# Wichinpong Park Sinchaisri

Ph.D. Candidate in Operations Management The Wharton School, University of Pennsylvania 3730 Walnut St Ste 500, Philadelphia, PA 19104 swich@wharton.upenn.edu http://wichinpong.com Revised: November 6, 2020

#### **Research Interests**

Behavioral and empirical operations, gig economy, people analytics, behavioral economics, human-AI interface, machine learning, revenue management/pricing, urban operations, computational social science

# Education

The Wharton School, University of Pennsylvania, Philadelphia, PA 2016–2021 (expected)

Ph.D. Candidate in Operations, Information, and Decisions (Operations Management)

M.S. Candidate in Statistics

Certificate in Social, Cognitive, and Affective Neuroscience

Wharton Social Impact Initiative Fellow

Penn Institute for Urban Research Affiliated Ph.D. Scholar

Advisor: Gad Allon

Stephen M. Ross School of Business, University of Michigan, Ann Arbor, MI

2019

Behavioral Operations Management Summer Institute

Massachusetts Institute of Technology, Cambridge, MA

2013-2016

S.M. Computation for Design and Optimization, GPA: 5.0/5.0

2014 Kaufman Teaching Certificate Program

Thesis: Pricing with Quality Perception: Theory and Experiment

Advisors: Georgia Perakis, Yanchong (Karen) Zheng

Brown University, Providence, RI

2008-2012

Sc.B. Computer Engineering and Applied Mathematics-Economics, GPA: 3.9/4.0

Honors: Tau Beta Pi, Omicron Delta Epsilon, Sigma Xi

Walter A. Haas School of Business, University of California, Berkeley, CA

2009

Certificate in Business for Arts, Sciences, and Engineering

#### Research

WORKING PAPERS

- 1. The Impact of Behavioral and Economic Drivers on Gig Economy Workers
  - Coauthors: Gad Allon, Maxime Cohen
  - Outlet: Major Revision (1st Round) at Manufacturing and Service Operations Management
  - Finalist: 2020 POMS College of Behavioral Operations Junior Scholar Paper Competition
  - Best Paper: 2019 Academy of Management, Operations and Supply Chain Management Division
  - 2<sup>nd</sup> Place: 2019 People Analytics Conference Research Paper Competition
  - 3<sup>rd</sup> Place: 2019 INFORMS Behavioral Operations Management Best Working Paper

- 2018 Baker Retailing Center Research Grant
- 2018 Russell Ackoff Doctoral Student Fellowship
- 2. Markdown Pricing with Quality Perception
  - Coauthors: Rim Hariss, Georgia Perakis, Yanchong Zheng
  - Outlet: Major Revision (2<sup>nd</sup> Round) at Manufacturing and Service Operations Management
  - Honorable Mention: 2017 MIT Operations Research Center Best Student Paper
- 3. Learning Best Practices: Can Machine Learning Improve Human Decision-Making?
  - Coauthors: Hamsa Bastani, Osbert Bastani
  - Outlet: In preparation for submission at *PNAS*
  - 2020 Russell Ackoff Doctoral Student Fellowship
  - 2019–2020 Mack Institute for Innovation Management Research Fellowship
- 4. Community Vibrancy and Its Relationship with Safety in Philadelphia
  - Coauthors: Shane Jensen
  - Outlet: Under Review at PLoS One
  - 2018–2020 Wharton Social Impact Initiative Fellowship

#### WORK IN PROGRESS

- 5. The Structural Behavioral Model of Gig Economy Workers (with Gad Allon, Maxime Cohen, Ken Moon)
  - 2020 Mack Institute for Innovation Management Research Fellowship
  - 2019 Russell Ackoff Doctoral Student Fellowship
  - 2019 Fishman Davidson Center for Service and Operations Management Research Grant
- 6. Signaling Quality and Speed Through Staffing Decisions (with Serguei Netessine)
  - 2020 Mack Institute for Innovation Management Research Fellowship
- 7. Scheduling Customers and Resources in the On-Demand Economy: An Empirical Analysis of Telehealth Consultations (with Gad Allon, Christian Terwiesch)
  - 2020 Mack Institute for Innovation Management Research Fellowship
- 8. Team Dynamics in Healthcare: A Qualitative Study of a Suicide Prevention Unit (with Cadence Bowden, Stephanie Doupnik)

