Email: ncyang@illinois.edu

URL: sites.google.com/view/nathanyang/home

Academic Positions

Current

Associate Professor (with tenure) and C.W. Park Faculty Fellow, University of Illinois Urbana-Champaign, Gies College of Business, 2025 -

Previous

Assistant Professor, Cornell University, SC Johnson College of Business, Charles H. Dyson School of Applied Economics and Management, 2020 - 2025

Assistant Professor, McGill University, Desautels Faculty of Management, 2015 - 2020

Post-Doctoral Associate and Lecturer, Yale University, School of Management, 2012 - 2015

Education

Ph.D. Economics, University of Toronto, 2013

M.A. Economics, University of Toronto, 2007

B.Sc. Mathematics, University of Alberta, 2006

Research

Themes of Interest

Retail and Strategic Behavior, Behavioral Analytics

[Equal authorship with alphabetical ordering, unless otherwise stated. * indicates lead or co-lead.]

Peer Reviewed Articles

Chintala, Sai Chand, Jūra Liaukonytė, and **Nathan Yang** (2024), "Browsing the Aisles or Browsing the App? How Online Grocery Shopping is Changing What We Buy," *Marketing Science*, 43 (3), 506-522

Fang, Limin, and **Nathan Yang** (2024), "Measuring Deterrence Motives in Dynamic Oligopoly Games," *Management Science*, 70 (6), 3527-3565

Khwaja, Ahmed, and **Nathan Yang** (2022), "Quantifying the Link Between Employee Engagement, and Customer Satisfaction and Retention in the Car Rental Industry," *Quantitative Marketing and Economics*, 20, 275-292

Ergin, Elcin, Mehmet Gumus, and **Nathan Yang** (2022), "An Empirical Analysis of Intra-Firm Product Substitutability in Fashion Retailing," *Production and Operations Management*, 31 (2), 607-621

Ling, Yabo*, Jian-Yun Nie, Daiva Nielsen, Bärbel Knäuper, **Nathan Yang**, and Laurette Dubé (2022), "Following Good Examples - Health Goal-Oriented Food Recommendation based on Behavior Data," WWW '22: Proceedings of the ACM Web Conference 2022, April 25-29, 2022

Labonte, Katherine*, Bärbel Knäuper, Laurette Dubé, **Nathan Yang**, and Daiva Nielsen (2022), "Adherence to a caloric budget and body weight change vary by season, gender, and BMI: an observational study of daily users of a mobile health app," *Obesity Science & Practice*, 8 (6), 735-747

Nielsen, Daiva*, **Nathan Yang***, Laurette Dubé, Bärbel Knäuper, Yabo Ling, and Jian-Yun Nie (2022), "Consumption Variety in Food Recommendation," *Journal of the Association for Consumer Research*, 7 (4)

Uetake, Kosuke, and **Nathan Yang** (2020), "Inspiration from the "Biggest Loser": Social Interactions in a Weight Loss Program," *Marketing Science*, 39 (3), 487-499

Nishida, Mitsukuni, and **Nathan Yang** (2020), "Threat of Entry and Organizational-form Choice: The Case of Franchising in Retailing," *Journal of Marketing Research*, 57 (5), 810-830

Yang, Nathan (2020), "Learning in Retail Entry," *International Journal of Research in Marketing*, 37 (2), 336-355

Blevins, Jason, Ahmed Khwaja, and **Nathan Yang** (2018), "Firm Expansion, Size Spillovers and Market Dominance in Retail Chain Dynamics," *Management Science*, 64 (9), 4070-4093

Igami, Mitsuru, and Nathan Yang (2016), "Unobserved Heterogeneity in Dynamic Games: Cannibalization and Preemptive Entry of Hamburger Chains in Canada," *Quantitative Economics*, 7 (2), 483-521

Yang, Nathan (2012), "Burger King and McDonalds: Wheres the Spillover?" *International Journal of the Economics of Business*, 19 (2), 255-281

Chi, Feng, and Nathan Yang (2011), "Twitter Adoption in Congress," *Review of Network Economics*, 10 (3), 1-44

