

# Xinchang Xie

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LAST UPDATED: November 11, 2021

ACADEMIC **Northwestern University**

APPOINTMENT **Kellogg School of Management**

2021.1-present

Postdoctoral Research Fellow

Advisor: Prof. Itai Gurvich

**Cornell Tech**

2020.6-2020.12

Postdoctoral Research Fellow

Advisor: Prof. Itai Gurvich

EDUCATION **Duke University, Fuqua School of Business, Durham, NC**

2020

Ph.D. in Business Administration (Decision Sciences)

Advisors: Prof. Alessandro Arlotto and Prof. Alexandre Belloni

**University of Science and Technology of China, China**

2014

B.S. in Mathematics and Applied Mathematics

RESEARCH  
INTERESTS Applied probability, business analytics, operations management, and operations research

PAPERS Xie, X. and Gurvich, I. (2021). Dynamic allocation of reusable resources: Logarithmic regret in hierarchical networks. *Working paper*

Arlotto, A., Belloni, A., and Xie, X. (2021). Data-driven monitoring the optimality of policies across many Markov decision problems. *Working paper*

Arlotto, A. and Xie, X. (2021). Sequential policies and the distributions of their total rewards in dynamic and stochastic knapsack problems. *Working paper*

Arlotto, A. and Xie, X. (2020). Logarithmic regret in the dynamic and stochastic knapsack problem with equal rewards. *Stochastic Systems*, 10(2):170–191

Arlotto, A., Wei, Y., and Xie, X. (2018). An adaptive  $O(\log n)$ -optimal policy for the online selection of a monotone subsequence from a random sample. *Random Structures Algorithms*, 52(1):41–53

Yang, J., Li, Y., Xie, X., and Yang, Z. (2017). Alternating direction method for separable variables under pair-wise constraints. *Communications in Mathematics and Statistics*, 5(1):59–82

TEACHING      **Instructor**, EGRMGMT580: Decision Models      Spring 2018  
EXPERIENCE      Master of Engineering Management, Duke University

**Teaching Assistant**

- Decision618: Data Analytics for Business (MBA)      Fall 2018, 2019  
Prof. Alexandre Belloni
- BA915/Math742/STA715: Stochastic Models      Spring 2016–2018  
Prof. Alessandro Arlotto
- Math541: Applied Stochastic Processes      Fall 2017  
Prof. Richard Durrett

PROFESSIONAL      Reviewer for *Computers & Operations Research*, *Management Science*, *Oper-*  
ACTIVITIES      *ations Research*, *Operations Research Letter*, *Stochastic Systems*

REFERENCES      **Alessandro Arlotto**  
Associate Professor of Business Administration and Mathematics  
The Fuqua School of Business, Duke University  
100 Fuqua Drive, Durham, NC, 27708  
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**Alexandre Belloni**  
John D. Forsyth Professor of Business Administration  
Professor of Business Administration and Statistical Science  
The Fuqua School of Business, Duke University  
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**Itai Gurvich**  
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