#### SELECTED OTHER WRITINGS/COURSE PROJECT WORK

- 9. Baum, Alexander, Mariela Hernandez, and **Park Sinchaisri**. Tusculum Square: A Healing Gateway to Kensington. (2019) *Panorama*.
- 10. **Sinchaisri, Park**, and Titipat Achakulvisut. Biases and (Dis)agreement in Fellowship Selection Process: Insights and Strategies. (2018) *Wharton People Analytics Conference Student Case Competition*.
- 11. Remorov, Alexander and **Park Sinchaisri**. Analyzing Movie Series. (2015) *Project for 15.071 (The Analytics Edge; Instructors: Dimitris Bertsimas and Allison K. O'Hair) at MIT*.
- 12. Cairns, Jillian, Jennifer Nguyen, **Park Sinchaisri**, and Xingxin Zhong. Modeling with Too Much Training Data. (2010) *RIPS Program at the Institute for Pure and Applied Mathematics, UCLA*.

# **Selected Honors and Awards**

Mack Institute Research Fellowship (\$7,500)	2020
Finalist, 2020 POMS College of Behavioral Operations Junior Scholar Paper Competition	2020
Russell Ackoff Doctoral Student Fellowship (\$1,500)	2020
Best Paper in Operations and Supply Chain Management, Academy of Management (\$500)	2019
2 <sup>nd</sup> Place, Wharton People Analytics Conference Research Paper Competition (\$3,000)	2019
3 <sup>rd</sup> Place, INFORMS Behavioral Operations Management Best Working Paper Award	2019
Excellence in Student and Community Engagement Award	2019
Mack Institute Research Fellowship (\$4,000)	2019
Russell Ackoff Doctoral Student Fellowship (\$1,000)	2019
George James Term Fund Award (\$500)	2019
Baker Retailing Center Research Grant (\$5,000)	2018–2021
Wharton Social Impact Initiative Fellowship (\$5,000)	2018–2020
Goldberg Barclay Fellowship (Best research in the area of entrepreneurship) (\$500)	2018
2 <sup>nd</sup> Place, Wharton People Analytics Conference Case Competition (\$3,000)	2018
Russell Ackoff Doctoral Student Fellowship (\$785)	2018
Honorable Mention, MIT Operations Research Center Best Student Paper	2017
Albert M. Greenfield Intercultural Center Award	2017
Wharton Doctoral Fellowship (full funding)	2016–2021
USC Provost's Ph.D. Fellowship (full funding)	2016
MIT Graduate Research/Teaching Assistantship (full funding)	2014–2016
Winner and Best Design, Oracle College Hire Hackathon (\$6,000)	2012
Sigma Xi (The Scientific Research Honor Society)	2012
Karen T. Romers Undergraduate Teaching and Research Award (\$1,000)	2011
Omicron Delta Epsilon (Outstanding Economics students at Brown)	2011
Tau Beta Pi (Top 1/8 <sup>th</sup> of Engineering juniors at Brown)	2010
UCLA IPAM Research in Industrial Projects Fellowship (\$3,500)	2010
Converse Prize for General Excellence in Mathematics	2008
Fred Tuttle Prize for Excellence in Physics	2008
Tabor Book Award for Excellence in Statistics	2008

## **Invited Presentations**

Learning Best Practices: Can Machine Learning Improve Human Decision-Making?

