Michael L. Hamilton

Contact Information 330 Mervis Hall 3950 Roberto Clemente Drive Pittsburgh, PA 15260 **Employment**

University of Pittsburgh, Pittsburgh, PA

Summer 2019 -

Katz Graduate School of Business Area: Business Analytics and Operations

Title: Assistant Professor

Education

 ${\bf Columbia\ University},\ {\rm New\ York},\ {\rm NY}$

Fall 2014 - Spring 2019

Ph.D. in Operations Research

Thesis: Pricing Tools and Analysis for Emerging e-Commerce Technologies

Rutgers University, New Brunswick, NJ

Fall 2010 - Spring 2014

B.S. in Mathematics

Working Papers Note: Author ordering on all papers is alphabetical, as is convention in OR/MS.

- 1. Cui, T., Hamilton, M., Optimal Feature-Based Market Segmentation and Pricing. Submitted.
 - Accepted to the 18^{th} Conf. on Web and Internet Economics (WINE), 2022.
 - Third Place, INFORMS Service Science Best Paper Competition, 2022.
- 2. Cui, T., Hamilton, M., Pricing Strategies for Online Dating Platforms. Submitted.
- 3. Cui, T., Gal-Or, E., Gordon, M., Hamilton, M., Shang, J. The Effects of Competition on Corporate Sustainability.

 Submitted.
- 4. DiChristofano, A., Hamilton, M., Linardi, S., McCloud, M. Project 412Connect: Bridging Students to Communities. In preparation for journal submission.
 - Accepted to the 1st ACM Conf. on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO), 2021. Oral Presentation.
 - New Horizons Award for Bridging Research and Practice at ACM EAAMO'21.
- 5. Hamilton, M., Singal, R., Churning while Learning: Maximizing User Engagement in a Recommendation System. In preparation for journal submission.
 - Finalist, 2020 RMP Data-Driven Research Challenge.

Published Papers

- 1. Chen, N., Elmachtoub, A., Hamilton, M., Lei, X., Loot Box Pricing and Design.

 Management Science

 Dec. 2020
 - Accepted to the 21st ACM Conf. on Economics and Computation (EC), 2020.
 - Finalist, 2021 CSAMSE Conference Best Paper Award.
 - Winner, 2019 IBM Best Student Paper Award in Service Science.
- 2. Elmachtoub, A., Gupta, V., Hamilton, M., The Value of Personalized Pricing.

 Management Science

 April 2021

- Accepted to the 15^{th} Conf. on Web and Internet Economics (WINE), 2019.
- Finalist, INFORMS Service Science Best Cluster Paper Competition, 2018.
- 3. Elmachtoub, A., Hamilton, M., The Power of Opaque Products in Pricing. Management Science Jan. 2021
 - Accepted to the 13^{th} Conf. on Web and Internet Economics (WINE), 2017.
 - Feature article, discussion in Management Science Review

Previous **Papers**

- 4. Hamilton, M., Hoang, P., Murray, J., Stafford, C., & Tran, H. A Dynamic Feature Selection Based LDA Approach to Baseball Pitch Prediction. Trends and applications in knowledge discovery and data mining 2015
- 5. Hamilton, M., Hoang, L. Layne, J. Murray, D. Padget, C. Stafford, & H. Tran. Applying Machine Learning Techniques to Baseball Pitch Prediction. Int. Conf. on Pattern Recognition Applications and Methods 2014

Prior Experience

MediaMath, New York, NY Research Science Intern

Summer 2017

Amazon Research, Seattle WA. Research Science Intern

Summer 2016

North Carolina State University, Raleigh, NC

Summer 2013

Undergraduate Researcher

Presentations

Notes: (*) symbol implies talk was given by a coauthor. The (C) implies the talk was given online.