Working Papers

Chen, Li, Thomas Dotzel, and **Nathan Yang** (2025), "Repeated Frontline Employee-Customer Interactions in Service Encounter Cascades"

Jiang, Yikun, Kosuke Uetake, and **Nathan Yang** (2025), "Does Premium Version Adoption in mHealth Improve User Engagement and Health-Related Outcomes?" [Minor Revision at *Marketing Science*]

Fang, Limin, and Nathan Yang (2025), "Non-Parametric Tests for Deterrence Motives"

Wang, Zhide*, Yanling Chang, **Nathan Yang**, and Alfredo Garcia (2025), "Surviving and Thriving: Firm Resilience in Competitive and Uncertain Markets"

Luo, Lijuan, Emaad Manzoor, and Nathan Yang (2025), "Creative Marketplaces for Humans & Machines"

Liu, Yiran, Kaitlin Woolley and Nathan Yang (2025), "Retail Chain Backlash"

Yang, Nathan (2025), "Strategic Duality in Quantum Games"

Yang, Nathan (2025), "Quantum Dominance"

Rao, Vithala, Nathan Yang, and Saleh Zakerinia (2025), "Using Quantum Game Theory to Model Competition"

Chi, Feng, Limin Fang, Mengwei Lin, and Nathan Yang (2025), "A Tax-Shaped Retail Landscape"

Zakerinia, Saleh*, **Nathan Yang**, and Vithala R. Rao (2024), "The Economic Benefits of Modular Innovation"

Uetake, Kosuke, and **Nathan Yang** (2022), "Harnessing the Small Victories: Goal Design Strategies for a Mobile Calorie and Weight Loss Tracking Application"

Books, Book Chapters and Survey Articles

Rao, Vithala, and **Nathan Yang** (2026), "Getting the Most Out of Structural Models," *Foundations and Trends in Marketing* (eds. Jehoshua Eliashberg), Now Publishers: Norwell, solicited and in-progress

Dubé, Laurette*, Maxime Cohen, **Nathan Yang**, and Bassem Monla, eds. (2024), *Precision Retailing*, University of Toronto Press: Toronto

Dubé, Laurette*, Maxime Cohen, **Nathan Yang**, and Bassem Monla (2024), "Preface by the Editorial Team," *Precision Retailing* (eds. Laurette Dubé, Maxime Cohen, **Nathan Yang**, and Bassem Monla), University of Toronto Press: Toronto

Liu, Peggy*, Jeffrey Inman, Beibei Li, Charlene Wong, and **Nathan Yang** (2022), "Consumer Health in the Digital Age," *Journal of the Association for Consumer Research*, 7 (2)

Hagen, Linda*, Kosuke Uetake*, **Nathan Yang***, Bryan Bollinger, Allison Chaney, Daria Dzyabura, Jordan Etkin, Avi Goldfarb, Liu Liu, K. Sudhir, Yanwen Wang, James Wright, and Ying Zhu (2020), "How Can Machine Learning Aid Behavioral Marketing Research?" *Marketing Letters*, 31, 361-370

Dubé, Laurette*, Daiva Nielsen, **Nathan Yang**, Andre Portella, and Shawn Brown (2020), "Behavior Analytics, Artificial Intelligence and Digital Technologies as Bridges Between Biological, Social and Food Systems," *Sight and Life*, 34 (1), 110-116

Dubé, Laurette*, Sjaak Wolfert, Karin Zimmerman, **Nathan Yang**, Fernando Diaz-Lopez, Rigas Arvanti, Sandra Schillo, Jian-Yun Nie, and Shawn Brown (2020), "Convergence research and innovation digital backbone: Behavioral analytics, artificial intelligence, and digital technologies as bridges between biological, social, and agri-food systems," *How is Digitization Affecting Agri-Food? New Business Models, Strategies, and Organizational Form* (eds. Maria Carmelo Annosi and Federica Brunetta), 111-125, Routledge: London

Awards, Honors and Recognition

Best Paper Award for the "Perspectives from the Front Line" track at AMA Summer Academic Conference, 2025

