 6:00 PM	**Posters / Cocktail**		**Building SD** 7th Floor

December 11th

	Event		Location
8:30 - 9:00 AM	Check-in		Building B - Room 202
9:00 - 10:00 AM	**Stephen Wright:** Revisiting Inexact Fixed-Point Iterations for Min-Max Problems: Stochasticity and Structured Nonconvexity	KEYNOTE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 11:10 AM	TBD	Katya Scheinberg	
11:10 - 11:50 AM	Proximal Splitting Methods Through the Lenses of Moreau-type Envelopes	Felipe Atenas	
11:50 AM - 1:30 PM	Lunch Break		
1:30 - 2:10 PM	Rounding the Lovász Theta Function with a Value Function Approximation	Alejandro Toriello	
2:10 - 2:50 PM	Non-SOS Polynomial Optimization via a Lifting procedure	Luis Zuluaga	
2:50 - 3:20 PM	Coffee Break		
3:20 - 4:00 PM	Partially Adaptive Multistage Stochastic Programming with Formulations, Algorithms, and Applications	Beste Basciftci	
4:00 - 6:00 PM	Adjourn		
6:00 - 8:00 PM	**Dinner**		Origen Bistro

December 12th

	Event		Location
8:30 - 9:00 AM	Check-in		Building B - Room 202
9:00 - 10:00 AM	**Simge Küçükyavuz:** Convex Mixed-Integer Optimization for Causal Discovery	KEYNOTE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 11:10 AM	Contextualizing, Fast and Slow	Bernardo Pagnoncelli	
11:10 - 11:50 AM	Problem-based clustering and opportunity cost matrices in stochastic programming	Janosh Ortmann	
11:50 AM - 1:30 PM	Lunch Break		
1:30 - 2:10 PM	Non-Convex Semi-Infinite Programming: From discretization to local reduction methods	Diego Alejandro Muñoz	
2:10 - 2:50 PM	Some ideas for convex optimization using quantum computers	Giacomo Nannicini	
2:50 - 3:20 PM	Coffee Break		
3:20 - 4:00 PM	Other ideas to leveraging quantum computing for discrete optimization	David Bernal	
4:00 - 4:40 PM	Beyond worst-case convergence guarantees: A framework for predicting the behavior of complex iterative algorithms with random data	Ashwin Pananjady	

December 13th

Time	Event		Location
8:30 - 9:00 AM	Check-in		Building B - Room 202
9:00 - 10:00 AM	**Andrés Medaglia:** Leveraging shortest-path structures for engineering solutions	KEYNOTE	
10:00 - 10:30 AM	Coffee Break		
10:30 - 11:10 AM	Outlier Robustness via Partial Optimal Transport	Soroosh Shafiee	
11:10 - 11:50 AM	A tractable algorithm, based on optimal transport, for computing adversarial training lower bounds	Nicolás García Trillos	
11:50 AM - 1:30 PM	Lunch Break		
1:30 - 2:10 PM	Adversarial robustness for stochastic programs through decision-dependent ambiguity sets	Mauricio Junca	
2:10 - 2:50 PM	Projection onto Cones Generated by Epigraphs of Perspective Functions	Luis Briceño Arias	
2:50 - 3:20 PM	Coffee Break		
3:20 - 4:00 PM	TBD	Andres Gomez	
4:00 - 4:20 AM	Closing remarks		