

# YILUN CHEN

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## EDUCATION

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<b>Cornell University</b> Ph.D. Candidate in <b>Operations Research</b>	Ithaca, NY Aug. 2017 - May 2021 (Expected)
<b>Georgia Institute of Technology</b> Ph.D. Candidate in <b>Operations Research</b>	Atlanta, GA Aug. 2014 - Aug. 2017
<b>Peking University</b> B.S. Mathematics	Beijing, China Sept. 2010 - July 2014

## PROFESSIONAL EXPERIENCE

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<b>IBM T.J. Watson Research Center</b> Ph.D Research Intern	Yorktown Heights, NY June. 2020 - Aug 2020
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## RESEARCH INTEREST

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Applied Probability, Sequential Decision-Making, Stochastic Control, Optimal Stopping and Option Pricing, Multi-armed Bandits, Inventory Control

## RESEARCH HONORS AND AWARDS

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<b>First Place</b> , <i>INFORMS George E. Nicholson Student Paper Competition</i>	<i>INFORMS, 2019</i>
<b>Finalist</b> , <i>INFORMS Section of Finance Student Paper Competition</i>	<i>INFORMS, 2018</i>
<b>Recipient</b> , <i>the Tennenbaum Fellowship</i>	<i>Georgia Tech, 2014, 2015</i>
<b>Microsoft Young Fellow</b>	<i>Microsoft Research Asia, 2013</i>

## PREPRINTS AND WORKING PAPERS

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- **Beating the Curse of Dimensionality in Optimal Stopping**  
Yilun Chen, David Goldberg *Major revision at MATHEMATICS OF OPERATIONS RESEARCH*
- **First place**, *2019 INFORMS George E. Nicholson Student Paper Competition*
- **Finalist**, *2018 INFORMS Section of Finance Student Paper Competition*
- **A New Approach to High-Dimensional Online Decision-Making**  
Yilun Chen, David Goldberg *Preprint to be submitted to MANAGEMENT SCIENCE*
- **Polynomial Time Algorithms for the Weighted Online Bipartite Independent Set Problem**  
Yilun Chen, David Goldberg *Preprint to be submitted to MATHEMATICS OF OPERATIONS RESEARCH*
- **Fast and Practical Algorithms for High-Dimensional Optimal Stopping Problems**  
Yilun Chen, David Goldberg *Working paper*

## WORK IN PROGRESS

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- **On the Theoretical Foundation of Generalization**  
Yilun Chen, Mark Squillante, David Goldberg
- **On Bayesian Regret of Multi-Armed Bandits**  
Yilun Chen, David Goldberg

## CONFERENCES AND INVITED PRESENTATIONS

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- **“Recent Progress At The Intersection Of Optimal Stopping And Bandits”**  
*INFORMS Annual Conference* *Phoenix, 2018*
- **“Beating the Curse of Dimensionality in Optimal Stopping”**  
*INFORMS Annual Conference* *Seattle, 2019*
- **“A New Approach to High-Dimensional Online Decision-Making”**  
*INFORMS Revenue Management & Pricing Conference* *Stanford, 2019*  
*INFORMS MSOM Conference* *Singapore, 2019*  
*INFORMS Applied Probability Conference* *Brisbane, 2019*  
*INFORMS Annual Conference* *Seattle, 2019*
- **“An Efficient Approximation Algorithm for Online Maximum Weighted Independent Set”**  
*INFORMS Annual Conference* *virtual, 2020*

## TEACHING EXPERIENCE

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- Cornell University** August 2017 - Present
- Co-Instructor and Head TA**, Engineering Probability and Statistics II (ORIE 3500) *2019*
- Graduate Teaching Assistant**, Engineering Probability and Statistics II (ORIE 3500) *2018*
- Graduate Teaching Assistant**, Optimization I (ORIE 3300) *2017*
- Georgia Institute of Technology** August 2014 - May 2016
- Graduate Teaching Assistant**, Stochastic Processes II (ISYE 6762) *2016*
- Graduate Teaching Assistant**, Stochastic System (ISYE 3232) *2014, 2015*

## SKILLS

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**Specialty and Strength**      Probability Theory, Math Modelling  
**Language**                      Chinese, Shanghainese (Native), English(Fluent)

## SERVICE AND PROFESSIONAL ACTIVITIES

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- Co-President, Operations Research Graduate Student Association (ORGA)** 2019-2020, Cornell
- Bridge the communication gap between graduate students and faculty members
  - Help establish a graduate student travel fund, taking the first step towards resolving a long standing issue of lacking of communication between two campuses (Cornell Tech and Ithaca)
  - Help with the PhD student admission process of year 2020

## REFERENCES

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**David A. Goldberg**, Associate Professor  
School of Operations Research and Information Engineering, Cornell University  
Ithaca, NY USA  
[dag369@cornell.edu](mailto:dag369@cornell.edu)

**Mark S. Squillante**, Distinguished Research Staff Member and Manager of Foundations of Probability, Dynamics and Control  
IBM Thomas J. Watson Research Center  
Yorktown Heights, NY USA  
[mss@us.ibm.com](mailto:mss@us.ibm.com)