2020 INFORMS Annual Conference, Online (November 2020) (Scheduled)

2020 INFORMS Workshop on Data Mining and Decision Analytic, Online (November 2020) (Scheduled)

2020 Wharton-INSEAD Doctoral Consortium, Online (November 2020) (Scheduled)

Trustworthy Machine Learning Group at Penn, Online (November 2020) (Scheduled)

2019 INFORMS Annual Conference, Seattle, WA (October 2019)

2019 Mack Institute Fast Takes Researchers' Meeting, Philadelphia, PA (October 2019) Signaling Quality and Speed Through Staffing Decisions 2020 INFORMS Annual Conference, Online (November 2020) (Scheduled) 2019 INFORMS Annual Conference, Seattle, WA (October 2019) Community Vibrancy and Its Relationship with Safety in Philadelphia City of Philadelphia, Office of Innovation and Technology, Philadelphia, PA (September 2019) The Structural Behavioral Model of Gig Economy Workers 2020 INFORMS Annual Conference, Online (November 2020) (Scheduled) 2019 INFORMS Annual Conference, Seattle, WA (October 2019) 2019 POMS Annual Conference, Washington, DC (May 2019) 2018 INFORMS Annual Conference, Phoenix, AZ (November 2018) The Impact of Behavioral and Economic Drivers on Gig Economy Workers 2020 INFORMS Annual Conference, Online (November 2020) (Scheduled) 2020 Empirical Workshop in Operations Management, Online (September 2020) 2020 Kellogg-Wharton Operations Management Workshop, Online (July 2020) 2020 Mack Institute Fast Takes Researchers' Meeting, Philadelphia, PA (April 2020) 2019 Wharton-INSEAD Doctoral Consortium, Philadelphia, PA (October 2019) 2019 INFORMS Annual Conference, Seattle, WA (October 2019) (Scheduled) 2019 Academy of Management Annual Meeting, Boston, MA (August 2019) 2019 Service Operations SIG Meeting, MSOM Annual Conference, Singapore (June 2019) 2019 Trans-Atlantic Doctoral Conference, London Business School, London, UK (May 2019) 2019 POMS Annual Conference, Washington, DC (May 2019) 2019 Wharton People Analytics Conference, Philadelphia, PA (April 2019) Stern School of Business, New York University, New York, NY (March 2019) 2018 INFORMS Annual Conference, Phoenix, AZ (November 2018) 2018 INSEAD-Wharton Doctoral Consortium, Fontainebleau, France (September 2018) 2018 MSOM Annual Conference, Dallas, TX (July 2018) 2018 Behavioral Operations Conference, Dallas, TX (June 2018) 2018 Behavioral Decision Research in Management Conference, Boston, MA (June 2018) 2018 Penn IUR Urban Doctoral Symposium, Philadelphia, PA (May 2018) 2017 Wharton-INSEAD Doctoral Consortium, Philadelphia, PA (October 2017) Biases and (Dis)agreement in Fellowship Selection Process: Insights and Strategies 2018 Wharton People Analytics Conference, Philadelphia, PA (March 2018) Markdown Pricing with Quality Perception

2017 MSOM Annual Conference, Chapel Hill, NC (June 2017) 2017 POMS Annual Conference, Seattle, WA (May 2017)

2016 INFORMS Annual Conference, Nashville, TN (November 2016)

2016 Behavioral Operations Conference, Madison, WI (July 2016)

2016 INFORMS Revenue Management & Pricing Conference, New York, NY (June 2016)

2015 INFORMS Annual Conference, Philadelphia, PA (November 2015)

2015 MSOM Annual Conference, Toronto, Canada (June 2015)

# **Work Experience**

# TEDxPenn, Philaldephia, PA

9/2016-4/2019

Marketing Associate (2016), Director of Marketing (2017), Senior Advisor (2018)

Designed and conducted experiments to study consumer behavior and inform marketing strategies Managed and led data-driven marketing campaigns that sold out 1,000 TEDxPenn Conference tickets and generated over \$45,000 in annual revenue from sales and sponsorships

#### Deloitte Consulting, Boston, MA

2/2016-9/2016

Data Scientist, Strategy & Operations Consultant

Helped clients solve their complex problems by bringing a data-driven approach to executable strategy as part of *InsightStudio's Data Science* team (R, Python, SQL, Tableau)