"Pricing Strategies for Online Dating Platforms"

• INFORMS Annual Conference 2022, Indianapolis, In. (*)	Oct. 2022
• University of Toronto, Rotman Young Scholar Seminar	July 2022
- RMP Section Conference 2022, Remote Conference. (C*)	July 2022
• MSOM Annual Conference 2022, Munich.	June 2022
• CORS Annual Conference 2022, Vancouver. (*)	June 2022

"Project 412Connect: Bridging Students to Communities"

- INFORMS Annual Conference 2022, Indianapolis, In. $(\ensuremath{^*})$	Oct. 2022
- ACM EAAMO Conference 2021, Remote Conference. (C*)	Oct 2021
• Sara Fine Institute (SFI) 2021, Year in Data Seminar. (C*)	Sept. 2021

[&]quot;Churning while Learning: Maximizing User Engagement in a Recommendation System"

• RMP Section Conference 2021, Remote Conference. (C) July 2021

"Optimal Feature-Based Market Segmentation and Pricing"

• WINE Conference 2022, Troy NY. (*) Dec. 2022 • INFORMS Annual Conference 2022, Indianapolis, In. Oct. 2022

• INFORMS Annual Conference 2021, Anaheim CA.	Oct. 2021
• RMP Section Conference 2021, Remote Conference. (C)	July 2021
• CORS Annual Conference 2021, Remote Conference. (C)	June 2021
"Loot Box Pricing and Design"	
- RMP Section Conference 2021, Remote Conference. (C*)	July 2021
• MSOM Conference 2021, Indianapolis, In. (*)	June 2021
• CSAMSE Conference 2021, Remote Conference. (C*)	June 2021
- CORS Annual Conference 2021, Remote Conference. (C*)	June 2021
• ACM EC Conference 2020, Remote Conference. (C*)	July 2020
• POMS Annual Conference 2020, Minneapolis MN. (C)	May 2020
• INFORMS Annual Conference 2019, Seattle WA. (*)	Oct. 2019
- Federal Trade Commission (FTC) Workshop on Consumer Issues Washington D.C. $({}^{\ast})$, Sept. 2019
"The Value of Personalized Pricing"	
• WINE Conference 2019, New York NY.	Dec. 2019
• MSOM Conference 2018, Dallas TX.	July 2018
• RMP Section Conference 2018, Toronto CN. (*)	June 2018
• POMS Annual Conference 2018, Houston TX.	May 2018
• INFORMS Annual Meeting 2019, Seattle WA.	Oct. 2019
• INFORMS Annual Meeting 2018, Phoenix AZ.	Oct. 2018
• INFORMS Annual Meeting 2017, Houston TX.	Oct. 2017
"The Power of Opaque Products in Pricing"	
• UCLA, Anderson School of Management, Los Angeles, CA.	Feb. 2019
• University of Pittsburgh, Katz Graduate School of Business, PA.	Jan. 2019
• WINE Conference 2017, IIS, Bangalore, India.	Dec. 2017
• MSOM Conference 2017, UNC, Chapel Hill NC.	June 2017
• POMS Annual Conference 2017, Seattle WA.	May 2017
• INFORMS Annual Meeting 2018, Phoenix AZ.	Oct. 2018
• INFORMS Annual Meeting 2016, Nashville TN.	Nov. 2016
• RMP Section Conference 2016, NYU, New York NY.	June 2016