Best Student Paper Award at the Conference on Health IT and Analtics, 2025

Honorable Mention for the AMA Retail & Pricing SIG's Best Paper Award, 2025

Dyson Faculty Outstanding Early Career Achievement Award, 2024

Jean F. Rowley Research Excellence Award, 2022

SSHRC IDG Grant Proposal Ranked 1st overall in the Emerging Scholars category under the Business, Management and Related Fields 2 committee, 2016

Publication featured in the "International Journal of the Economics of Business 21st Anniversary Call for Papers," 2014

Publication selected for "20 Years of *International Journal of the Economics of Business*" Anniversary Collection, 2013

Winner of the North American Regional Science Council (NARSC) Graduate Student Paper Award, 2011

Social Sciences and Humanities Research Council of Canada (SSHRC), Joseph-Armand Bombardier Canada Graduate Scholarship (CGS), 2008 - 2011

Maurice Cody Research Fellowship, University of Toronto, 2011

Mary H. Beatty Fellowship, University of Toronto, 2008 - 2009

Jason Lang Scholarship, University of Alberta, 2005

Grants

New Frontiers in Research Fund (NFRF) Exploration Grant (Inaugural Competition), co-principal investigator, with Laurette Dubé, Bärbel Knäuper, Jian-Yun Nie, and Daiva Nielsen, 2019

The Institute for Data Valorisation (IVADO) Startup Research Grant, lead principal investigator, with Laurent Charlin, Saibal Ray, and Changseung Yoo, 2019

Marketing Science Institute (MSI) Research Grant, co-applicant with Linda Hagen, Yikun Jiang, Bärbel Knäuper, and Kosuke Uetake, 2018

The Institute for Data Valorisation (IVADO) Research Internship Grant, sole principal supervisor, 2018

Social Sciences and Humanities Research Council (SSHRC) Insight Grant, co-applicant with Yu Ma (principal investigator), Andrew Ching, and Laurette Dubé, 2018 - 2021

Social Sciences and Humanities Research Council (SSHRC) Insight Development Grant, sole principal investigator, 2016 - 2018

Compute Canada Default Resource Allocation Project, 2015 -

NET Institute Summer Research Grant, co-applicant with Mitsukuni Nishida, 2014

Wharton Customer Analytics Initiative Data Grantee, co-applicant with Ahmed Khwaja, 2013

NET Institute Summer Research Grant, 2011

Academic Presentations

Seminars and Workshops

2025: Centre for Complexity Economics, Applied Spirituality and Public Policy (CEASP) at O.P. Jindal Global University (virtual), Indiana University (Economics)

2024: Cornell Institute for China Economic Research, University of Hawaii (Marketing), University of Illinois Urbana-Champaign (Marketing), Baruch College (Marketing), Coventry University (Marketing), University College London (Marketing), Bocconi University (Marketing), United States Department of Agriculture (Economic Research Service)

2023: Temple University (Marketing), Canadian Centre for Health Economics (CCHE), University of Alberta (Computer Science), University of Toronto (Marketing), Rutgers University (Marketing)

2022: JACR, Temple University (Marketing), Virtual Digital Economy (VIDE), Marketing Modelers Group, McGill University (Marketing), McGill University (Nutrition)

2021: MCCHE Healthy Brains for Healthy Lives (HBHL) Workshop, Nanyang Technological University (Information Systems)

2020: Concordia John Molson School of Business (Marketing), Yale University (Marketing), McGill University (Nutrition)

2019: Cornell University (Marketing), Dalian University of Technology (Marketing), Dongbei University of Finance and Economics (Operations), University of Guelph (Marketing), Emory University (Marketing), CREST-ENSAE (Economics), Toulouse School of Economics (Economics)

2018: Dalian University of Technology (Marketing), Dongbei University of Finance and Economics (Operations), Duke University (Marketing), Queen's University (Marketing), University of Toronto (BEAR)

2017: University of Michigan (Economics), University of Michigan (Marketing), Purdue University (Marketing), McGill-John Hopkins-PSC BRIDGE, McMaster University (Marketing), University of Ottawa (Economics)

