

# PETER ZHANG

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HBH 2118E, 4800 Forbes Ave, Pittsburgh PA 15213

## EMPLOYMENT

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### Carnegie Mellon University

Assistant Professor

2019 - Present

Heinz College of Information Systems and Public Policy

Courtesy appointment at Civil and Environmental Engineering

## EDUCATION

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### Massachusetts Institute of Technology

PhD in Engineering Systems

2013 - 2019

Institute for Data, Systems, and Society

### University of Toronto

MASc, Mechanical and Industrial Engineering

2011 - 2013

BASc, Engineering Science

2005 - 2011

## PUBLICATIONS

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1. Simchi-Levi, D., Trichakis, N., Zhang, P. Y. Designing response supply chain against bioattacks. *Operations Research*, 67(5):1246-1268.
  - INFORMS Koopman Prize (2020)
  - Second place in POMS HOCM paper competition (2018)
  - Second place in POMS SCM student paper competition (2017)
  - MSOM SIG (2017)
2. Simchi-Levi, D., Schmidt, W., Wei, Y., Zhang, P. Y., Combs, K., Ge, Y., Gusikhin, O., Sander, M., and Zhang, D. Identifying risks and mitigating disruptions in the automotive supply chain. *INFORMS Journal on Applied Analytics*, 45(5):375-390.
  - Ford Engineering Excellence Award (2015)
  - INFORMS Daniel H. Wagner Prize for Excellence in Operations Research Practice (2014)
3. Tran, T.T., Zhang, P.Y., Li, H., Down, D., Beck, J.C. Multi-Stage Resource-Aware Scheduling for Data Centers with Heterogenous Servers. *Journal of Scheduling*, 21(2):251-267.
4. Turner, S. D. O., Zhang, P. Y., Romero, D., Chan, T. C. Y. A new mathematical programming approach to optimizing wind farm layouts. *Renewable Energy*, 63:674-680.
5. Zhang, P. Y., Romero, D., Beck, J. C., Amon, C. Solving Wind farm layout optimization with mixed integer programs and constraint programs. *EURO Journal on Computational Optimization*, 2(3):195-219.
6. Kwong, P., Zhang, P. Y., Romero, D., Moran, J., Morgenroth, M., and Amon, C. Multi-objective wind farm layout optimization with non-dominated sorting genetic algorithm (NSGA-II). *Journal of Mechanical Design*, 136(9):091010.
7. Zhang, P. Y., Kuo, J. Y. J., Romero, D. A., Chan, T. C. Y., Amon, C. H. Robust Wind Farm Layout Optimization. *Advances and Trends in Optimization with Engineering Applications*. 367-375.

8. Tran, T.T., Zhang, P.Y., Li, H., Down, D., Beck, J.C. Resource-Aware Scheduling for Data Centers with Heterogenous Servers. *Multidisciplinary International Conference on Scheduling: Theory & Applications*, Prague, Czech Republic, August 25th-28th, 2015.
9. Zhang, P.Y., Metcalfe, M., Cheng, Y.-L. Redefining affluence in China: carbon emission from private transportation. *The 3rd Climate Change Technology Conference*, Montreal, Quebec, May 27-29, 2013.
10. Zhang, P.Y., Romero, D., Beck, J.C., Amon, C. Solving wind farm layout optimization with mixed-integer programming and constraint programming. *CPAIOR 2013: 10th International Conference on Integration of Artificial Intelligence and Operations Research Techniques in Constraint Programming*, IBM T. J. Watson Research Center, Yorktown Heights, New York, May 18-22, 2013.
11. Kwong, P., Zhang, P.Y., Romero, D., Moran, J., Morgenroth, M., and Amon, C. Wind farm layout optimization considering energy generation and noise propagation. *Proceedings of the ASME International Design Engineering Technical Conferences*, Chicago, Illinois, August 12-15, 2012.

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## PATENTS

Global optimizer for supply chain

Blockchain-enabled what-if simulator to estimate impact of information sharing in supply chain

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## TEACHING

94-867 Decision Analytics for Business and Policy (Spring 2020)

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## FUNDED PROJECTS

Joint optimization of school bus routes and last mile services (PI). *Mobility21, USDOT National University Transportation Center*. (2020.07.01 – 2021.06.30, \$93,379)

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## AWARDS

INFORMS Koopman Prize (2020)

POMS Humanitarian Operations and Crisis Management Paper Competition 2nd place (2018)

POMS Supply Chain Management Student Paper Competition 2nd place (2017)

Ford Engineering Excellence Award (2015)

INFORMS Wagner Prize for Excellence in Operations Research Practice (2014)

Gordon Cressy Student Leadership Award (University of Toronto) (2013)

Top score, Canadian Euclid Mathematics Contest (2004)

Bronze medal, International Physics Olympiad (2004)

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## REVIEW SERVICE

*Management Science, Transportation Science, Naval Research Logistics, European Journal of Operational Research, Computers and Operations Research, American Society of Mechanical Engineers.*

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## PROFESSIONAL SOCIETIES

Institute for Operations Research and the Management Sciences

Production and Operations Management Society