Teaching University of Pittsburgh, Pittsburgh, PA Instructor and Course Coordinator • BUSQOM 1080 Data Analysis for Business Fall 2019 - Fall 2022 Columbia University, New York, NY Teaching Assistant • IEOR 4111 Operations Consulting. Fall 2017 - Spring 2018 • IEOR 8100 Learning and Optimization. Spring 2016 • IEOR 4004 Optimization Models & Methods. Fall 2015, Fall 2016 • IEOR 4106 Stochastic Models. Spring 2015 Rutgers University, New Brunswick, NJ Recitation Mentor/Grader • CS 111, Introduction to Computer Science. Spring 2013 - Spring 2014 • MATH 151/152, Calculus I & II Fall 2012 - Fall 2014 Mentorship Note: (A) designates students for which I am their primary advisor. PhD Student Co-Author • Qiqi Hao (A), University of Pittsburgh (Katz). Fall 2022 - Present • Titing Cui (A), University of Pittsburgh (Katz). Fall 2021 - Present • Alex DiChristofano, WUSTL (DCDS) Fall 2020 - Present PhD Thesis Committee Member • Jing Luo (2022) Undergraduate Advising • Mehba Teshome (2021 \rightarrow Pitt M.S.), Stephen Imhoff (2021 \rightarrow PNC), Jingyao Wu (2022 \rightarrow JHU M.S.), Tianyu Tan (2022), Lidong Yang (2022 \rightarrow CMU M.S.), Tianren Wang (2023 \rightarrow), Ivy Chang (2023 \rightarrow), Kathryn Grogan (2023 \rightarrow). Honors & Awards Third Place, INFORMS Service Science Best Cluster Paper Competition 2022 Katz 2021 Excellence in Research Award 2021 2021 Winner, EAAMO New Horizons Award for Bridging Research and Practice Finalist, 2021 CSAMSE Conference Best Paper Award 2021 Finalist, 2020 RMP Data-Driven Research Challenge 2021 Engaged Scholarship Development Initiative Summer Design Fellow 2021 Winner, IBM Best Student Paper Award in Service Science (to Xiao Lei) 2019

Finalist, INFORMS Service Science Best Cluster Paper Competition

JMM Outstanding Poster Presentation Winner

Rutgers Mathematics Honors Track

Weill Scholarship

Scarlet Scholarship

Dean's Scholarship

High Honors in Mathematics (Top 4), Rutgers University

SAS Excellence Award, The Harry J. Riskin Scholarship

Rutgers School of Arts and Sciences Honors Program

2018

2014

2014 2013 - 2014

2012 - 2014

2010 - 2014

2010 - 2014

2013 - 2014

2010 - 2014

Funding

Grants

- University of Pittsburgh Pitt Seed Grant, Building DS4SJ Ecosystems: Sustaining Impact, (co-PI with Sera Linardi, Bob Gradeck, and Nick Farnan), 2022-2023 (Amount: \$75,000).
- Engaged Scholarship Development Initiative (ESDI) Grant Winner (Amount: \$3000)

Professional Activities & Service

Reviewer

- Journals: Management Science, Operations Research, Manufacturing & Service Operations Management, Production and Operations Management, IISE Transactions, Naval Research Logistics, Computational Management Science, INFORMS Journal of Computing.
- Conferences: ACM Economics and Computation (EC) (2020, 2021), ACM Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO) (2021, 2022)

Session Chair

- POMS 2023 Annual Conference, Orlando 2023
- INFORMS Annual Meeting, Anaheim 2021

Program Committee

• ACM EAAMO 2021, 2022

Academic Service

- Faculty Judge for YinzOR Poster and Flash Talk Competitions 2022
- Business Analytics Task Force Committee Member 2022 (Pitt)
- Faculty Search Committee Member 2022, 2023 (Pitt)
- PhD Admissions Committee Member 2022, 2023 (Pitt)
- Instructor/Coach for Katz Super Analytics Challenge 2021, 2022 (Pitt)
- Race to the Case Logistics Faculty Judge 2019, 2021, 2022 (Pitt)
- Co-organizer, Discussant Lead for the 50^{th} NBER Decentralization Conference: Mechanism Design for Vulnerable Populations 2020
- Faculty Mentor for ACM Economics and Computation (EC) 2020
- Academic Job Market Panel Organizer 2018 (Columbia)
- IEOR-DRO Seminar Student Organizer 2017 (Columbia)

Misc.

Citizenship: USA

Languages: Python, R, Julia, Matlab, Java, LATEX

Volunteering: School 2 Career (S2C) Tutor, Grief to Action (G2A) Member

Kidney donor

References are available upon request.