
ACADEMIC APPOINTMENTS	Cornell Tech , Visiting Assistant Professor, New York, NY Cornell school of Operations Research and Information Engineering	Jul 2020-
EDUCATION	Columbia University , New York, NY Ph.D. in Operations Research. Advisor: Prof. Vineet Goyal Thesis: <i>Tractable Policies in Dynamic Robust Optimization</i>	2016-2020
	Columbia University , New York, NY Master of Science in Operations Research, GPA: 4.05/4.0	2015-2016
	Ecole Polytechnique , Paris, France Bachelor of Science and Master of Science in Applied Mathematics, GPA: 4.16/4.0	2012-2015
PUBLICATIONS	<i>On the Power of Static Assignment Policies for Robust Facility Location Problems</i> (joint with V. Goyal and D. Shmoys). To appear in <i>Integer Programming and Combinatorial Optimization (IPCO 2021)</i> . Journal version in preparation.	
	<i>On the Optimality of Affine Policies for Budgeted Uncertainty Sets</i> (joint with V. Goyal). Accepted for publication in <i>Math of Operations Research</i> . 2nd place in the 2020 George Nicholson student paper competition.	
	<i>A Tractable Approach for Designing Piecewise Affine Policies in Dynamic Robust Optimization</i> (joint with A. Ben-Tal and V. Goyal). <i>Math Programming</i> , 182 (1), 57-102, 2020.	
	<i>Piecewise Static Policies for Two-stage Adjustable Robust Linear Optimization</i> (joint with V. Goyal). <i>Math Programming</i> 169 (2), 649-665, 2018. Finalist in INFORMS Undergraduate OR student paper competition 2015.	
	<i>Beyond Worst-case: A Probabilistic Analysis of Affine Policies in Dynamic Optimization</i> (joint with V. Goyal). Preliminary version published as spotlight in <i>Advances in Neural Information Processing Systems (NeurIPS)</i> , 2017. Journal version under review.	
WORKING PAPERS	<i>Joint Assortment Optimization and Customization under Mixture of Multinomial Logit Model: On the Value of Personalized Assortments</i> (joint with Huseyin Topaloglu). Submitted.	
	<i>Joint Assortment and Inventory Planning for Heavy Tailed Demand</i> (joint with Vineet Goyal, Salal Humair, Omar Mouchtaki, Ali Sadighian, Jingchen Wu). Submitted.	
	<i>Matchings Riders to Drivers: A Two-stage Robust Optimization Approach</i> (joint with V. Goyal, O. Hangur and C. Stein). Submitted	
	<i>Near-optimal Threshold Policies via Lifted Linear Decision Rules</i> (with A. Bennouna and V. Goyal).	
	<i>Dynamic Resource Provisioning under Demand Uncertainty</i> (joint with C. Bandi and V. Goyal).	
REPORTS (ON COVID-19)	<i>Can Testing Ease Social Distancing Measures? Future Evolution of COVID-19 in NYC</i> (joint with Mika Sumida, Paat Rusmevichientong, Huseyin Topaloglu and Serhan Ziya)	
	<i>Future Evolution of COVID-19 Pandemic in North Carolina: Can We Flatten the Curve?</i> (joint with Mika Sumida, Paat Rusmevichientong, Huseyin Topaloglu and Serhan Ziya)	

AWARDS	<p>Second prize in the George Nicholson student paper competition 2020. Amazon Inventor Award, 2017. The Graduate Fellowship for Masters in Operations Research, Columbia University, 2016. Ecole Polytechnique Research Prize in Applied Mathematics, 2015. French Government's Major-Excellence Scholarship, 2012. Honorable Mention in the 51st International Mathematical Olympiad, Astana, Kazakhstan, 2010.</p>
PATENTS	<p><i>Real-time Iterative Assortment Allocation Estimation</i> (joint with D.Bhatia, S.Humair, V.Jain, G.Li, J.Marasanapalle, A.Sadighian, and J.Wu) Amazon Research. Patent pending.</p>
INDUSTRY EXPERIENCE	<p>Uber, Data Scientist Intern, San Francisco, CA Summer 2018 Developed a machine learning and an optimization framework for Uber Eats targeted promotions.</p> <p>Amazon, Research Scientist Intern, Seattle, WA Summer 2016, Summer 2017 Developed a standardized decision-making process for Amazon fashion assortment planning (patent pending).</p> <p>EDF R&D, Research Intern, Paris, France Fall 2014 Developed a large scale optimization framework for scheduling employees rounds at EDF (the French flagship electric utility company).</p> <p>Empresas Lipigas, Supply Chain Analyst, Santiago, Chili Summer 2014 Implemented optimization algorithms for scheduling the production of gas cylinders under demand uncertainty.</p>