2016: McMaster University (Economics), University of Toronto (Economics), University of Toronto (Marketing), MCCHE Consumer Behavior, University of Alberta (Economics), University of Alberta (Marketing), University of British Columbia (Marketing), Western University (Marketing), University of Guelph (Marketing), Chinese University of Hong Kong (Marketing), McGill University (Finance), GERAD

2015: HEC Montréal (Economics), Yale University (Marketing), Yale University (Human Neuroscience Lab), Yale University (Economics)

2014: McGill University (Marketing), Yale University (Marketing)

2013: Yale University, Consumer Financial Protection Bureau

2012: Kansas State University (Economics), University of Connecticut (Marketing), Massachusetts Institute of Technology (Marketing), SUNY Stony Brook (Economics), Charles River Associates, Johns Hopkins University (Economics), Carnegie Mellon University (Economics), Purdue University (Economics), University of Chicago (Marketing)

2011: Bank of Canada, Yale University (Marketing)

Conferences

2023: Causal Data Science Meeting

2022: INFORMS Marketing Science Conference, SICS, Strategy Science Conference

2021: Paris Conference on Digital Economics, AIM (Artificial Intelligence in Management) Workshop and Conference at USC, Industrial Organization Society Conference, Nudges in Health Care Symposium (poster session), INFORMS Marketing Science Conference, 13th International Conference on Monte Carlo Methods and Applications, International Association for Applied Econometrics (IAAE) Annual Conference, INFORMS Virtual Healthcare Conference, Causal Data Science Meeting

2020: Summer AMA Master Class

2019: 11th Triennial Invitational Choice Symposium, Joint Statistical Meeting

2018: HEC Symposium on Consumer Behavior, ET Symposium at University of Guelph, Annual Canadian Health Economics Study Group Meeting at McGill University, Canadian Economic Association Conference at McGill University, INFORMS Marketing Science Conference, International Association for Applied Econometrics Conference at University of Montréal and UQAM

2017: American Real Estate and Urban Economics Association Conference, Industrial Organization Society Conference, 11th International Conference on Monte Carlo Methods and Applications, Marketing Analytics and Big Data Conference at Columbia Business School, Canadian Centre for Health Economics at University of Toronto, GERAD Day, Ninth Workshop on Dynamic Games in Management Science at HEC Montréal

2016: CIQSS Montreal Applied Microeconomics Research Day, Eighth Workshop on Dynamic Games in Management Science, Marketing Science Conference on Health at the Olin School

2014: Marketing Dynamics Conference, Strategy Conference at Columbia University, UTD FORMS Conference

2013: North American Econometric Society Meeting at University of Southern California, International Industrial Organization Conference

2012: FTC Microeconomics Conference, QME Annual Conference

2011: Urban Economics Association Meeting, Yale School of Management (Marketing), North American Econometric Society Meeting at Washington University of St. Louis

Teaching

Instructor

Digital Marketing Strategy and Technology (iMBA), University of Illinois Urbana-Champaign, Gies College of Business, 2026

Doctoral Seminar in Quantitative Marketing: Structural Models and Estimation (NRE), Cornell University, SC Johnson College of Business, 2021, 2023

Retail Strategy (AEM), Cornell University, Charles H. Dyson School of Applied Economics and Management, 2021 -

Marketing (AEM), Cornell University, Charles H. Dyson School of Applied Economics and Management, 2020 -

Advanced Marketing Analytics: Visual Listening in Marketing (MMA), McGill University, Desautels Faculty of Management, 2019 - 2020

Internet Marketing Analytics (MMA), McGill University, Desautels Faculty of Management, 2019 - 2020

Internet Marketing Strategy (MBA), McGill University, Desautels Faculty of Management, 2017 - 2020

Principles of Marketing (BComm), McGill University, Desautels Faculty of Management, 2016 - 2020

Internet Marketing and Social Media Analytics (MBA), Yale University, School of Management, 2013 - 2015

Ph.D Program

Co-Chair Advisor

Saleh Zakerinia, Cornell University, Charles H. Dyson School of Applied Economics and Management Sai Chand Chintala, Cornell University, SC Johnson Graduate School of Management

