# Wichinpong Park Sinchaisri

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### **Research Interests**

*Fields:* empirical operations management, people analytics, behavioral economics, revenue management and pricing, social learning and networks, computational social science, machine learning, causal inference

Applications: gig economy/flexible workforce, sharing economy, transportation, retail, urban planning

#### Education

#### The Wharton School, University of Pennsylvania, Philadelphia, PA

2016-2021 (expected)

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

Certificate in Social, Cognitive, and Affective Neuroscience (In Progress)

Wharton Social Impact Initiative Fellow

Penn Institute for Urban Research Affiliated Ph.D. Scholar

Advisor: Gad Allon

## Massachusetts Institute of Technology, Cambridge, MA

2013-2016

S.M. Computation for Design and Optimization

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

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

#### **Publications**

WORKING PAPERS

- 1. "The Impact of Behavioral and Economic Drivers on Gig Economy Workers", with G. Allon, M. Cohen. Under review at Management Science.
  - Winner, 2018 Baker Retailing Center Research Grant
  - Selected talks: Wharton-INSEAD Doctoral Consortium 2017, Behavioral Decision Research in Management 2018, Behavioral Operations Conference 2018, MSOM 2018, INSEAD-Wharton Doctoral Consortium 2018, INFORMS 2018

Scheduled: POMS 2019

- 2. "Markdown Pricing with Quality Perception and Consumer Optimism", with R. Hariss, G. Perakis, Y. Zheng. R&R at Management Science.
  - Honorable Mention, 2017 MIT Operations Research Center Best Student Paper

• Selected talks: MSOM 2015, INFORMS 2015, Revenue Management & Pricing Workshop 2016, Behavioral Operations Conference 2016, INFORMS 2016, POMS 2017, MSOM 2017

#### WORK IN PROGRESS

- 3. The Structural Model of Gig Economy Workers (with G. Allon, M. Cohen).
- 4. Urban Analytics through Community Vibrancy (with S. Jensen).
- 5. Decoding Consumer Learning (with K. Moon).

#### SELECTED TECHNICAL REPORTS

- 6. **W. Sinchaisri**, and T. Achakulvisut. Biases and (Dis)agreement in Fellowship Selection Process: Insights and Strategies. (2018) *Wharton People Analytics Conference*.
- 7. J. Cairns, J. Nguyen, **W. Sinchaisri**, and X. Zhong. Modeling with Too Much Training Data. (2010) *Research in Industrial Projects Program at the Institute for Pure and Applied Mathematics, UCLA*.

## **Selected Honors and Awards**

| Goldberg Barclay Term Fellowship (\$500)   | 2018      |
|--|-----------|
| Russell Ackoff Doctoral Student Fellowship (\$785)                               | 2018      |
| Baker Retailing Center Research Grant (\$5,000)                                  | 2018      |
| 2nd Place, Wharton People Analytics Conference Competition (\$3,000)             | 2018      |
| Wharton Social Impact Initiative Fellowship (\$1,000)                            | 2018      |
| 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 Fellowship (full funding)                         | 2014–2016 |
| Winner and Best Design, Oracle College Hire Hackathon (\$6,000)                  | 2012      |
| Karen T. Romers Undergraduate Teaching and Research Award (\$1,000)              | 2011      |
| 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      |
| Royal Thai Undergraduate Scholarship to study at Brown University (full funding) | 2008–2012 |

## **Employment**

#### 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 - 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
- Enhanced order routing algorithm to minimize risks and costs, using joint front-running likelihood, latency, hidden liquidity, and access to dark pools
- Backtested the algorithm with historical data; \$4 million annual saving
- Created interactive data visualization for Javascript dependencies report using d3.js and developed the company's electronic trading platform, Marquee

#### Oracle Corporation, Redwood Shores, CA

6/2012-9/2013

Software Engineer, Fusion Financials Development

- Leveraged financial and technical skills to efficiently enhance features for Fusion Financials Application Suites
- Developed tools to assist developers, including code coverage dashboard and merge validation process optimization using 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 visits, using Java/ADF Mobile
- Oracle College Hires (OCH) committee: organized on- and off-campus social events, invited speakers to share their experiences with new hires, and developed training programs/bootcamps for employees

#### American International Assurance, Bangkok, Thailand

12/2010-1/2011

Corporate Actuarial Analyst Intern

- Helped with valuation program enhancement and reporting
- Forecast reserves required for top policies, that generated 85% of revenue, using Prophet and Visual FoxPro
- Assisted with designing new policies based on current trends and calculating profit-maximizing models of premiums and benefits
- Wrote reinsurance agreements and English manual for future interns

#### Symantec Corporation, Los Angeles, CA

6/2010-8/2010

Summer Intern, Research in Industrial Projects

 Designed a variable-order Markov algorithm to test and minimize false positive rates of malware signatures and simulated test cases in MATLAB/C++

## **Teaching**

1. Teaching Assistant | Wharton

Spring 2019

OIDD 615: Operations Strategy
MBA Core course taught by Gad Allon.

2. 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/graded problem sets and exams.

#### 3. Teaching Assistant | MIT

Fall 2014, 2015

#### 1.200: Transportation Systems Analysis: Performance and Optimization

Transportation S.M./Ph.D. core course taught by Carolina Osorio, Amadeo Odoni, and James Orlin. Developed class materials, led weekly recitations, designed/graded problem sets and exams. Overall rating: 6.3/7.0 (2014), 6.4/7.0 (2015)

## 4. Teaching Assistant | MIT

Spring 2015

#### 15.730: Data, Models, and Decisions

Executive MBA Core course taught by Georgia Perakis.

Led recitations, graded problem sets, case studies, and exams, designed online experiments.

## 5. Teaching Assistant | Brown University

Spring 2012

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

Undergraduate course taught by Barrett Hazeltine.

Led weekly discussion sessions, graded written assignments, mentored students on final projects.

### 6. 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/graded coding assignments, mentored students on final projects.

## Selected Leadership and Service

| Executive Board, Wharton Doctoral Council                    | 2017–     |
|--|-----------|
| Graduate Associate, Stouffer College House                   | 2017–     |
| Director of Marketing, TEDxPenn                              | 2017–2018 |
| Intercultural Leadership Fellow, University of Pennsylvania  | 2016–     |
| Student Advisory Board, Weingarten Learning Resources Center | 2016–     |
| Mentor, Penn Graduate-Undergraduate Mentoring Program        | 2016–     |
| President, Thai Students at MIT                              | 2014–2015 |
| IS&T Student Technology Advisory Board (ISTAB), MIT          | 2013–2014 |
| College Hire Committee, Oracle Corporation                   | 2012–2013 |
| Consultant, Collegiate Consulting Group                      | 2011–2012 |

#### Skills

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

Programming: Java, Python, MySQL, JavaScript, HTML, CSS

Languages: English (professional), Thai (native), currently learning Mandarin and Japanese