TEACHING EXPERIENCE	<p>Cornell Tech, Instructor Spring 2021 - <i>ORIE 5132: Service Systems and Online Markets</i>, graduate (30 students).</p> <p>Columbia University, Teaching Assistant 2016-2020 - <i>IEOR 6613: Optimization</i>, PhD (30 students). - <i>IEOR4601: Dynamic Pricing and Revenue Management</i>, graduate (50 students). - <i>IEOR3404: Simulation</i>, undergraduate (90 students). - <i>IEOR3609: Advanced Optimization</i>, undergraduate (90 students).</p> <p>Columbia University Science Honors Program, Co-instructor Spring 2019 - <i>Introduction to Algorithms</i> (40 students).</p> <p>Mathematical Olympiad, Instructor 2018-2019 - <i>Instructor and Head coach of the Moroccan International Mathematical Olympiad team, IMO 2019, Bath UK.</i></p>
PROFESSIONAL SERVICE	<p>Reviewer for <i>Operations Research</i>, <i>INFORMS journal on Computing</i>, <i>Mathematical Programming</i>, <i>Mathematics of Operations Research</i> and <i>Management Science</i> journals. Co-organizer of IEOR-DRO seminars at Columbia university.</p>
SKILLS	<p>Arabic/French: bilingual Spanish: Fluent Programming: R, Python, Matlab, CVX, GUROBI</p>
SELECTED TALKS	<p>From Affine to Threshold Policies: a New Framework in Dynamic Robust Optimization</p> <ul style="list-style-type: none"> • Cornell ORIE, Ithaca, NY Dec 2019 • Cornell Tech, New York, NY Dec 2019 • Chicago Booth, IL Jan 2020 • Imperial College Business School, London, UK Feb 2020 • University of Waterloo, Combinatorics & Optimization, Canada Feb 2020 • Lyft Labs, New York, NY Mar 2020

On the Power of Affine Policies for Capacity Planning under Demand Uncertainty	
• MSOM, Singapore	Jul 2019
On the Optimality of Affine Policies for Budget of Uncertainty Sets	
• INFORMS Annual Meeting, (online)	Nov 2020
• ICCOPT, Berlin, Germany	Aug 2019
• ICSP, Trondheim, Norway	Jul 2019
• BIRS workshop, Banff, Canada	Jan 2019
• INFORMS Annual Meeting, Phoenix, AZ	Nov 2018
• INFORMS Optimization society Conference, Denver, CO	Mar 2018
• INFORMS Annual Meeting, Houston, TX	Oct 2017
On the Power of Affine Policies in Two-Stage Adjustable Robust Optimization	
• Imperial College, London, UK	May 2018
Beyond Worst-case: A Probabilistic Analysis of Affine Policies in Dynamic Optimization	
• Uber Tech Talks, San Francisco, CA	Aug 2018
• ISMP, Bordeaux, France	Jul 2018
• TADC, London Business School, London, UK	May 2018
• INFORMS Optimization society Conference, Denver, CO	Mar 2018
• NIPS, Long Beach, CA	Dec 2017
• INFORMS Annual Meeting, Houston, TX	Oct 2017
• Student seminar Columbia University, NY	Oct 2017
Dynamic Resource Provisioning in Data Centers under Demand Uncertainty	
• MSOM conference, Chapel Hill, NC	Jun 2017
Piecewise Affine policies for Dynamic Robust Optimization	
• Young Researchers Workshop at Cornell ORIE, Ithaca, NY	Oct 2017
• Computational Management Science conference, Bergamo, Italy	May 2017
• IBM Thomas J.Watson Research center, NY	Dec 2016
• INFORMS Annual Meeting, Nashville, TN	Nov 2016
• EURO of Operations Research, Poznan, Poland	Jul 2016
• Amazon seminars, Seattle, WA	Jun 2016
• Student seminar Columbia University, NY	Apr 2016
Affine policies for Multi-stage Dynamic Robust Optimization	
• INFORMS Annual Meeting, Nashville, TN	Nov 2016
• Student seminar Columbia University, NY	Nov 2016
Piecewise Static policies for Two-stage Adjustable Robust Optimization	
• Optimization days, Montreal, Canada	May 2016
• INFORMS Annual Meeting, Philadelphia, PA	Nov 2015
Tractable Policies in Dynamic Robust Optimization	
• Africa Business School- OCP Headquarters, Casablanca, Morocco	Jun 2017