Committee Member

Jingru Jia, University of Illinois Urbana-Champaign, Department of Agricultural and Consumer Economics

Zhide Wang, Texas A&M University, Department of Engineering Technology & Industrial Distribution

Xinhua Wang, Cornell University, Nolan School of Hotel Administration

Anugna Reddy Gondi, Cornell University, SC Johnson Graduate School of Management

Na Liu, Cornell University, Department of Economics

Murat Unal, Cornell University, SC Johnson Graduate School of Management

Raphael Zerbato, HEC Montréal, Department of Applied Economics

Qianran (Jenny) Jin, McGill University, Desautels Faculty of Management

Jafar Chaab, HEC Montréal, Department of Decision Sciences

François-Xavier Devailly, HEC Montréal, Department of Decision Sciences

June Lee, McGill University, Desautels Faculty of Management

Filippo Dall'Olio, McGill University, Desautels Faculty of Management

Elcin Ergin, McGill University, Desautels Faculty of Management

External Member

Thang Long Doan, McGill University, Desautels Faculty of Management

Zhuang Miao, McGill University, Department of Economics

Derek Chan, McGill University, Desautels Faculty of Management

Jean-François Mercier, McGill University, Department of Economics

Amir Akbari, McGill University, Desautels Faculty of Management

Master's Program

Advisor

Jade Ding, Cornell University, Charles H. Dyson School of Applied Economics and Management Yiran Liu, Cornell University, Charles H. Dyson School of Applied Economics and Management Zanliang Meng, Cornell University, Charles H. Dyson School of Applied Economics and Management Pradeep Nagavenkata, Cornell University, SC Johnson Graduate School of Management

Committee Member

Chenrui Wang, Cornell University, Charles H. Dyson School of Applied Economics and Management Fauzi Estiko, Cornell University, Charles H. Dyson School of Applied Economics and Management

Academic Service

Editorial Board

Marketing Science, 2022 - 2025

Journal of Experimental Psychology: Applied, 2021 - 2024

Ad Hoc Reviewer

Economics: American Economic Review, American Economic Review: Insights, Canadian Journal of Economics, Economic Record, Information Economics and Policy, International Economic Review, International Journal of the Economics of Business, International Journal of Industrial Organization, Journal of Econometrics, Journal of Economic Dynamics and Control, Journal of Economics & Management Strategy, Journal of the European Economic Association, Journal of Industrial Economics, Journal of Law and Economics, Journal of Political Economy, Journal of Political Economics, Journal of Urban Economics, Quantitative Economics Economics, RAND Journal of Economics, Review of Economic Studies, Review of Industrial Organization

Information Systems: Information Systems Research, Management Science, MIS Quarterly

Marketing: Journal of the Association for Consumer Research, Journal of Business Research, Journal of Consumer Research, Journal of Marketing, Journal of Marketing Research, Journal of Public Policy & Marketing, Journal of Retailing, Management Science, Marketing Letters, Marketing Science, Psychology & Marketing

Psychology: Journal of Experimental Psychology: Applied, Organizational Behavior and Human Decision Processes

Operations: Operations Research, Production and Operations Management

Strategy: California Management Review

Awards: MSI's Alden G. Clayton Doctoral Dissertation Proposal Competition

Books: *Channel Strategies and Marketing Mix in a Connected World* (edited by Saibal Ray and Shuya Yin), *Precision Retailing* (edited by Laurette Dubé, Maxime Cohen, Nathan Yang, and Bassem Monla)

Grants: Dutch Research Council (NWO), Institute for Data Valorization (IVADO) Postdoctoral Scholarships, Mitacs Accelerate Program, New Frontiers of Research Fund (NFRF) Exploration Grant, Research Grants Council (RGC) of Hong Kong, Social Sciences and Humanities Research Council (SSHRC) Insight Development Grant

Conferences: Workshop on Platform Analytics (WoPA)

Personal

Citizenship: Canadian, US Permanent Resident

Hometown: Saskatoon, Saskatchewan