

## Curriculum Vitae

Dr. Kai PAN

### Contact Information

M507a, 5/F, Li Ka Shing Tower  
Department of Logistics and Maritime Studies  
Faculty of Business, The Hong Kong Polytechnic University  
Hung Hom, Kowloon, Hong Kong

Phone: +852 2766 5545  
E-mail: kai.pan@polyu.edu.hk

### Education

Ph.D., Industrial and Systems Engineering, University of Florida, USA 2016  
• *Dissertation Title:* Deterministic and Stochastic Unit Commitment Problems: Convex Hulls, Strong Formulations, and Case Studies (The IISE Pritsker Doctoral Dissertation Award, the first place winner, 2017)  
• *Advisor:* Prof. Yongpei Guan  
M.S., Industrial and Systems Engineering, University of Florida, USA 2014  
B.E., Industrial Engineering, Zhejiang University, China 2010

### Academic Positions

Assistant Professor, The Hong Kong Polytechnic University 2016 - Present

### Research Interests

*Theories:* Stochastic Integer Programming, Data-Driven Optimization, Dynamic Programming  
*Applications:* Energy Market, Supply Chain Management, Transportation, Healthcare

### Invited Talks

1. "Optimal Adaptive Bidding Strategy for Electricity Market Participants Considering Renewable Generation and Price Uncertainties"
  - POMS 28th Annual Conference, Seattle, WA, May 2017.
  - INFORMS Annual Meeting, Nashville, TN, Nov. 2016.
  - Risk Management Approaches in Engineering Applications 2016, University of Florida, Nov. 2016.
2. "A Polyhedral Study of the Integrated Minimum-Up/-Down Time and Ramping Polytope"
  - IISE Annual Conference, Anaheim, CA, May 2016.
  - INFORMS Annual Meeting, Philadelphia, PA, Nov. 2015.
3. "A Polyhedral Study of Multistage Stochastic Unit Commitment Polytope," International Symposium on Mathematical Programming (ISMP) 2015, Pittsburgh, PA, Jul. 2015.
4. "Data-Driven Stochastic Self-Scheduling for the Combined-Cycle Units," INFORMS Computing Society Conference, Richmond, VA, Jan. 2015.
5. "Cutting Planes for the Multistage Stochastic Self-Scheduling Problems," INFORMS Annual Meeting, San Francisco, CA, Nov. 2014.
6. "Stochastic Optimization Formulations for Reliability Unit Commitment Runs," IEEE Power and Energy Society General Meeting, Washington, DC, Jul. 2014.

### Teaching Experience

Instructor, The Hong Kong Polytechnic University

- LGT4017: Information Systems for Logistics Management 2017 Spring

Teaching Assistant, University of Florida

- ESI 4357: Web-based Decision Support Systems 2012 Fall, 2013 Spring & Summer
- ESI 4356: Decision Support Systems 2014 Fall
- ESI 4523: Industrial Systems Simulation 2015 Spring

### **Professional Experience**

Amazon Corporate LLC Research Scientist  
Seattle, Washington, USA 2015 Summer

- Optimization on supply chain and inventory planning.

GE Grid Solutions (formerly ALSTOM Grid) Power System Engineer  
Redmond, Washington, USA 2014 Summer

- Optimization on power system operations.

### **Honors and Awards**

- The IISE Pritsker Doctoral Dissertation Award, the first place, 2017
- Hearn Graduate Research Award, University of Florida, 2016 (the highest research award to Ph.D. students in the Department of Industrial and Systems Engineering, awarded once a year for one Ph.D. student)
- Office of Research Travel Award, University of Florida, 2015
- Linda Parker Hudson Summer Fellowship, University of Florida, 2015 (This fellowship recognizes a student who exhibits outstanding leadership and scholarly characteristics, within and outside of the school of Industrial and Systems Engineering.)
- Outstanding Graduate with Honor (5%), Zhejiang University, 2010
- The Top Outstanding Stars Award (9/1200, the highest honor of School of Mechanical Engineering, awarded once per year for the most distinguished students), Zhejiang University, 2010
- Outstanding Student (10%), Zhejiang University, 2007-2010
- Outstanding Bachelor's Thesis (5%), Zhejiang University, 2010
- Chinese National Scholarship (2%), 2009

### **Professional Service**

- *Reviewer for the Scholarly Journals:* Annals of Operations Research; Applied Energy; Energy Systems; European Journal of Operational Research; IEEE Transactions on Industrial Informatics; IEEE Transactions on Power Systems; IEEE Transactions on Sustainable Energy; IET Generation, Transmission & Distribution; IET Science, Measurement & Technology; IISE Transactions (formerly IIE Transactions); INFORMS Journal on Computing; Journal of Intelligent Manufacturing.
- *Session Chair:* 2016 IISE Annual Conference; 2016 INFORMS Annual Meeting.

### **Professional Membership**

- Institute for Operations Research and Management Science (INFORMS)
- INFORMS Societies/Section: Optimization; Computing; Manufacturing & Service Operations Management; Energy, Natural Resources, and the Environment; Transportation Science and Logistics
- Mathematical Optimization Society
- Institute of Electrical and Electronics Engineers (IEEE), Power & Energy Society
- Institute of Industrial and Systems Engineers (IISE)