

EDUCATION	Columbia University, Graduate School of Business , New York, NY 2020-present Ph.D. candidate in Decision, Risk and Operations division. GPA: 9.96/10.00 Advisors: Prof. Omar Besbes and Prof. Yash Kanoria
	University of Michigan , Ann Arbor, MI 2018-2020 Master of Science in Electrical and Computer Engineering. GPA: 4.27/4.00. Advisor: Prof. Vijay Subramanian Masters' Thesis: <i>Finite Time Guarantees for Empirical Dynamic Programs</i>
	Indian Institute of Technology Madras , Chennai, India 2014-2018 Bachelor of Technology in Electrical Engineering, minor in Robotics. GPA: 8.81/10.00 Advisor: Prof. Rahul Vaze, Tata Institute of Fundamental Research Bachelors' Thesis: <i>Speed Scaling under QoS constraints with finite buffer</i>
RESEARCH INTERESTS	Dynamic Resource Allocation, Online Algorithms, Reinforcement Learning
PUBLICATIONS	The Multi-secretary problem with many types with Omar Besbes and Yash Kanoria. <i>EC'22: Proceedings of the 2022 ACM Conference on Economics and Computation (forthcoming)</i> . Low-cost aerial imaging for small holder farmers with Ranveer Chandra et al. <i>COMPASS '19: Proceedings of the 2nd ACM SIGCAS Conference on Computing and Sustainable Societies</i> ★ Best Paper Award at COMPASS'19 Speed scaling under QoS constraints with finite buffer with Parikshit Hegde and Rahul Vaze. <i>WiOpt'18: 16th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks</i> .
WORKING PAPERS	Feature Based Dynamic Matching with Yilun Chen and Yash Kanoria. <i>Submitted (2022)</i> Finite Time Analysis of Empirical Dynamic Programs with Vijay Subramanian and Daniel Vial. <i>Under Preparation (2021)</i> Breaking the Unit Throughput Barrier in Distributed System with Parikshit Hegde and Rahul Vaze. <i>Working Paper (2021)</i>
PATENTS	US20180213186 A1 <i>Low-cost, Long-term Aerial Imagery</i> US20180213187 A1 <i>Aerial imaging of a region using above ground aerial camera platform</i>
INDUSTRY INTERNSHIPS	Nokia Bell Labs , Paris, France May 2018 - August 2018 Worked on developing and analysing decoding schemes for distributed wireless systems with applications in 5G and Internet of Things. Microsoft Research , Bangalore, India June 2016 - August 2016 Worked on designing low cost solutions to enable precision agriculture for small farm holders. <i>Industry Category Winner at Microsoft OneWeek Hackathon</i>
TEACHING EXPERIENCE	Columbia University, Teaching Assistant Business Analytics (EMBA core) Spring 2022 Foundations of Optimization (PhD core) Fall 2021 University of Michigan, Grader Probability (PhD core) Winter 2019 Analysis of Societal Networks (PhD elective) Fall 2019

AWARDS	Best Paper Award, COMPASS'19, 2019	
	Industry Category Winner at Microsoft OneWeek Hackathon, 2016	
	Recipient of Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship by Government of India, 2014	
	Recipient of National Talent Search Examination (NTSE) scholarship by Government of India, 2011	
SKILLS	Programming: Python, C/C++, JavaScript, PHP, HTML, CSS Tools: Git, L ^A T _E X, ROS	
SELECTED PROJECTS	Feature Based Dynamic Matching Devised a novel algorithm dubbed “Fair Allocate and Match” (FAM) to dynamically match demand units to existing supply. Proved near-optimality of the FAM algorithm as a function of the market thickness and dimensionality of the problem.	
	The Multi-secretary problem with many types Extended the network revenue management problem to encompass infinite types and distributions with gaps. Developed a novel algorithmic principle dubbed “Conversativism w.r.t Gaps” and proved near-optimality of the algorithm.	
	Finite Time Analysis of Empirical Dynamic Programs Proved finite time bounds for biased and unbiased operators for stochastic approximation algorithms using Lyapunov method.	
	Breaking the Unit Throughput Barrier in Distributed System Derived closed form expressions for throughput in coded slotted aloha scheme with power control. Developed an optimization framework to heuristically improve throughput for distributed system under the path loss setting. Full paper can be found at https://arxiv.org/abs/2010.07430	
	Low-cost aerial imaging for small holder farmers Developed a low-cost long-term aerial imagery system with lighter-than-air gas filled balloon system with novel battery efficient application and instant feedback system for online path planning to enable precision agriculture in developing countries like India.	
	Speed scaling under QoS constraints with finite buffer Devised near-optimal policies for the problem of dynamic speed scaling for optimizing the service cost under QoS constraints.	
	Speed scaling under QoS constraints with finite buffer WiOpt'2018, Shanghai, China	
SELECTED TALKS	<i>The multi-secretary problem with many types</i>	
	MSOM Annual Conference, Munich	June 2022
	RMP Annual Conference, Online	June 2022
	EC'22, Boulder	July 2022
	INFORMS Annual Meeting, Indianapolis	October 2022
SELECTED TALKS	<i>Speed scaling under QoS constraints with finite buffer</i>	
	WiOpt'2018, Shanghai, China	May 2018