*Selected clients:* retail/healthcare (medication adherence study), foodservice distributor (supply chain optimization), non-profit healthcare (people analytics), beverage corporation (automation)

# Goldman Sachs, New York, NY

6/2014-8/2014

Summer Analyst, Securities Strats

Analyzed big data of stock orders and predicted front-running likelihood (R, Slang)

Enhanced order routing algorithm to minimize risks and costs using predicted front-running likelihood, latency, hidden liquidity, and access to dark pools (Slang)

Backtested the algorithm with historical data and forecast \$4 million in annual cost reduction

Created interactive data visualization for Javascript dependencies report and developed the company's electronic trading platform, Marquee (d3.js, Scala, Java)

#### Oracle Corporation, Redwood Shores, CA

6/2012-9/2013

Software Engineer, Fusion Financials Development

Developed platforms and tools to improve development workflow, including code coverage dashboard and merge-validation process optimization (Java, JSP, XML, and SQL)

Won the First Prize and Best Design at an annual firm-wide Hackathon for an iOS app that helps conference attendees navigate their experience (Java, ADF Mobile)

College Hire Board of Committee: Developed and organized training programs/bootcamps for new hires, led team-bonding and social events, and initiated employee wellness and peer learning programs

# Collegiate Consulting Group, Providence, RI

9/2011-6/2012

Consultant

Developed strategies for *What Took You So Long Foundation* on sustainable operations and expansions Conducted market research and designed an online networking platform for social entrepreneurs

#### American International Assurance, Bangkok, Thailand

12/2010-1/2011

Corporate Actuarial Analyst Intern

Developed a forecasting model of actuarial reserves for top 85% revenue-generating policies Designed and optimized new policies for premiums and benefits based on current trends

# Symantec Corporation, Los Angeles, CA

6/2010-8/2010

Summer Intern, Research in Industrial Projects

Designed and implemented a new algorithm based on variable-order Markov models and principal component analysis to test candidate malware signatures and minimize false positive rates

Tested the framework through simulations (MATLAB/C++) and presented findings to Engineering

# **Teaching Experience**

1. Instructor/Mentor | Wharton Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021 OIDD 299: Judgment and Decision Making Research Immersion

Undergraduate elective course taught by Maurice Schweitzer

Supervising and mentoring undergraduate students on their behavioral science research projects Mentees: Sarah Kim, Sarah Herman, Stephen Lin, Canary Zhu, Arianna Samet

2. Teaching Assistant | Wharton

Fall 2019, Spring 2020, Fall 2020, Spring 2021

## OIDD 611: Quality and Productivity

Regular and Executive MBA core course taught by Christian Terwiesch

Managing the course's online learning platform, developing course materials, facilitating in-class learning activities (in-person and online), grading problem sets and exams

3. Teaching Assistant | The Vanguard Group

Fall 2019

#### **Lean Operations and Operational Performance**

Wharton Executive Education for Vanguard Leadership taught by Christian Terwiesch Facilitated in-class learning activities

4. Teaching Assistant | Wharton

Spring 2019

#### **OIDD 615: Operations Strategy**

Executive MBA core course taught by Gad Allon

Graded and provided feedback for problem sets and final term papers

5. Facilitator | Wharton

Fall 2018, Fall 2019, Fall 2020

## MGMT 610: Foundations of Teamwork and Leadership

MBA core course taught by the McNulty Leadership Program

Assisted with multi-day, team-based, highly interactive simulation sessions

6. Teaching Assistant | Wharton

Fall 2017

#### OIDD 101: Introduction to Operations, Information, and Decisions

Undergraduate Business Fundamentals course taught by Ken Moon and Hummy Song Facilitated weekly recitations, designed and graded problem sets and exams

7. Teaching Assistant | MIT

Fall 2014, 2015

# 1.200: Transportation Systems Analysis: Performance and Optimization

Transportation SM/PhD core course taught by Carolina Osorio, Amadeo Odoni, and James Orlin Led weekly hour-long recitations, developed class materials, designed and graded problem sets Overall ratings: 6.3/7.0 (2014), 6.4/7.0 (2015)

# 8. Teaching Assistant | MIT

Spring 2015

## 15.730: Data, Models, and Decisions

Executive MBA core course taught by Georgia Perakis

Led recitations and review sessions, facilitated in-class activities, graded problem sets and case reports Overall ratings: 4.35/5

# 9. Teaching Assistant | Brown University

Spring 2012

#### **ENGN 900: Managerial Decision Making**

Undergraduate course taught by Barrett Hazeltine

Led weekly case-based discussion sessions, graded problem sets, mentored students on final projects

## 10. Teaching Assistant | Brown University

Spring 2012

## CSCI 40: Introduction to Scientific Computing and Problem Solving

Undergraduate MATLAB/Python programming course taught by Maurice Herlihy.

Led weekly lab sessions, designed and graded coding assignments, mentored students on final projects

# Leadership and Service

Reviewer, Service Science	2020-
Reviewer, M&SOM SIG Service Operations	2020-
Reviewer, INFORMS Technology, Innovation Management and Entrepreneurship Section	2020-
Research Collaborator, Children's Hospital of Philadelphia	2019–
Reviewer, Wharton Innovation Doctoral Symposium	2019–
Reviewer, Wharton-INSEAD Doctoral Consortium	2018–
Coordinator, PhD Student Seminar, Wharton OID	2018–2019
Senior Advisor, TEDxPenn	2018–2019
Core Member, Penn Data Science Group	2018
Executive Board, Wharton Doctoral Council	2017–2018
Coordinator, Operations Management Journal Club, Wharton OID	2017–2018
Graduate Associate, Stouffer College House	2017-
PhD Student Mentor, Wharton Doctoral Council	2017–
Director of Marketing, TEDxPenn	2017–2018
Intercultural Leadership Fellow, University of Pennsylvania	2016–
Mentor, Penn Graduate-Undergraduate Mentoring Program	2016–
Student Advisory Board, Weingarten Learning Resources Center	2016–2019
President, Thai Students at MIT	2014–2015
Social Chair, MIT Association of Computational Science and Engineering Students	2014–2015
Publicity Committee, MIT Ashdown House	2014–2015
IS&T Student Technology Advisory Board (ISTAB), MIT	2013–2014
College Hire Committee, Oracle Corporation	2012–2013
President, Brown Thai Students Association	2010-2011
Team Leader, Rainwater for Humanity	2009–2010
Team Leader (Active Science Learning), Southeast Asian Service Leadership Network	2009

## Skills

Mathematical/Statistical Tools: R, MATLAB, Python, Mathematica, Gurobi, Stata

Programming: Java, Python, SQL, JavaScript, HTML, CSS, Scala

Languages: English (professional), Thai (native), Japanese (beginner, N5)

# References

#### **Gad Allon** (Primary PhD Advisor)

Jeffrey A. Keswin Professor of Operations Management Director of the Jerome Fisher Program in Management & Technology Operations, Information, and Decisions Department The Wharton School, University of Pennsylvania gadallon@wharton.upenn.edu 847-962-0821

#### Hamsa Bastani

Assistant Professor of Operations Management
Operations, Information, and Decisions Department
The Wharton School, University of Pennsylvania
hamsab@wharton.upenn.edu
631-697-4356

#### Y. Karen Zheng (SM Advisor)

Sloan School Career Development Professor Associate Professor of Operations Management MIT Sloan School of Management yanchong@mit.edu 617-253-4512

#### Serguei Netessine

Dhirubhai Ambani Professor of Innovation and Entrepreneurship Vice Dean for Global Initiatives Operations, Information, and Decisions Department The Wharton School, University of Pennsylvania netessin@wharton.upenn.edu 215-840-1784

#### Ken Moon

Assistant Professor of Operations Management
Operations, Information, and Decisions Department
The Wharton School, University of Pennsylvania
kenmoon@wharton.upenn.edu
617-894-0752